



# Short Form Catalog 2016

High power semiconductors for industrial applications

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Bare dies

Discrete

IGBT modules

IPMs

Stacks & boards

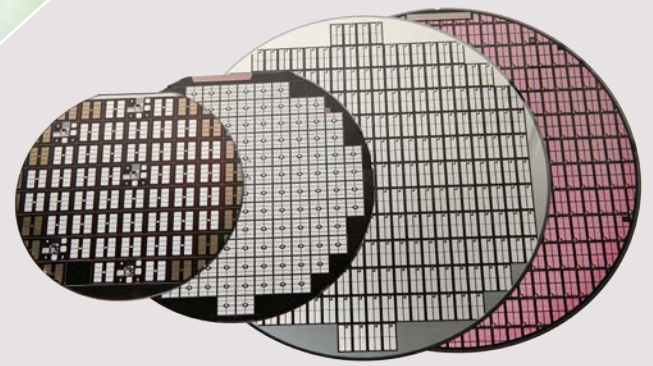
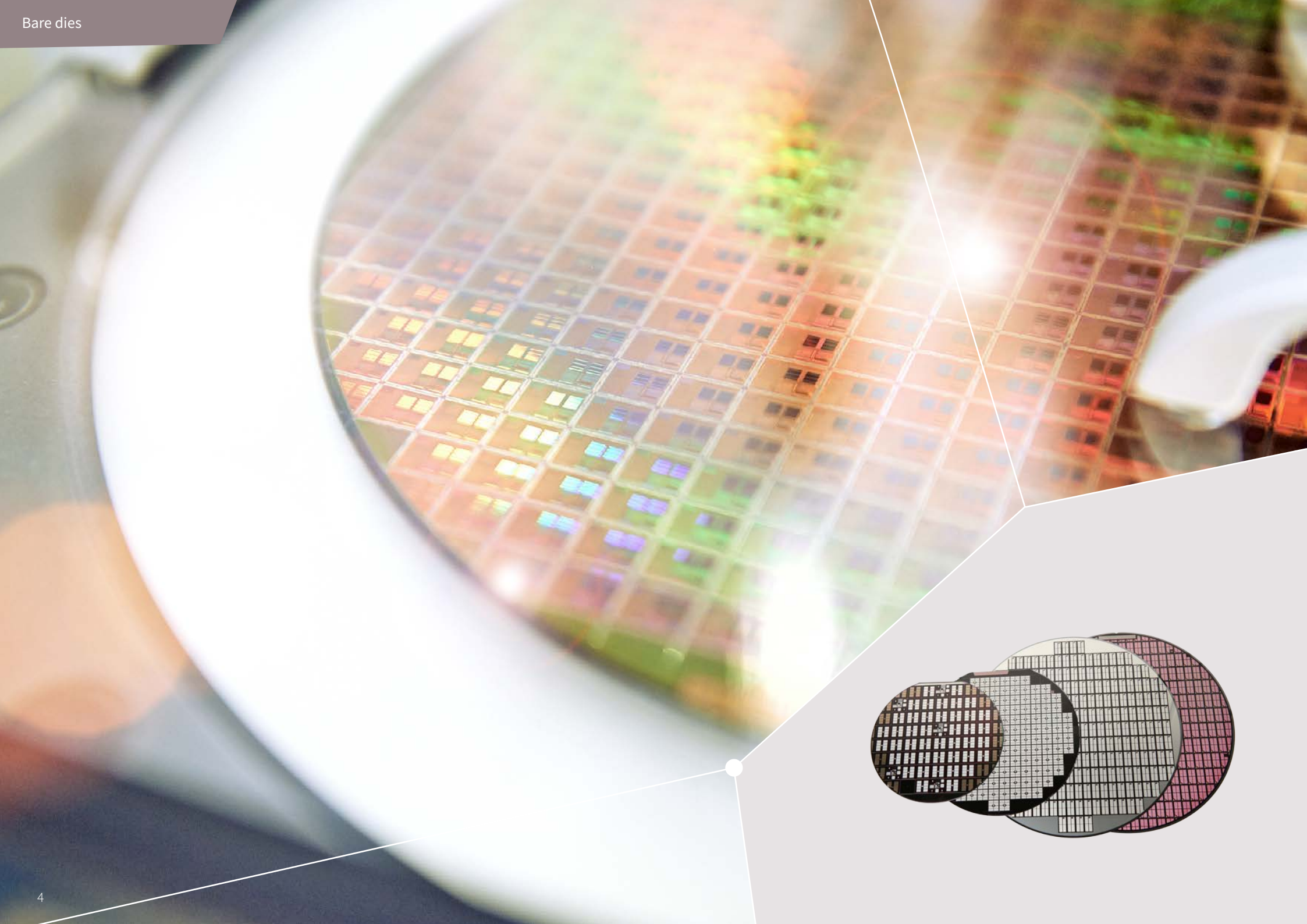
Driver & controller

SiC

Presspacks

SCR / diode modules

Solid state relays



## Bare dies

# IGBTs and diodes

The TRENCHSTOP™ IGBT combines the unique Trench- and Fieldstop-Technology and is a benchmark in the Industry. Portfolio includes the voltage range from 600V up to 1700V with several different versions, and is optimized for a wide range of applications like Drives, Renewable energy, Welding and Power supplies.

[www.infineon.com/igbt-bare-dies](http://www.infineon.com/igbt-bare-dies)

Emitter Controlled-Diode is Infineon unique Fast Recovery Diode technology. The Ultrathin wafer and field-stop technology makes the Emitter Controlled-Diode from Infineon ideally suited for consumer & industry applications as it lower the turn-on losses of the IGBT with soft recovery. The Emitter Controlled-Diode is optimized for Infineon IGBT technology.

[www.infineon.com/diode-bare-dies](http://www.infineon.com/diode-bare-dies)

Bare dies

Discrete

IGBT  
modules

IPMs

Stacks &  
boardsDriver &  
controller

SiC

Presspacks

SCR / diode  
modulesSolid state  
relays

## IGBT bare die (400V-1200V)

Product	Product status	$V_{CE,max}$ [A]	$I_c,max$ [A]	$V_{CE(sat),max}$ [V]	$V_{GE(th),min}$ [V]	$V_{GE(th),max}$ [V]	$t_r$ [ns]	$t_f$ [ns]	Operating temperature min	Operating temperature max
IGBT HighSpeed 3										
IGC10T65QE	active and preferred	650.0	20.0	2.32	4.2	5.6	-	-	-40.0 °C	175.0 °C
IGC15T65QE	active and preferred	650.0	30.0	2.32	4.2	5.6	-	-	-40.0 °C	175.0 °C
IGC19T65QE	active and preferred	650.0	40.0	2.32	4.2	5.6	-	-	-40.0 °C	175.0 °C
IGC28T65QE	active and preferred	650.0	50.0	2.22	4.2	5.6	-	-	-40.0 °C	175.0 °C
IGC31T65QE	active and preferred	650.0	60.0	2.22	4.2	5.6	-	-	-40.0 °C	175.0 °C
IGC39T65QE	active and preferred	650.0	75.0	2.22	4.2	5.6	-	-	-40.0 °C	175.0 °C
IGC54T65R3QE	active and preferred	650.0	100.0	2.22	4.2	5.6	-	-	-40.0 °C	175.0 °C
IGC18T120T8Q	active and preferred	1200.0	15.0	2.42	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC27T120T8Q	active and preferred	1200.0	25.0	2.42	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC41T120T8Q	active and preferred	1200.0	40.0	2.42	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC50T120T8RQ	active and preferred	1200.0	50.0	2.42	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC70T120T8RQ	active and preferred	1200.0	75.0	2.42	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC99T120T8RQ	active and preferred	1200.0	100.0	2.42	5.1	6.4	-	-	-40.0 °C	175.0 °C

# IGBT bare die (400V-1200V)

Product	Product status	$V_{CE(max)}$ [A]	$I_r(max)$ [A]	$V_{CE(sat)max}$ [V]	$V_{GE(th)min}$ [V]	$V_{GE(th)max}$ [V]	$t_r$ [ns]	$t_f$ [ns]	Operating temperature min	Operating temperature max
IGBT3										
SIGC03T60E	active and preferred	600.0	4.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC04T60E	active and preferred	600.0	6.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC04T60GE	active and preferred	600.0	6.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC06T60E	active and preferred	600.0	10.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC06T60GE	active and preferred	600.0	10.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC08T60E	active and preferred	600.0	15.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC10T60E	active and preferred	600.0	20.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC15T60E	active and preferred	600.0	30.0	1.9	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC28T60E	active and preferred	600.0	50.0	1.85	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC39T60E	active and preferred	600.0	75.0	1.85	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC40T60R3E	active and preferred	600.0	75.0	1.85	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC54T60R3E	active and preferred	600.0	100.0	1.85	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC76T60R3E	active and preferred	600.0	150.0	1.85	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC100T60R3E	active and preferred	600.0	200.0	1.85	5.0	6.5	-	-	-40.0 °C	175.0 °C
SIGC128T170R3E	active and preferred	1700.0	100.0	2.4	5.2	6.4	-	-	-55.0 °C	150.0 °C
SIGC04T65E	active and preferred	650.0	6.0	1.87	5.1	6.5	-	-	-40.0 °C	175.0 °C
SIGC06T65E	active and preferred	650.0	10.0	1.87	5.1	6.5	-	-	-40.0 °C	175.0 °C
SIGC06T65GE	active and preferred	650.0	10.0	1.87	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC08T65E	active and preferred	650.0	15.0	1.87	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC10T65E	active and preferred	650.0	20.0	1.87	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC15T65E	active and preferred	650.0	30.0	1.87	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC28T65E	active and preferred	650.0	50.0	1.77	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC39T65E	active and preferred	650.0	75.0	1.77	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC40T65R3E	active and preferred	650.0	75.0	1.77	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC54T65R3E	active and preferred	650.0	100.0	1.77	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC76T65R3E	active and preferred	650.0	150.0	1.2	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC78T65R3E	active and preferred	650.0	150.0	1.54	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC100T65R3E	active and preferred	650.0	200.0	1.2	5.1	6.4	-	-	-40.0 °C	175.0 °C
SIGC12T120E	active and preferred	1200.0	8.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC12T120LE	active and preferred	1200.0	8.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC20T120E	active and preferred	1200.0	15.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC20T120LE	active and preferred	1200.0	15.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC32T120R3E	active and preferred	1200.0	25.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC32T120R3LE	active and preferred	1200.0	25.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC41T120R3E	active and preferred	1200.0	35.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC41T120R3LE	active and preferred	1200.0	40.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C

## IGBT bare die (400V-1200V)

Product	Product status	$V_{CE,max}$ [A]	$I_c,max$ [A]	$V_{CE(sat),max}$ [V]	$V_{GE(th),min}$ [V]	$V_{GE(th),max}$ [V]	$t_r$ [ns]	$t_f$ [ns]	Operating temperature min	Operating temperature max
<b>IGBT3</b>										
SIGC57T120R3E	active and preferred	1200.0	50.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC57T120R3LE	active and preferred	1200.0	50.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC84T120R3E	active and preferred	1200.0	75.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC84T120R3LE	active and preferred	1200.0	75.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC109T120R3E	active and preferred	1200.0	100.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC109T120R3LE	active and preferred	1200.0	100.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC158T120R3E	active and preferred	1200.0	150.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC158T120R3LE	active and preferred	1200.0	150.0	2.1	5.0	6.5	-	-	-40.0 °C	150.0 °C
SIGC42T170R3GE	active and preferred	1700.0	29.0	2.4	5.2	6.4	-	-	-55.0 °C	150.0 °C
SIGC68T170R3E	active and preferred	1700.0	50.0	2.4	5.2	6.4	-	-	-55.0 °C	150.0 °C
SIGC101T170R3E	active and preferred	1700.0	75.0	2.4	5.2	6.4	-	-	-55.0 °C	150.0 °C
SIGC158T170R3E	active and preferred	1700.0	125.0	2.4	5.2	6.4	-	-	-55.0 °C	150.0 °C
SIGC186T170R3E	active and preferred	1700.0	150.0	2.4	5.2	6.4	-	-	-55.0 °C	150.0 °C
<b>IGBT3 Fast</b>										
SIGC04T60GSE	active and preferred	600.0	6.0	2.05	4.1	5.7	-	-	-40.0 °C	150.0 °C
SIGC03T60SE	active and preferred	600.0	4.0	2.05	4.1	5.7	-	-	-40.0 °C	150.0 °C
SIGC08T60SE	active and preferred	600.0	15.0	2.05	4.1	5.7	-	-	-40.0 °C	150.0 °C
SIGC10T60SE	active and preferred	600.0	20.0	2.05	4.1	5.7	-	-	-40.0 °C	150.0 °C
SIGC15T60SE	active and preferred	600.0	30.0	2.05	4.1	5.7	-	-	-40.0 °C	150.0 °C
SIGC19T60SE	active and preferred	600.0	40.0	1.97	4.2	5.6	-	-	-40.0 °C	150.0 °C
<b>IGBT3 High Power</b>										
IGC114T170S8RH	active and preferred	1700.0	100.0	2.15	5.2	6.4	-	-	-40.0 °C	150.0 °C
IGC168T170S8RH	active and preferred	1700.0	150.0	2.15	5.2	6.4	-	-	-40.0 °C	150.0 °C
IGC136T170S8RH2	active and preferred	1700.0	117.5	-	5.3	6.3	-	-	-40.0 °C	150.0 °C
<b>IGBT3 Medium Power</b>										
IGC28T65T8M	active and preferred	650.0	50.0	1.82	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC39T65T8M	active and preferred	650.0	75.0	1.82	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC54T65T8RM	active and preferred	650.0	100.0	1.82	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC76T65T8RM	active and preferred	650.0	150.0	1.23	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC100T65T8RM	active and preferred	650.0	200.0	1.23	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC89T170S8RM	active and preferred	1700.0	75.0	2.2	5.2	6.4	-	-	-40.0 °C	150.0 °C
IGC114T170S8RM	active and preferred	1700.0	100.0	2.2	5.2	6.4	-	-	-40.0 °C	150.0 °C
IGC168T170S8RM	active and preferred	1700.0	150.0	2.2	5.2	6.4	-	-	-40.0 °C	150.0 °C



# IGBT bare die (400V-1200V)

Product	Product status	$V_{CE,max}$ [A]	$I_c,max$ [A]	$V_{CE(sat),max}$ [V]	$V_{GE(th),min}$ [V]	$V_{GE(th),max}$ [V]	$t_r$ [ns]	$t_f$ [ns]	Operating temperature min	Operating temperature max
<b>IGBT3 RC Drives</b>										
IGC03R60DE	active and preferred	600.0	2.5	2.1	4.3	5.7	-	-	-40.0 °C	175.0 °C
IGC04R60DE	active and preferred	600.0	4.0	2.1	4.3	5.7	-	-	-40.0 °C	175.0 °C
IGC05R60DE	active and preferred	600.0	6.0	2.1	4.3	5.7	-	-	-40.0 °C	175.0 °C
IGC06R60DE	active and preferred	600.0	8.0	2.1	4.3	5.7	-	-	-40.0 °C	175.0 °C
IGC07R60DE	active and preferred	600.0	10.0	2.1	4.3	5.7	-	-	-40.0 °C	175.0 °C
IGC10R60DE	active and preferred	600.0	15.0	5.7	4.3	5.7	-	-	-40.0 °C	175.0 °C
<b>IGBT4 Low Power</b>										
IGC99T120T8RH	active and preferred	1200.0	100.0	1.92	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC142T120T8RH	active and preferred	1200.0	150.0	1.26	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC11T120T8L	active and preferred	1200.0	8.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC07T120T8L	active and preferred	1200.0	4.0	2.02	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC142T120T8RL	active and preferred	1200.0	150.0	1.74	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC189T120T8RL	active and preferred	1200.0	200.0	2.05	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC18T120T8L	active and preferred	1200.0	15.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC27T120T8L	active and preferred	1200.0	25.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC36T120T8L	active and preferred	1200.0	35.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC50T120T8RL	active and preferred	1200.0	50.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC70T120T8RL	active and preferred	1200.0	75.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC99T120T8RL	active and preferred	1200.0	100.0	1.97	5.1	6.4	-	-	-40.0 °C	175.0 °C
IGC13T120T8L	active and preferred	1200.0	10.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
<b>IGBT4 Medium Power</b>										
IGC142T120T8RM	active and preferred	1200.0	150.0	1.74	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC193T120T8RM	active and preferred	1200.0	200.0	1.3	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC70T120T8RM	active and preferred	1200.0	75.0	2.07	5.3	6.3	-	-	-40.0 °C	175.0 °C
IGC99T120T8RM	active and preferred	1200.0	100.0	1.97	5.1	6.4	-	-	-40.0 °C	175.0 °C

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## IGBT bare die (400V-1200V)

Product	Product status	$V_{CE,max}$ [A]	$I_c,max$ [A]	$V_{CE(sat),max}$ [V]	$V_{GE(th),min}$ [V]	$V_{GE(th),max}$ [V]	$t_r$ [ns]	$t_f$ [ns]	Operating temperature min	Operating temperature max
Gen 4 IGBT										
IRG4CC20FB	active	600.0	9.0	2.0	3.0	6.0	17.0	210.0	-55.0 °C	150.0 °C
IRG4CC20UB	active	600.0	6.5	2.1	3.0	6.0	15.0	110.0	-55.0 °C	150.0 °C
IRG4CC30FB	active	600.0	17.0	1.8	3.0	6.0	26.0	160.0	-55.0 °C	150.0 °C
IRG4CC30SB	active	600.0	18.0	1.6	3.0	6.0	18.0	390.0	-55.0 °C	150.0 °C
IRG4CC30UB	active	600.0	12.0	2.1	3.0	6.0	21.0	80.0	-55.0 °C	150.0 °C
IRG4CC40FB	active	600.0	27.0	1.7	3.0	6.0	18.0	170.0	-55.0 °C	150.0 °C
IRG4CC40KB	active	600.0	25.0	2.6	3.0	6.0	15.0	140.0	-55.0 °C	150.0 °C
IRG4CC40UB	active	600.0	20.0	2.1	3.0	6.0	19.0	120.0	-55.0 °C	150.0 °C
IRG4CC40WB	active	600.0	20.0	2.5	3.0	6.0	22.0	74.0	-55.0 °C	150.0 °C
IRG4CC50FB	active	600.0	39.0	1.6	3.0	6.0	25.0	140.0	-55.0 °C	150.0 °C
IRG4CC50KB	active	600.0	30.0	2.2	3.0	6.0	49.0	95.0	-55.0 °C	150.0 °C
IRG4CC50SB	active	600.0	41.0	1.36	3.0	6.0	30.0	400.0	-55.0 °C	150.0 °C
IRG4CC50UB	active	600.0	27.0	2.0	3.0	6.0	27.0	130.0	-55.0 °C	150.0 °C
IRG4CC50WB	active	600.0	27.0	2.3	3.0	6.0	33.0	57.0	-55.0 °C	150.0 °C
IRG4CC50WC	active	600.0	27.0	2.3	3.0	6.0	33.0	57.0	-55.0 °C	150.0 °C
IRG4CC60UB	active	600.0	40.0	2.0	3.0	6.0	42.0	100.0	-55.0 °C	150.0 °C
IRG4CC71UB	active	600.0	60.0	2.0	3.0	6.0	50.0	86.0	-55.0 °C	150.0 °C
IRG4CC80SB	active	600.0	-	-	3.0	6.0	-	-	-55.0 °C	150.0 °C
IRG4CF50WB	active	900.0	28.0	2.7	3.0	6.0	50.0	110.0	-55.0 °C	150.0 °C
IRG4CH20KB	active	1200.0	5.0	4.3	3.0	6.0	26.0	270.0	-55.0 °C	150.0 °C
IRG4CH30KB	active	1200.0	10.0	4.2	3.0	6.0	23.0	110.0	-55.0 °C	150.0 °C
IRG4CH50UB	active	1200.0	24.0	3.7	3.0	6.0	15.0	290.0	-55.0 °C	150.0 °C
IRG4CH71KB	active	1200.0	42.0	3.9	3.0	6.0	84.0	130.0	-55.0 °C	150.0 °C
IRG4CH71UB	active	1200.0	70.0	2.7	3.0	6.0	77.0	220.0	-55.0 °C	150.0 °C
IRGC14C40LD	active	400.0	14.0	1.75	1.3	2.2	2.8	-	-40.0 °C	175.0 °C

## IGBT bare die (400V-1200V)

Product	Product status	V <sub>CE</sub> max [A]	I <sub>c</sub> max [A]	V <sub>CE(sat)</sub> max [V]	V <sub>GE(th)</sub> min [V]	V <sub>GE(th)</sub> max [V]	t <sub>r</sub> [ns]	t <sub>f</sub> [ns]	Operating temperature min	Operating temperature max
Gen 5 IGBT										
IRGC100B120KB	active	1200.0	100.0	2.6	4.5	6.0	110.0	150.0	-55.0 °C	150.0 °C
IRGC100B120UB	active	1200.0	100.0	3.5	4.5	6.0	110.0	130.0	-55.0 °C	150.0 °C
IRGC100B60KB	active	600.0	100.0	2.1	3.5	5.5	130.0	125.0	-55.0 °C	150.0 °C
IRGC100B60KC	active	600.0	100.0	2.1	3.5	5.5	130.0	125.0	-55.0 °C	150.0 °C
IRGC100B60UB	active	600.0	100.0	2.9	3.5	5.5	100.0	85.0	-55.0 °C	150.0 °C
IRGC10B60KB	active	600.0	10.0	1.3	3.5	5.5	20.0	23.0	-55.0 °C	150.0 °C
IRGC15B120KB	active	1200.0	15.0	2.3	4.4	6.0	-	-	-55.0 °C	150.0 °C
IRGC15B120KD	active	1200.0	15.0	2.3	4.4	6.0	-	-	-55.0 °C	150.0 °C
IRGC15B120UB	active	1200.0	15.0	3.45	4.4	6.0	-	-	-55.0 °C	150.0 °C
IRGC15B60KB	active	600.0	15.0	1.35	3.5	5.5	16.0	20.0	-55.0 °C	150.0 °C
IRGC15B60KD	active	600.0	15.0	1.35	3.5	5.5	16.0	20.0	-55.0 °C	150.0 °C
IRGC20B60KB	active	600.0	20.0	1.3	3.5	5.5	-	-	-55.0 °C	150.0 °C
IRGC20B60KC	active	600.0	20.0	1.3	3.5	5.5	-	-	-55.0 °C	150.0 °C
IRGC25B120KB	active	1200.0	25.0	1.95	4.4	6.0	25.0	60.0	-55.0 °C	150.0 °C
IRGC25B120UB	active	1200.0	25.0	2.7	4.4	6.0	20.0	24.0	-55.0 °C	150.0 °C
IRGC25B120UD	active	1200.0	25.0	2.7	4.4	6.0	20.0	24.0	-55.0 °C	150.0 °C
IRGC26B120KB	active	1200.0	25.0	1.96	4.4	6.0	-	-	-55.0 °C	150.0 °C
IRGC2B60KB	active	600.0	2.0	2.16	4.0	6.0	8.7	56.0	-55.0 °C	150.0 °C
IRGC30B60KB	active	600.0	30.0	1.35	3.5	5.5	28.0	31.0	-55.0 °C	150.0 °C
IRGC30B60KD	active	600.0	30.0	1.35	3.5	5.5	28.0	31.0	-55.0 °C	150.0 °C
IRGC35B120KB	active	1200.0	35.0	1.72	4.4	6.0	40.0	170.0	-55.0 °C	150.0 °C
IRGC35B60PB	active	600.0	35.0	1.7	3.0	5.0	6.0	8.0	-55.0 °C	150.0 °C
IRGC49B120KB	active	1200.0	50.0	1.60	4.4	6.0	32.0	45.0	-55.0 °C	150.0 °C
IRGC49B120UB	active	1200.0	50.0	2.25	4.4	6.0	39.0	25.0	-55.0 °C	150.0 °C
IRGC50B120KB	active	1200.0	50.0	2.6	4.5	6.0	85.0	145.0	-55.0 °C	150.0 °C
IRGC50B120UB	active	1200.0	50.0	3.5	4.5	6.0	70.0	125.0	-55.0 °C	150.0 °C
IRGC50B120UD	active	1200.0	50.0	3.5	4.5	6.0	70.0	125.0	-55.0 °C	150.0 °C
IRGC50B60KB	active	600.0	50.0	1.35	3.5	5.5	75.0	90.0	-55.0 °C	150.0 °C
IRGC50B60PB	active	600.0	50.0	1.65	3.0	5.0	10.0	11.0	-55.0 °C	150.0 °C
IRGC50B60PD	active	600.0	50.0	1.65	3.0	5.0	10.0	11.0	-55.0 °C	150.0 °C
IRGC5B120KB	active	1200.0	5.0	2.22	4.4	6.0	19.0	19.0	-55.0 °C	150.0 °C
IRGC5B60KB	active	600.0	5.0	1.25	3.5	5.5	17.0	13.2	-55.0 °C	150.0 °C
IRGC75B120KB	active	1200.0	75.0	2.6	4.5	6.0	85.0	170.0	-55.0 °C	150.0 °C
IRGC75B120UB	active	1200.0	75.0	3.5	4.5	6.0	90.0	120.0	-55.0 °C	150.0 °C
IRGC75B60KB	active	600.0	75.0	2.1	3.5	5.5	165.0	125.0	-55.0 °C	150.0 °C
IRGC75B60UB	active	600.0	75.0	3.5	4.5	6.0	100.0	120.0	-55.0 °C	150.0 °C

## IGBT bare die (400V-1200V)

Product	Product status	$V_{CE(max)}$ [A]	$I_c(max)$ [A]	$V_{CE(sat)max}$ [V]	$V_{GE(th)min}$ [V]	$V_{GE(th)max}$ [V]	$t_r$ [ns]	$t_f$ [ns]	Operating temperature min	Operating temperature max
Gen 5 IGBT										
IRGC8B120KB	active	1200.0	8.0	2.27	4.4	6.0	-	-	-55.0 °C	150.0 °C
IRGC8B60KB	active	600.0	8.0	1.4	3.5	5.5	22.0	32.0	-55.0 °C	150.0 °C
IRGC9B120KB	active	1200.0	9.0	2.27	4.4	6.0	-	-	-55.0 °C	150.0 °C
Gen 6 IGBT										
IRGC4045B	active and preferred	600.0	6.0	2.0	4.0	6.5	11.0	17.0	-55.0 °C	175.0 °C
IRGC4056B	active and preferred	600.0	12.0	1.85	4.0	6.5	17.0	24.0	-55.0 °C	175.0 °C
IRGC4056F	active and preferred	600.0	12.0	1.85	4.0	6.5	17.0	24.0	-55.0 °C	175.0 °C
IRGC4059B	active and preferred	600.0	4.0	2.05	4.0	6.5	10.0	15.0	-55.0 °C	175.0 °C
IRGC4060B	active and preferred	600.0	8.0	1.85	4.0	6.5	15.0	20.0	-55.0 °C	175.0 °C
IRGC4061B	active and preferred	600.0	18.0	1.95	4.0	6.5	25.0	25.0	-55.0 °C	175.0 °C
IRGC4061F	active and preferred	600.0	18.0	1.95	4.0	6.5	25.0	25.0	-55.0 °C	175.0 °C
IRGC4062B	active and preferred	600.0	24.0	1.95	4.0	6.5	22.0	29.0	-55.0 °C	175.0 °C
IRGC4063B	active and preferred	600.0	48.0	2.14	4.0	6.5	45.0	45.0	-55.0 °C	175.0 °C
IRGC4063D	active and preferred	600.0	48.0	2.14	4.0	6.5	45.0	45.0	-55.0 °C	175.0 °C
IRGC4064B	active and preferred	600.0	10.0	1.91	4.0	6.5	15.0	21.0	-55.0 °C	175.0 °C
IRGC4066B	active and preferred	600.0	75.0	2.1	4.0	6.5	70.0	60.0	-55.0 °C	175.0 °C
IRGC4066F	active and preferred	600.0	75.0	2.1	4.0	6.5	70.0	60.0	-55.0 °C	175.0 °C
IRGC4067B	active and preferred	600.0	120.0	2.05	4.0	6.5	130.0	130.0	-55.0 °C	175.0 °C
IRGC4069B	active and preferred	600.0	35.0	1.95	4.0	6.5	33.0	44.0	-55.0 °C	175.0 °C
IRGC4069F	active and preferred	600.0	35.0	1.95	4.0	6.5	33.0	44.0	-55.0 °C	175.0 °C
IRGC4263B	active and preferred	650.0	48.0	2.1	5.5	7.7	60.0	30.0	-55.0 °C	175.0 °C
IRGC4271B	active and preferred	650.0	75.0	1.9	5.5	7.7	65.0	25.0	-55.0 °C	175.0 °C
IRGC4273B	active and preferred	650.0	100.0	1.9	5.5	7.7	80.0	35.0	-55.0 °C	175.0 °C
IRGC4274B	active and preferred	650.0	150.0	1.9	5.5	7.7	200.0	85.0	-55.0 °C	175.0 °C
IRGC4275B	active and preferred	650.0	200.0	1.9	5.5	7.7	330.0	140.0	-55.0 °C	175.0 °C
IRGC4615B	active and preferred	600.0	8.0	1.85	4.0	6.5	15.0	20.0	-55.0 °C	175.0 °C
IRGC4615F	active and preferred	600.0	8.0	1.85	4.0	6.5	15.0	20.0	-55.0 °C	175.0 °C
IRGC4620B	active and preferred	600.0	12.0	1.85	4.0	6.5	17.0	24.0	-55.0 °C	175.0 °C
IRGC4620F	active and preferred	600.0	12.0	1.85	4.0	6.5	17.0	24.0	-55.0 °C	175.0 °C
IRGC4630B	active and preferred	600.0	18.0	1.95	4.0	6.5	25.0	25.0	-55.0 °C	175.0 °C
IRGC4640B	active and preferred	600.0	24.0	1.95	4.0	6.5	22.0	29.0	-55.0 °C	175.0 °C
IRGC4640F	active and preferred	600.0	24.0	1.95	4.0	6.5	22.0	29.0	-55.0 °C	175.0 °C
IRGC4660B	active and preferred	600.0	48.0	2.14	4.0	6.5	45.0	45.0	-55.0 °C	175.0 °C

# IGBT bare die (400V-1200V)

Product	Product status	V <sub>CE</sub> max [A]	I <sub>c</sub> max [A]	V <sub>CE(sat)</sub> max [V]	V <sub>GE(th)</sub> min [V]	V <sub>GE(th)</sub> max [V]	t <sub>r</sub> [ns]	t <sub>f</sub> [ns]	Operating temperature min	Operating temperature max
Gen 7 IGBT										
IRG7CH28UEF	active	1200.0	25.0	2.2	3.0	6.0	20.0	105.0	-40.0 °C	175.0 °C
IRG7CH30K10EF	active	1200.0	10.0	2.56	5.0	7.5	35.0	120.0	-40.0 °C	175.0 °C
IRG7CH35UEF	active	1200.0	20.0	2.2	3.0	6.0	15.0	80.0	-40.0 °C	175.0 °C
IRG7CH37K10EF	active	1200.0	15.0	2.3	5.0	7.5	27.0	105.0	-40.0 °C	175.0 °C
IRG7CH42UEF	active	1200.0	30.0	2.02	3.0	6.0	32.0	63.0	-40.0 °C	175.0 °C
IRG7CH44K10EF	active	1200.0	25.0	2.3	5.0	7.5	35.0	70.0	-40.0 °C	175.0 °C
IRG7CH46UEF	active	1200.0	40.0	2.0	3.0	6.0	40.0	45.0	-40.0 °C	175.0 °C
IRG7CH50K10EF	active	1200.0	35.0	2.3	5.0	7.5	80.0	30.0	-40.0 °C	175.0 °C
IRG7CH50UEF	active	1200.0	50.0	2.0	3.0	6.0	45.0	45.0	-40.0 °C	175.0 °C
IRG7CH54K10EF-R	active	1200.0	50.0	2.3	5.0	7.5	60.0	55.0	-40.0 °C	175.0 °C
IRG7CH73K10EF-R	active	1200.0	75.0	2.3	5.0	7.5	115.0	60.0	-40.0 °C	175.0 °C
IRG7CH73UEF-R	active	1200.0	75.0	2.0	3.0	6.0	70.0	50.0	-40.0 °C	175.0 °C
IRG7CH75K10EF-R	active	1200.0	100.0	2.3	5.0	7.5	105.0	70.0	-40.0 °C	175.0 °C
IRG7CH75UEF-R	active	1200.0	100.0	2.0	3.0	6.0	100.0	80.0	-40.0 °C	175.0 °C
IRG7CH81K10EF-R	active	1200.0	150.0	2.3	5.0	7.5	130.0	70.0	-40.0 °C	175.0 °C
Gen 8 IGBT										
IRG8CH106K10F	active	1200.0	110.0	2.0	5.0	6.5	30.0	110.0	-40.0 °C	175.0 °C
IRG8CH10K10F	active	1200.0	5.0	2.0	5.0	6.5	20.0	240.0	-40.0 °C	175.0 °C
IRG8CH137K10F	active	1200.0	150.0	2.0	5.0	6.5	45.0	50.0	-40.0 °C	175.0 °C
IRG8CH15K10F	active	1200.0	10.0	2.0	5.0	6.5	20.0	200.0	-40.0 °C	175.0 °C
IRG8CH182K10F	active	1200.0	200.0	2.0	5.0	6.5	65.0	80.0	-40.0 °C	175.0 °C
IRG8CH184K10F	active	1200.0	200.0	2.0	5.0	6.5	40.0	170.0	-40.0 °C	175.0 °C
IRG8CH20K10F	active	1200.0	15.0	2.0	5.0	6.5	20.0	190.0	-40.0 °C	175.0 °C
IRG8CH29K10F	active	1200.0	25.0	2.0	5.0	6.5	20.0	180.0	-40.0 °C	175.0 °C
IRG8CH37K10F	active	1200.0	35.0	2.0	5.0	6.5	25.0	105.0	-40.0 °C	175.0 °C
IRG8CH42K10F	active	1200.0	40.0	2.0	5.0	6.5	30.0	110.0	-40.0 °C	175.0 °C
IRG8CH50K10F	active	1200.0	50.0	2.0	5.0	6.5	30.0	145.0	-40.0 °C	175.0 °C
IRG8CH76K10F	active	1200.0	75.0	2.0	5.0	6.5	15.0	130.0	-40.0 °C	175.0 °C
IRG8CH97K10F	active	1200.0	100.0	2.0	5.0	6.5	20.0	130.0	-40.0 °C	175.0 °C

## Chip diode

Product	Product status	$V_{D_S}$ max [V]	$I_F$ max [A]	$I_{(FSM)}$ max [A]	$V_F$ [V]	$I_R$ max [uA]	$I_{rrm}$ [A]
Emitter controlled diode							
SIDC06D60E6	active and preferred	600.0	10.0	30.0	1.25	250.0	8.0
SIDC09D60E6	active and preferred	600.0	20.0	60.0	1.25	250.0	20.0
SIDC14D60E6	active and preferred	600.0	30.0	90.0	1.25	250.0	50.0
SIDC23D60E6	active and preferred	600.0	50.0	150.0	1.25	250.0	75.3
SIDC30D60E6	active and preferred	600.0	75.0	225.0	1.25	250.0	104.0
SIDC42D60E6	active and preferred	600.0	100.0	300.0	1.25	250.0	132.8
SIDC56D60E6	active and preferred	600.0	150.0	450.0	1.25	250.0	190.2
SIDC81D60E6	active and preferred	600.0	200.0	600.0	1.25	250.0	247.7
SIDC42D170E6	active and preferred	1700.0	50.0	100.0	2.15	375.0	36.0
SIDC56D170E6	active and preferred	1700.0	75.0	150.0	2.15	375.0	55.0
SIDC73D170E6	active and preferred	1700.0	100.0	200.0	2.15	375.0	110.0
SIDC03D60F6	active and preferred	600.0	6.0	12.0	1.6	250.0	6.5
SIDC06D120E6	active and preferred	1200.0	5.0	10.0	1.9	250.0	2.3
SIDC23D120E6	active and preferred	1200.0	25.0	50.0	1.9	250.0	23.9
SIDC30D120E6	active and preferred	1200.0	35.0	70.0	1.9	250.0	36.8
SIDC42D120E6	active and preferred	1200.0	50.0	100.0	1.9	250.0	56.2
SIDC56D120E6	active and preferred	1200.0	75.0	150.0	1.9	250.0	88.5
SIDC81D120E6	active and preferred	1200.0	100.0	200.0	1.9	250.0	120.0
SIDC14D120E6	active and preferred	1200.0	15.0	30.0	1.9	250.0	10.9
SIDC07D60E6	active and preferred	600.0	15.0	45.0	1.25	27.0	18.5

# Chip diode

Product	Product status	$V_{D5}$ max [V]	$I_F$ max [A]	$I_{(FSM)}$ max [A]	$V_F$ [V]	$I_R$ max [uA]	$I_{rm}$ [A]
Emitter controlled diode 3							
SIDC32D170H	active and preferred	1700.0	50.0	100.0	1.8	250.0	62.0
SIDC59D170H	active and preferred	1700.0	100.0	200.0	1.8	250.0	123.0
SIDC78D170H	active and preferred	1700.0	150.0	300.0	1.8	250.0	175.0
SIDC85D170H	active and preferred	1700.0	150.0	300.0	1.8	250.0	131.0
SIDC110D170H	active and preferred	1700.0	200.0	400.0	1.8	250.0	171.0
SIDC161D170H	active and preferred	1700.0	300.0	600.0	1.8	250.0	233.0
SIDC46D170H	active and preferred	1700.0	75.0	150.0	1.8	250.0	93.0
SIDC112D170H	active and preferred	1700.0	205.0	410.0	1.9	20.0	-
SIDC02D60C8	active and preferred	600.0	6.0	12.0	1.6	27.0	-
SIDC03D60C8	active and preferred	600.0	10.0	20.0	1.6	27.0	-
SIDC05D60C8	active and preferred	600.0	15.0	30.0	1.6	27.0	-
SIDC06D60C8	active and preferred	600.0	20.0	40.0	1.6	27.0	-
SIDC08D60C8	active and preferred	600.0	30.0	60.0	1.6	27.0	-
SIDC14D60C8	active and preferred	600.0	50.0	100.0	1.6	27.0	-
SIDC20D60C8	active and preferred	600.0	75.0	150.0	1.6	27.0	-
SIDC26D60C8	active and preferred	600.0	100.0	200.0	1.6	27.0	-
SIDC38D60C8	active and preferred	600.0	150.0	300.0	1.6	27.0	-
SIDC50D60C8	active and preferred	600.0	200.0	400.0	1.6	27.0	-
SIDC02D65C8	active and preferred	650.0	6.0	12.0	1.55	0.1	-
SIDC03D65C8	active and preferred	650.0	10.0	20.0	1.55	0.14	-
SIDC05D65C8	active and preferred	650.0	15.0	30.0	1.55	0.18	-
SIDC06D65C8	active and preferred	650.0	20.0	40.0	1.55	0.24	-
SIDC08D65C8	active and preferred	650.0	30.0	60.0	1.55	0.36	-
SIDC14D65C8	active and preferred	650.0	50.0	100.0	1.55	0.6	-
SIDC20D65C8	active and preferred	650.0	75.0	150.0	1.55	0.9	-
SIDC26D65C8	active and preferred	650.0	100.0	200.0	1.17	1.2	-
SIDC38D65C8	active and preferred	650.0	150.0	300.0	1.17	1.8	-
SIDC50D65C8	active and preferred	650.0	200.0	-	1.17	2.4	-
Emitter controlled diode 4 high power							
IDC40D120T6H	active and preferred	1200.0	75.0	150.0	1.9	14.0	-
IDC51D120T6H	active and preferred	1200.0	100.0	200.0	1.9	18.0	-
IDC73D120T6H	active and preferred	1200.0	150.0	300.0	1.9	26.0	-

Bare dies

Discrete

IGBT  
modules

IPMs

Stacks &  
boardsDriver &  
controller

SiC

Presspacks

SCR / diode  
modulesSolid state  
relays

## Chip diode

Product	Product status	$V_{D5}$ max [V]	$I_F$ max [A]	$I_{(FSM)}$ max [A]	$V_F$ [V]	$I_R$ max [uA]	$I_{rrm}$ [A]
Emitter controlled diode 4 medium power							
IDC08D120T6M	active and preferred	1200.0	10.0	20.0	1.7	2.7	-
IDC10D120T6M	active and preferred	1200.0	15.0	-	1.7	3.5	-
IDC15D120T6M	active and preferred	1200.0	25.0	50.0	1.7	5.2	-
IDC21D120T6M	active and preferred	1200.0	35.0	70.0	1.7	7.7	-
IDC28D120T6M	active and preferred	1200.0	50.0	100.0	1.7	10.0	-
IDC40D120T6M	active and preferred	1200.0	75.0	-	1.7	14.0	-
IDC51D120T6M	active and preferred	1200.0	100.0	200.0	1.7	18.0	-
IDC73D120T6M	active and preferred	1200.0	150.0	300.0	1.7	26.0	-
Emitter controlled diode fast							
SIDC03D120F6	active and preferred	1200.0	2.0	4.0	2.1	250.0	-
SIDC08D120F6	active and preferred	1200.0	7.0	14.0	2.1	250.0	-
SIDC14D120F6	active and preferred	1200.0	15.0	30.0	2.1	250.0	-
SIDC23D120F6	active and preferred	1200.0	25.0	50.0	2.1	250.0	-
SIDC30D120F6	active and preferred	1200.0	35.0	70.0	2.1	250.0	-
SIDC42D120F6	active and preferred	1200.0	50.0	100.0	2.1	250.0	-
SIDC56D120F6	active and preferred	1200.0	75.0	150.0	2.1	250.0	-
SIDC81D120F6	active and preferred	1200.0	100.0	200.0	2.1	250.0	-
SIDC06D120F6	active and preferred	1200.0	5.0	10.0	2.1	250.0	-
SIDC03D120H8	active and preferred	1200.0	3.0	6.0	1.6	27.0	-
SIDC06D120H8	active and preferred	1200.0	7.5	15.0	1.6	27.0	-
SIDC08D120H8	active and preferred	1200.0	10.0	20.0	1.6	27.0	-
SIDC10D120H8	active and preferred	1200.0	15.0	30.0	1.6	27.0	-
SIDC23D120H8	active and preferred	1200.0	35.0	70.0	1.6	27.0	-
SIDC30D120H8	active and preferred	1200.0	50.0	100.0	1.6	27.0	-
SIDC42D120H8	active and preferred	1200.0	75.0	150.0	1.6	27.0	-
SIDC53D120H8	active and preferred	1200.0	100.0	200.0	1.6	27.0	-
SIDC81D120H8	active and preferred	1200.0	150.0	300.0	1.6	27.0	-
SIDC130D170H	active and preferred	1700.0	235.0	470.0	1.35	11.0	-



# Chip diode

Product	Product status	$V_{D_S}$ max [V]	$I_F$ max [A]	$I_{(FSM)}$ max [A]	$V_F$ [V]	$I_R$ max [ $\mu$ A]	$I_{rm}$ [A]
Emitter controlled diode high efficiency							
SIDC02D60F6	active and preferred	600.0	3.0	6.0	1.6	250.0	3.8
SIDC04D60F6	active and preferred	600.0	9.0	18.0	1.6	250.0	10.2
SIDC06D60F6	active and preferred	600.0	15.0	30.0	1.6	250.0	13.7
SIDC07D60AF6	active and preferred	600.0	22.5	45.0	1.5	250.0	17.0
SIDC07D60F6	active and preferred	600.0	22.5	45.0	1.6	250.0	17.0
SIDC09D60F6	active and preferred	600.0	30.0	60.0	1.6	250.0	19.0
SIDC14D60F6	active and preferred	600.0	45.0	90.0	1.6	250.0	23.0
SIDC14D120H8	active and preferred	1200.0	25.0	50.0	1.6	27.0	-
SIDC105D120H8	active and preferred	1200.0	200.0	400.0	1.29	2.6	-

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

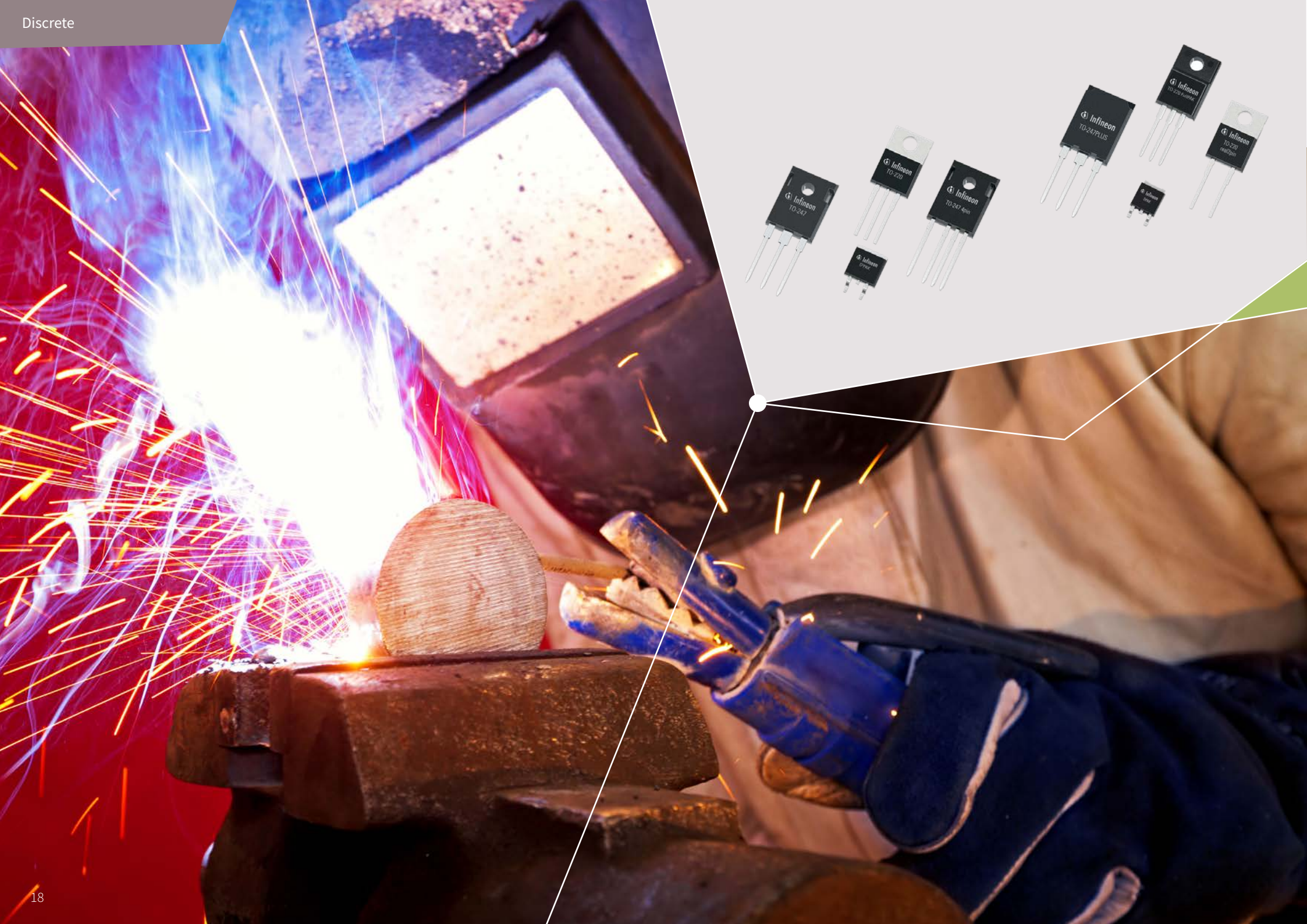
Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays



## Discrete

## IGBTs and diodes

Market leadership through groundbreaking innovation and application focus. Striving for the highest standards in performance and quality, Infineon offers a comprehensive application specific discrete IGBT portfolio that is second to none. New products are application specific developed to achieve highest value.

The Silicon Power Rapid Diode family complements Infineon's existing high power

600V/650 V diode portfolio by filling the gap between SiC diodes and previously released emitter-controlled diodes. They represent a perfect cost/performance balance and target high efficiency applications switching between 18 kHz and 100 kHz. Rapid 1 and Rapid 2 diodes are optimized to have excellent compatibility with CoolMOS™ and high speed IGBT (Insulated Gate Bipolar Transistor) such as the TRENCHSTOP™ 5 and HighSpeed 3.

## Highlights



**650V TRENCHSTOP™ 5 – discover the discrete IGBT families H5/F5/L5/WR5 and the new S5**  
650V TRENCHSTOP™ 5 is the highest efficiency discrete IGBT technology on the market and ideally suited for customers who are looking for outstanding efficiency and power density. It consists of 5 subcategories – H5, F5, L5, WR5 and the new S5 – positioned clearly according to switching frequencies, targeted for applications such as Welding, UPS, Photovoltaic and Energy Storage.  
[www.infineon.com/trenchstop5](http://www.infineon.com/trenchstop5)



**650V/1200V/1350V Next Generation Reverse Conducting IGBT – higher efficiency and better reliability**  
The latest generation of reverse conducting IGBTs has been optimized for the demanding requirements of Induction Cooking applications. The new 20 A RC-H5 1200V and 1350 V devices complement the previous generation of reverse conduction IGBTs and extend the performance leadership of the RC-H family, focusing on system efficiency and reliability.  
[www.infineon.com/rch5](http://www.infineon.com/rch5)



**TRENCHSTOP™ 5 in TO-247 4pin package – redefining new levels of switching losses and power density**

- > 20 % reduction in total switching losses vs TO-247
- > True benefit seem under high current conditions
- > Extremely low emitter inductance loop

[www.infineon.com/to-247-4](http://www.infineon.com/to-247-4)



**Discrete IGBT in TO-247PLUS package – maximum flexibility in high power 600 V designs**

- > Highest current rating co-pack 600V in 100 A and 120 A
- > Extended creepage distance of 4.25 mm
- > 20 % lower thermal resistance vs TO-247

[www.infineon.com/to-247plus](http://www.infineon.com/to-247plus)

## Discrete IGBT with anti-parallel diode

Product	Package	V <sub>CE</sub> max [V]	I <sub>C</sub> (@ 100°) max [A]	I <sub>C</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max [W]	V <sub>CE(sat)</sub> [V]	E <sub>on</sub> [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]	I <sub>F</sub> max [A]	I <sub>Fpuls</sub> max [A]	V <sub>F</sub> [V]	Q <sub>rr</sub> [nC]	I <sub>rrm</sub> [A]
Switching frequency: Fast IGBT 10-40 kHz																			
SKW15N120	TO-247	1200.0	15.0	30.0	52.0	198.0	3.7	1.9	1.5	38.0	30.0	652.0	31.0	130.0	32.0	50.0	2.0	0.5 uC	15.0
SKB02N120	D2PAK (TO-263)	1200.0	2.8	6.2	9.6	62.0	3.7	0.27	0.11	26.0	14.0	290.0	85.0	11.0	4.5	9.0	2.0	0.1 uC	4.2
SKP02N120	TO-220	1200.0	2.8	6.2	9.6	-	3.7	0.27	0.11	26.0	14.0	290.0	85.0	11.0	4.5	9.0	2.0	0.1	4.2
SKW25N120	TO-247	1200.0	25.0	46.0	84.0	313.0	3.7	3.8	2.9	50.0	36.0	820.0	42.0	225.0	42.0	80.0	2.0	1.0 uC	20.0
SKW07N120	TO-247	1200.0	7.9	16.5	27.0	125.0	3.7	1.0	0.7	30.0	26.0	490.0	30.0	70.0	13.0	27.0	2.0	0.3 uC	9.0
SKP10N60A	TO-220	600.0	10.6	20.0	40.0	-	2.3	0.26	0.28	28.0	12.0	198.0	26.0	52.0	21.0	42.0	1.4	310.0	4.5
SKB10N60A	D2PAK (TO-263)	600.0	10.9	21.0	40.0	92.0	2.3	0.26	0.28	28.0	12.0	198.0	26.0	52.0	21.0	42.0	1.4	310.0	4.5
SKB15N60	D2PAK (TO-263)	600.0	15.0	31.0	62.0	139.0	2.3	0.45	0.41	31.0	23.0	261.0	54.0	76.0	31.0	62.0	1.4	390.0	5.0
SKP15N60	TO-220	600.0	15.0	31.0	62.0	-	2.3	0.45	0.41	31.0	23.0	261.0	54.0	76.0	31.0	62.0	1.4	390.0	5.0
SKW15N60	TO-247	600.0	15.0	31.0	62.0	139.0	2.3	0.45	0.41	31.0	23.0	261.0	54.0	76.0	1.4	31.0	62.0	1020.0	7.5
SKB02N60	D2PAK (TO-263)	600.0	2.9	6.0	12.0	30.0	2.2	0.05	0.04	20.0	14.0	287.0	67.0	14.0	6.0	12.0	1.4	0.065 uC	1.9
SKP02N60	TO-220	600.0	2.9	6.0	12.0	-	2.2	0.05	0.04	20.0	14.0	287.0	67.0	14.0	6.0	12.0	1.4	65.0	1.9
SKW20N60	TO-247	600.0	20.0	40.0	80.0	179.0	2.4	0.67	0.49	36.0	30.0	250.0	63.0	100.0	40.0	80.0	1.4	490.0	5.5
SKW30N60	TO-247	600.0	30.0	41.0	112.0	250.0	2.5	0.98	0.92	44.0	34.0	324.0	67.0	140.0	41.0	112.0	1.4	1740.0	9.0
SKP04N60	TO-220	600.0	4.9	9.4	19.0	-	2.3	0.12	0.11	22.0	16.0	264.0	104.0	24.0	10.0	19.0	1.4	130.0	2.5
SKB06N60	D2PAK (TO-263)	600.0	6.9	12.0	24.0	68.0	2.3	0.17	0.15	24.0	17.0	248.0	70.0	32.0	12.0	24.0	1.4	200.0	2.8
SKP06N60	TO-220	600.0	6.9	12.0	24.0	-	2.3	0.17	0.15	24.0	17.0	248.0	70.0	32.0	12.0	24.0	1.4	200.0	2.8
Switching frequency: HighSpeed 30-100 kHz																			
SKB15N60HS	D2PAK (TO-263)	600.0	15.0	27.0	60.0	138.0	3.5	0.48	0.3	12.0	15.0	235.0	17.0	80.0	40.0	80.0	1.5	580.0	14.0
SKW20N60HS	TO-247	600.0	20.0	36.0	80.0	178.0	3.5	0.6	0.36	17.0	13.0	222.0	13.0	100.0	40.0	80.0	1.5	730.0	16.0
SKW30N60HS	TO-247	600.0	30.0	41.0	112.0	250.0	3.5	0.91	0.7	20.0	19.0	274.0	27.0	141.0	41.0 mA	112.0	1.55	0.82 uC	17.0
Switching frequency: HighSpeed2 30-100 kHz																			
IKP01N120H2	TO-220	1200.0	1.3	3.2	3.5	-	2.5	0.11	0.09	12.0	8.9	450.0	43.0	8.6	3.2	-	2.0	89.0	2.5
IKB03N120H2	D2PAK (TO-263)	1200.0	3.9	9.6	9.9	62.5	2.5	0.22	0.26	9.4	6.7	340.0	63.0	22.0	9.6	-	2.0	0.51	12.0
IKP03N120H2	TO-220	1200.0	3.9	9.6	9.9	-	2.5	0.22	0.26	9.4	6.7	340.0	63.0	22.0	9.6	-	2.0	0.23	10.3
IKW03N120H2	TO-247	1200.0	3.9	9.6	9.9	62.5	2.5	0.22	0.26	9.4	6.7	340.0	63.0	22.0	9.6	-	2.0	0.23	10.3

# Discrete IGBT with anti-parallel diode

Product	Package	V <sub>CE</sub> max [V]	I <sub>C</sub> (@ 100°) max [A]	I <sub>C</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max [W]	V <sub>CE(sat)</sub> [V]	E <sub>on</sub> [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]	I <sub>F</sub> max [A]	I <sub>Fpuls</sub> max [A]	V <sub>F</sub> [V]	Q <sub>rr</sub> [nC]	I <sub>rrm</sub> [A]
Switching frequency: HighSpeed3 20-100 kHz																			
IKW15N120H3	TO-247	1200.0	15.0	30.0	60.0	-	2.05	1.1	0.45	21.0	34.0	260.0	14.0	75.0	15.0	60.0	2.4	800	7.7
IKW25N120H3	TO-247	1200.0	25.0	50.0	100.0	-	2.05	1.8	0.85	26.0	35.0	277.0	17.0	115.0	25.0	100.0	2.4	1200	10.4
IKW40N120H3	TO-247	1200.0	40.0	80.0	160.0	-	2.05	3.2	1.2	30.0	57.0	290.0	16.0	185.0	40.0	160.0	2.4	1900	12.8
IKB20N60H3	D2PAK (TO-263)	600.0	20.0	40.0	80.0	-	1.95	0.45	0.24	16.0	20.0	194.0	11.0	120.0	20.0	80.0	1.65	390	14.2
IKP20N60H3	TO-220	600.0	20.0	40.0	80.0	-	1.95	0.45	0.24	16.0	20.0	194.0	11.0	120.0	20.0	80.0	1.65	390	11.0
IKW20N60H3	TO-247	600.0	20.0	40.0	80.0	-	1.95	0.56	0.24	17.0	11.0	194.0	11.0	120.0	20.0	80.0	1.65	390	11.0
IKW30N60H3	TO-247	600.0	30.0	60.0	120.0	-	1.95	0.94	0.44	21.0	33.0	207.0	22.0	165.0	30.0	120.0	1.65	320	12.0
IKW40N60H3	TO-247	600.0	40.0	80.0	160.0	-	1.95	1.1	0.58	19.0	33.0	197.0	21.0	223.0	40.0	160.0	1.65	810	13.6
IKW50N60H3	TO-247	600.0	50.0	100.0	200.0	-	1.85	1.45	0.91	23.0	37.0	235.0	24.0	315.0	60.0	200.0	1.65	880	16.9
IKW60N60H3	TO-247	600.0	60.0	80.0	180.0	416.0	1.85	2.1	1.13	25.0	39.0	291.0	23.0	375.0	80.0	90.0	1.65	1200	23.0
IKW75N60H3	TO-247	600.0	75.0	80.0	225.0	-	1.85	3.0	1.7	31.0	60.0	265.0	27.0	470.0	80.0	150.0	1.65	1800	19.0
Switching frequency: RC drives fast series 4-30 kHz																			
IKD10N60RF	DPAK (TO-252)	600.0	10.0	20.0	30.0	-	2.2	0.19	0.16	12.0	15.0	168.0	18.0	64.0	20.0	30.0	2.1	270	9.1
IKD15N60RF	DPAK (TO-252)	600.0	15.0	30.0	45.0	-	2.2	0.27	0.25	13.0	15.0	160.0	17.0	90.0	30.0	45.0	2.1	420	13.2
IKD03N60RF	DPAK (TO-252)	600.0	2.5	5.0	7.5	53.6	2.2	0.05	0.04	9.0	8.0	142.0	123.0	17.1	5.0	7.5	2.1	60	6.2
IKD04N60RF	DPAK (TO-252)	600.0	4.0	8.0	12.0	75.0	2.2	0.06	0.05	12.0	7.0	116.0	37.0	27.0	8.0	12.0	2.1	90	4.6
IKD06N60-RF	DPAK (TO-252)	600.0	6.0	12.0	18.0	-	2.2	0.09	0.09	7.0	8.0	106.0	22.0	48.0	12.0	18.0	2.1	160	7.4
Switching frequency: RC drives series 2-20 kHz																			
IKD10N60R	DPAK (TO-252)	600.0	10.0	20.0	30.0	150.0	1.65	0.21	0.38	14.0	10.0	192.0	139.0	64.0	20.0	30.0	1.7	560	20.3
IKD15N60R	DPAK (TO-252)	600.0	15.0	30.0	45.0	250.0	1.65	0.37	0.53	16.0	10.0	183.0	136.0	90.0	30.0	45.0	1.7	760	27.0
IKD04N60R	DPAK (TO-252)	600.0	4.0	8.0	12.0	75.0	1.65	0.09	0.15	14.0	8.0	146.0	171.0	27.0	8.0	12.0	1.7	220	11.0
IKD06N60R	DPAK (TO-252)	600.0	6.0	12.0	18.0	100.0	1.65	0.11	0.22	12.0	7.0	127.0	152.0	48.0	12.0	18.0	1.7	370	12.0

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## Discrete IGBT with anti-parallel diode

Product	Package	V <sub>CE</sub> max [V]	I <sub>C</sub> (@ 100°) max [A]	I <sub>C</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max [W]	V <sub>CE(sat)</sub> [V]	E <sub>on</sub> [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]	I <sub>F</sub> max [A]	I <sub>Fpuls</sub> max [A]	V <sub>F</sub> [V]	Q <sub>rr</sub> [nC]	I <sub>rrm</sub> [A]
Switching frequency: RC soft switching series 8-60 kHz																			
IHW30N110R3	TO-247	1100.0	30.0	60.0	90.0	-	1.55	-	1.15	-	-	350.0	16.0	180.0	60.0	90.0	1.35	-	-
IHW15N120R3	TO-247	1200.0	15.0	30.0	45.0	-	1.48	-	0.7	-	-	300.0	46.0	165.0	30.0	45.0	1.55	-	-
IHW15T120	TO-247	1200.0	15.0	30.0	45.0	113.0	2.2	2.0	2.1	50.0	35.0	600.0	120.0	85.0	23.0	36.0	1.7	950.0	13.3
IHW20N120R3	TO-247	1200.0	20.0	40.0	60.0	-	1.48	-	0.95	0.0	0.0	387.0	25.0	211.0	40.0	40.0	1.55	-	0.0
IHW20N120R5	TO-247	1200.0	20.0	40.0	60.0	288.0	1.55	-	0.75	-	-	350.0	90.0	170.0	40.0	60.0	1.6	-	-
IHW25N120R2	TO-247	1200.0	25.0	50.0	75.0	365.0	1.6	-	2.54	-	-	373.0	55.8	60.7	25.0	75.0	1.8	-	-
IHW30N120R2	TO-247	1200.0	30.0	60.0	90.0	390.0	2.0	-	3.1	-	-	860.0	40.0	198.0	30.0	90.0	1.75	-	-
IHW30N120R3	TO-247	1200.0	30.0	60.0	90.0	349.0	1.55	-	1.47	-	-	326.0	39.0	263.0	60.0	90.0	1.6	-	-
IHW40N120R3	TO-247	1200.0	40.0	80.0	120.0	-	1.55	-	2.02	-	-	336.0	38.0	335.0	80.0	120.0	1.6	-	-
IHW40T120	TO-247	1200.0	40.0	75.0	105.0	270.0	2.3	5.0	5.4	52.0	40.0	580.0	120.0	203.0	31.0	47.0	1.7	3540.0	25.3
IHW20N135R3	TO-247	1350.0	20.0	40.0	60.0	-	1.6	-	1.3	-	-	335.0	50.0	195.0	40.0	60.0	1.6	-	-
IHW20N135R5	TO-247	1350.0	20.0	40.0	60.0	288.0	1.65	-	0.95	-	-	235.0	50.0	170.0	40.0	60.0	1.65	-	-
IHW30N135R3	TO-247	1350.0	30.0	60.0	90.0	349.0	1.65	-	1.93	-	-	337.0	47.0	263.0	60.0	90.0	1.65	-	-
IHW40N135R3	TO-247	1350.0	40.0	80.0	120.0	429.0	1.65	-	2.5	-	-	343.0	98.0	365.0	80.0	120.0	1.65	-	-
IHW30N160R2	TO-247	1600.0	30.0	60.0	90.0	312.0	2.35	-	4.37	-	-	564.0	111.0	94.0	30.0	90.0	2.0	-	-
IHW40N60R	TO-247	600.0	40.0	80.0	120.0	-	1.65	0.0	0.75	0.0	0.0	193.0	24.0	223.0	40.0	120.0	1.65	-	-
Switching frequency: RC-fast soft switching series 20-100 kHz																			
IHW40N60RF	TO-247	600.0	40.0	80.0	120.0	-	1.85	-	0.56	-	-	175.0	14.0	220.0	80.0	120.0	1.75	-	-
Switching frequency: RC-H5 series 20-150 kHz																			
IHW20N65R5	TO-247	650.0	20.0	40.0	60.0	150.0	1.35	0.54	0.16	23.0	16.0	250.0	7.0	97.0	19.0	60.0	1.7	1550	29.0
IHW30N65R5	TO-247	650.0	30.0	60.0	90.0	176.0	1.35	0.85	0.24	29.0	17.0	220.0	8.0	153.0	23.0	42.0	1.7	1900	28.0
IHW40N65R5	TO-247	650.0	40.0	80.0	120.0	230.0	1.35	1.1	0.37	34.0	25.0	260.0	13.0	193.0	32.0	120.0	1.7	2750	37.2
IHW50N65R5	TO-247	650.0	50.0	80.0	150.0	282.0	1.35	1.5	0.45	30.0	20.0	210.0	8.0	230.0	37.0	150.0	1.7	2750	37.0

# Discrete IGBT with anti-parallel diode

Product	Package	V <sub>CE</sub> max [V]	I <sub>C</sub> (@ 100°) max [A]	I <sub>C</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max [W]	V <sub>CE(sat)</sub> [V]	E <sub>on</sub> [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]	I <sub>F</sub> max [A]	I <sub>Fpuls</sub> max [A]	V <sub>F</sub> [V]	Q <sub>rr</sub> [nC]	I <sub>rrm</sub> [A]
Switching frequency: TRENCHSTOP™ 2-20 kHz																			
IHW30N100T	TO-247	1000.0	30.0	60.0	90.0	412.0	1.55	2.1	1.6	50.0	25.0	550.0	35.0	-	12.0	36.0	1.1	-	-
IKW15T120	TO-247	1200.0	15.0	30.0	45.0	110.0	2.2	2.0	2.1	50.0	35.0	600.0	120.0	85.0	30.0	45.0	1.7	1900	17.0
IKW25T120	TO-247	1200.0	25.0	50.0	75.0	190.0	2.2	3.0	4.0	50.0	32.0	660.0	130.0	155.0	50.0	105.0	1.75	2300	21.0
IKW40T120	TO-247	1200.0	40.0	75.0	105.0	270.0	2.3	5.0	5.4	52.0	40.0	580.0	120.0	203.0	80.0	105.0	1.75	3800	2.8
IKW08T120	TO-247	1200.0	8.0	16.0	24.0	70.0	2.2	1.08	1.2	40.0	26.0	570.0	140.0	53.0	16.0	24.0	1.7	1000	13.0
IKQ100N60T	TO-247PLUS-3	600.0	100.0	160.0	400.0	714.0	1.5	3.1	2.5	30.0	38.0	290.0	31.0	610.0	160.0	400.0	1.65	2800	23.0
IKQ120N60T	TO-247PLUS-3	600.0	120.0	160.0	480.0	833.0	1.5	6.2	5.9	50.0	75.0	565.0	68.0	703.0	160.0	480.0	1.65	3400	26.5
IKB20N60T	D2PAK (TO-263)	600.0	15.0	30.0	60.0	166.0	1.5	0.31	0.46	18.0	14.0	199.0	42.0	120.0	30.0	45.0	1.65	310	10.4
IKB10N60T	D2PAK (TO-263)	600.0	18.0	24.0	30.0	110.0	1.5	0.16	0.27	12.0	8.0	215.0	38.0	62.0	20.0	30.0	1.6	380	10.0
IKP10N60T	TO-220	600.0	18.0	24.0	30.0	-	1.5	0.16	0.27	12.0	8.0	215.0	38.0	67.0	24.0	30.0	1.6	380	10.0
IKB15N60T	D2PAK (TO-263)	600.0	23.0	26.0	45.0	130.0	1.5	0.22	0.35	17.0	11.0	188.0	50.0	87.0	30.0	45.0	1.65	240	10.4
IKP15N60T	TO-220	600.0	23.0	26.0	45.0	-	1.5	0.22	0.35	17.0	11.0	188.0	50.0	87.0	26.0	45.0	1.65	240	10.4
IKP20N60T	TO-220	600.0	28.0	41.0	60.0	-	1.5	0.31	0.46	18.0	14.0	199.0	42.0	120.0	41.0	60.0	1.65	310	13.3
IKW20N60T	TO-247	600.0	28.0	41.0	60.0	166.0	1.5	0.31	0.46	18.0	14.0	199.0	42.0	120.0	40.0	60.0	1.65	310	13.3
IHW30N60T	TO-247	600.0	30.0	60.0	90.0	187.0	1.5	-	0.8	23.0	21.0	254.0	46.0	167.0	13.0	30.0	1.1	-	-
IKW30N60T	TO-247	600.0	39.0	45.0	90.0	187.0	1.5	1.0	1.1	23.0	21.0	254.0	46.0	167.0	60.0	90.0	1.65	920	16.3
IKP04N60T	TO-220	600.0	4.0	8.0	12.0	-	1.5	0.06	0.08	14.0	7.0	164.0	43.0	27.0	8.0	12.0	1.65	79	5.3
IHW40T60	TO-247	600.0	40.0	80.0	120.0	-	1.55	0.0	0.92	0.0	0.0	186.0	66.3	215.0	30.0	90.0	1.65	0.92	16.3
IKW50N60T	TO-247	600.0	50.0	80.0	150.0	333.0	1.5	1.2	1.4	26.0	29.0	299.0	29.0	310.0	100.0	150.0	1.65	1800	27.7
IKB06N60T	D2PAK (TO-263)	600.0	6.0	12.0	18.0	88.0	1.5	0.09	0.11	9.0	6.0	130.0	58.0	42.0	12.0	18.0	1.6	190	5.3
IKP06N60T	TO-220	600.0	6.0	12.0	18.0	-	1.5	0.09	0.11	9.0	6.0	130.0	58.0	42.0	12.0	18.0	1.6	190	5.3
IKA06N60T	TO-220	600.0	6.2	10.0	18.0	-	1.5	0.09	0.11	9.0	6.0	130.0	58.0	42.0	10.2	18.0	0.1	190	5.3
IKA10N60T	TO-220	600.0	7.2	11.7	30.0	-	1.5	0.16	0.27	12.0	8.0	215.0	35.0	67.0	11.9	30.0	1.6	380	13.0
IKW75N60T	TO-247	600.0	75.0	80.0	225.0	428.0	1.5	2.9	2.9	33.0	36.0	330.0	35.0	470.0	80.0	225.0	1.65	2400	38.5
IKA15N60T	TO-220	600.0	8.9	14.7	45.0	-	1.5	0.22	0.35	17.0	11.0	188.0	50.0	87.0	15.5	45.0	1.65	240	10.4
IHW30N90T	TO-247	900.0	30.0	60.0	90.0	428.0	1.5	-	1.8	45.0	26.0	556.0	29.0	280.0	13.0	36.0	1.1	-	-
IKW15N120T2	TO-247	1200.0	15.0	30.0	60.0	235.0	2.2	1.5	1.3	31.0	30.0	450.0	176.0	93.0	25.0	60.0	1.75	1300	13.0
IKW25N120T2	TO-247	1200.0	25.0	50.0	100.0	349.0	2.2	2.25	2.05	25.0	24.0	340.0	164.0	120.0	40.0	100.0	1.65	2050	24.0
IKW40N120T2	TO-247	1200.0	40.0	75.0	160.0	480.0	2.3	4.5	3.8	32.0	28.0	405.0	195.0	192.0	75.0	160.0	1.75	3300	31.0

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

# Discrete IGBT with anti-parallel diode

Product	Package	V <sub>CE</sub> max [V]	I <sub>C</sub> (@ 100°) max [A]	I <sub>C</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max [W]	V <sub>CE(sat)</sub> [V]	E <sub>on</sub> [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]	I <sub>F</sub> max [A]	I <sub>Fpuls</sub> max [A]	V <sub>F</sub> [V]	Q <sub>rr</sub> [nC]	I <sub>rrm</sub> [A]
Switching frequency: TRENCHSTOP™5 20-60 kHz																			
IKW30N65WR5	TO-247	650.0	30.0	60.0	90.0	185.0	1.4	0.99	0.33	39.0	12.0	367.0	9.0	155.0	24.0	45.0	1.4	1250	22.0
IKW40N65WR5	TO-247	650.0	40.0	80.0	120.0	230.0	1.4	1.4	0.42	40.0	29.0	402.0	11.0	193.0	32.0	120.0	1.4	1650	27.0
IKW50N65WR5	TO-247	650.0	50.0	80.0	150.0	282.0	1.4	1.85	0.7	46.0	33.0	400.0	20.0	230.0	37.0	150.0	1.4	1800	29.0
Switching frequency: TRENCHSTOP™5 30-100 kHz																			
IKP08N65H5	TO-220	650.0	11.0	18.0	24.0	70.0	1.65	0.07	0.03	11.0	5.0	115.0	15.0	22.0	20.0	24.0	1.45	130	6.8
IKP15N65H5	TO-220	650.0	18.0	30.0	45.0	105.0	1.65	0.12	0.05	17.0	7.0	160.0	10.0	38.0	20.0	45.0	1.45	200	8.0
IKP20N65H5	TO-220	650.0	21.0	42.0	60.0	125.0	1.65	0.17	0.06	16.0	3.0	168.0	36.0	48.0	20.0	60.0	1.65	270	10.04
IKP30N65H5	TO-220	650.0	35.0	55.0	90.0	188.0	1.65	0.28	0.1	18.0	4.0	180.0	22.0	70.0	36.0	90.0	1.35	410	14.3
IKW30N65H5	TO-247	650.0	35.0	55.0	90.0	188.0	1.65	0.28	0.1	20.0	11.0	190.0	19.0	70.0	30.0	54.0	1.55	410	11.5
IKP40N65H5	TO-220	650.0	46.0	74.0	120.0	255.0	1.65	0.39	0.12	22.0	12.0	165.0	13.0	95.0	36.0	120.0	1.45	450	12.5
IKW40N65H5	TO-247	650.0	46.0	74.0	120.0	255.0	1.65	0.39	0.12	22.0	12.0	165.0	13.0	95.0	36.0	120.0	1.45	450	12.5
IKW50N65EH5	TO-247	650.0	50.0	80.0	200.0	275.0	1.65	1.5	0.5	25.0	29.0	172.0	35.0	120.0	80.0	200.0	1.35	1100	17.0
IKZ50N65EH5	TO-247-4	650.0	54.0	85.0	200.0	273.0	1.65	0.41	0.19	20.0	7.0	250.0	21.0	109.0	95.0	200.0	1.35	820	24.0
IKZ50N65NH5	TO-247-4	650.0	54.0	85.0	200.0	273.0	1.65	0.35	0.2	22.0	8.0	252.0	23.0	109.0	79.0	200.0	1.6	490	22.0
IKW50N65H5	TO-247	650.0	56.0	80.0	150.0	305.0	1.65	0.52	0.18	21.0	15.0	180.0	18.0	120.0	40.0	150.0	1.45	570	16.7
IKA08N65H5	TO220-3 FP	650.0	6.8	10.8	24.0	31.2	1.65	0.07	0.03	11.0	5.0	115.0	15.0	22.0	12.3	24.0	1.45	130	6.8
IKW75N65EH5	TO-247	650.0	75.0	90.0	300.0	395.0	1.65	2.3	0.9	28.0	33.0	174.0	41.0	160.0	90.0	300.0	1.35	1330	20.5
IKZ75N65EH5	TO-247-4	650.0	75.0	90.0	300.0	395.0	1.65	0.68	0.43	26.0	11.0	347.0	15.0	166.0	95.0	300.0	1.35	1020	29.0
IKZ75N65NH5	TO-247-4	650.0	75.0	90.0	300.0	395.0	1.65	0.88	0.52	52.0	19.0	412.0	19.0	166.0	95.0	219.0	1.6	570	26.0
IKA15N65H5	TO220-3 FP	650.0	8.5	14.0	45.0	33.3	1.65	0.12	0.05	17.0	7.0	160.0	10.0	38.0	12.3	45.0	1.45	200	8.0
Switching frequency: TRENCHSTOP™5 50Hz -20 kHz																			
IKZ75N65EL5	TO-247-4	650.0	100.0	100.0	300.0	536.0	1.1	1.57	3.2	120.0	23.0	275.0	50.0	436.0	90.0	300.0	1.4	1300	37.0
IKW30N65EL5	TO-247	650.0	62.0	85.0	120.0	227.0	1.05	0.47	1.35	33.0	11.0	308.0	51.0	168.0	50.0	120.0	1.35	910	21.0
IKW30N65NL5	TO-247	650.0	62.0	85.0	120.0	227.0	1.05	0.56	1.35	59.0	20.0	283.0	67.0	168.0	50.0	120.0	1.65	480	18.0
IKW75N65EL5	TO-247	650.0	80.0	80.0	300.0	536.0	1.1	1.61	3.2	40.0	11.0	275.0	50.0	436.0	90.0	300.0	1.4	1370	29.0



# Discrete IGBT with anti-parallel diode

Product	Package	V <sub>CE</sub> max [V]	I <sub>C</sub> (@ 100°) max [A]	I <sub>C</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max [W]	V <sub>CE(sat)</sub> [V]	E <sub>on</sub> [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]	I <sub>F</sub> max [A]	I <sub>Fpuls</sub> max [A]	V <sub>F</sub> [V]	Q <sub>rr</sub> [nC]	I <sub>rrm</sub> [A]
Switching frequency: TRENCHSTOP™5 60-120 kHz																			
IKP08N65F5	TO-220	650.0	11.0	18.0	24.0	70.0	1.6	0.07	0.02	116.0	5.0	116.0	20.0	22.0	20.0	24.0	1.45	140	6.6
IKP15N65F5	TO-220	650.0	18.0	30.0	45.0	105.0	1.6	0.13	0.04	17.0	7.0	150.0	16.0	38.0	20.0	45.0	1.45	190	8.0
IKP20N65F5	TO-220	650.0	21.0	42.0	60.0	125.0	1.6	0.16	0.06	18.0	3.0	170.0	30.0	48.0	20.0	60.0	1.65	280	10.25
IKP30N65F5	TO-220	650.0	35.0	55.0	90.0	188.0	1.6	0.28	0.07	18.0	4.0	174.0	15.0	70.0	36.0	90.0	1.35	410	14.4
IKP40N65F5	TO-220	650.0	46.0	74.0	120.0	255.0	1.6	0.36	0.1	19.0	13.0	160.0	16.0	95.0	36.0	120.0	1.45	450	12.4
IKW40N65F5	TO-247	650.0	46.0	74.0	120.0	255.0	1.6	0.36	0.1	19.0	13.0	160.0	16.0	95.0	36.0	120.0	1.45	450	12.4
IKW50N65F5	TO-247	650.0	56.0	80.0	150.0	305.0	1.6	0.49	0.16	21.0	15.0	175.0	18.0	120.0	40.0	150.0	1.45	550	16.5
IKA08N65F5	TO220-3 FP	650.0	6.8	10.8	24.0	31.2	1.6	0.07	0.02	10.0	5.0	116.0	20.0	22.0	12.3	24.0	1.45	140	6.6
IKA15N65F5	TO220-3 FP	650.0	8.5	14.0	45.0	33.3	1.6	0.13	0.04	150.0	7.0	150.0	16.0	38.0	12.3	45.0	1.45	190	8.0
Switching frequency: TRENCHSTOP™5 S5 10-30 kHz																			
IKW30N65ES5	TO-247	650.0	39.5	62.0	120.0	188.0	1.35	0.56	0.32	17.0	12.0	124.0	30.0	70.0	40.0	120.0	1.45	830	18.0
IKW40N65ES5	TO-247	650.0	50.0	79.0	160.0	230.0	1.35	0.86	0.4	19.0	18.0	130.0	23.0	95.0	79.0	160.0	1.45	1100	23.0
IKW50N65ES5	TO-247	650.0	60.5	80.0	200.0	274.0	1.35	1.23	0.55	20.0	27.0	127.0	34.0	120.0	80.0	5.0	1.45	1250	25.0
IKW75N65ES5	TO-247	650.0	80.0	80.0	300.0	395.0	1.42	2.4	0.95	40.0	46.0	144.0	41.0	164.0	80.0	300.0	1.5	1800	31.0

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## Discrete IGBT with anti-parallel diode

Product	Product status	Package	V <sub>CE</sub> max [V]	I <sub>c</sub> (@ 100°) max [A]	I <sub>c</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max [W]	V <sub>CE(sat)</sub> [V]	E <sub>on</sub> [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]	I <sub>F</sub> max [A]	V <sub>F</sub> [V]	Q <sub>rr</sub> [nC]	I <sub>rrm</sub> [A]
Switching frequency: Gen 4 1 kHz																			
IRG4BC20SD	active	TO-220	600.0	10.0	19.0	38.0	60.0	1.4	0.32	2.58	62.0	32.0	690.0	480.0	27.0	38.0	1.40	65.0	3.5
IRG4BC20SD-S	active	D2PAK (TO-263)	600.0	10.0	19.0	38.0	60.0	1.4	0.32	2.58	62.0	32.0	690.0	480.0	27.0	38.0	1.40	65.0	3.5
IRG4PC50SD	active	TO-247	600.0	41.0	70.0	104.0	200.0	1.28	0.72	8.27	63.0	49.0	150.0	95.0	200.0	280.0	1.30	112.0	4.5
IRG4BC10SD-S	active	D2PAK (TO-263)	600.0	8.0	14.0	18.0	38.0	1.58	0.31	3.28	76.0	32.0	815.0	720.0	15.0	18.0	1.50	40.0	2.9
IRG4RC10SD	active	DPAK (TO-252)	600.0	8.0	14.0	18.0	38.0	1.58	0.31	3.28	76.0	32.0	815.0	720.0	15.0	16.0	1.50	40.0	2.9
Switching frequency: Gen 4 1-8 kHz																			
IRG4BC30FD	active	TO-220	600.0	17.0	31.0	124.0	100.0	1.59	0.63	1.39	42.0	26.0	230.0	160.0	51.0	120.0	1.40	80.0	3.5
IRG4BC30FD1	active	TO-220	600.0	17.0	31.0	124.0	100.0	1.59	0.37	1.42	22.0	24.0	250.0	160.0	57.0	16.0	1.40	110.0	4.8
IRG4BC30FD-S	active	D2PAK (TO-263)	600.0	17.0	31.0	124.0	100.0	1.59	0.63	1.39	42.0	26.0	230.0	160.0	51.0	120.0	1.40	80.0	3.5
IRG4PC30FD	active	TO-247	600.0	17.0	31.0	120.0	100.0	1.59	0.63	1.39	42.0	26.0	230.0	160.0	51.0	120.0	1.40	80.0	3.5
IRG4PC40FD	active	TO-247	600.0	27.0	49.0	196.0	160.0	1.5	0.95	2.01	63.0	32.0	230.0	170.0	100.0	200.0	1.30	80.0	4.0
IRG4PC50FD	active	TO-247	600.0	39.0	70.0	280.0	200.0	1.45	1.50	2.40	55.0	25.0	240.0	140.0	190.0	280.0	1.30	112.0	4.5
IRG4BC20FD	active	TO-220-3 FP	600.0	7.7	14.3	64.0	34.0	1.66	0.25	0.64	43.0	20.0	240.0	150.0	27.0	64.0	1.40	65.0	3.5
IRG4BC20FD	active	TO-220	600.0	9.0	16.0	64.0	60.0	1.66	0.25	0.64	43.0	20.0	240.0	150.0	27.0	32.0	1.40	65.0	3.5
Switching frequency: Gen 4 30-150 kHz																			
IRG4PF50WD	active	TO-247	900.0	28.0	51.0	204.0	200.0	2.25	2.63	1.34	71.0	50.0	150.0	110.0	160.0	204.0	2.50	260.0	5.8

# Discrete IGBT with anti-parallel diode

Product	Product status	Package	V <sub>CE</sub> max [V]	I <sub>c</sub> (@ 100°) max [A]	I <sub>c</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max [W]	V <sub>CE(sat)</sub> [V]	E <sub>on</sub> [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]	I <sub>F</sub> max [A]	V <sub>F</sub> [V]	Q <sub>rr</sub> [nC]	I <sub>rrm</sub> [A]
Switching frequency: Gen 4 8-30 kHz																			
IRG4PH30KD	active	TO-247	1200.0	10.0	20.0	40.0	100.0	3.1	0.95	1.15	39.0	84.0	220.0	90.0	53.0	40.0	3.40	130.0	4.4
IRG4PH40KD	active	TO-247	1200.0	15.0	30.0	60.0	160.0	2.74	1.31	1.12	50.0	31.0	96.0	220.0	94.0	130.0	2.60	140.0	4.5
IRG4PH40UD	active	TO-247	1200.0	21.0	41.0	82.0	160.0	2.43	1.80	1.93	46.0	35.0	97.0	240.0	86.0	130.0	2.60	80.0	4.5
IRG4PH40UD2-E	active	TO-247	1200.0	21.0	41.0	82.0	160.0	2.43	1.95	1.71	22.0	26.0	100.0	200.0	100.0	40.0	3.40	130.0	4.4
IRG4PH50KD	active	TO-247	1200.0	24.0	45.0	90.0	200.0	2.77	3.83	1.90	87.0	100.0	140.0	200.0	180.0	90.0	2.50	260.0	5.8
IRG4PH50UD	active	TO-247	1200.0	24.0	45.0	180.0	200.0	2.78	2.10	3.60	47.0	24.0	110.0	180.0	160.0	180.0	2.50	260.0	5.8
IRG4PSH71KD	active	Super-247 (TO-274)	1200.0	42.0	78.0	156.0	350.0	2.97	5.68	3.23	67.0	84.0	230.0	130.0	410.0	156.0	2.50	680.0	10.0
IRG4PH20KD	active	TO-247	1200.0	5.0	11.0	22.0	60.0	3.17	0.62	0.30	50.0	30.0	100.0	250.0	28.0	22.0	2.50	183.0	6.0
IRG4PSH71UD	active	Super-247 (TO-274)	1200.0	50.0	99.0	200.0	350.0	2.52	8.80	9.40	46.0	77.0	250.0	220.0	380.0	200.0	2.92	350.0	6.0
IRG4BC30UD	active	TO-220	600.0	12.0	23.0	92.0	100.0	1.95	0.38	0.16	40.0	21.0	91.0	80.0	50.0	92.0	1.40	80.0	3.5
IRG4PC30UD	active	TO-247	600.0	12.0	23.0	92.0	100.0	1.95	0.38	0.16	40.0	21.0	91.0	80.0	50.0	92.0	1.40	80.0	3.5
IRG4BC30KD	active	TO-220	600.0	16.0	28.0	56.0	100.0	2.21	0.60	0.58	60.0	42.0	160.0	80.0	67.0	58.0	1.40	80.0	3.5
IRG4BC30KD-S	active	D2PAK (TO-263)	600.0	16.0	28.0	56.0	100.0	2.21	0.60	0.58	60.0	42.0	160.0	80.0	67.0	58.0	1.40	80.0	3.5
IRG4PC30KD	active	TO-247	600.0	16.0	28.0	58.0	100.0	2.21	0.60	0.58	60.0	42.0	160.0	80.0	67.0	58.0	1.40	80.0	3.5
IRG4PC40UD	active	TO-247	600.0	20.0	40.0	160.0	160.0	1.72	0.71	0.35	54.0	57.0	110.0	80.0	100.0	160.0	1.30	80.0	4.0
IRG4PC40KD	active	TO-247	600.0	25.0	42.0	84.0	160.0	2.1	0.95	0.76	53.0	33.0	110.0	100.0	120.0	84.0	1.30	80.0	4.0
IRG4PC50UD	active	TO-247	600.0	27.0	55.0	220.0	200.0	1.65	0.99	0.59	46.0	25.0	140.0	74.0	180.0	220.0	1.30	112.0	4.5
IRG4IBC10UD	active	TO-220-3 FP	600.0	3.9	6.8	27.0	25.0	2.15	0.14	0.12	40.0	16.0	87.0	140.0	15.0	27.0	1.50	40.0	2.9
IRG4PC50KD	active	TO-247	600.0	30.0	52.0	104.0	104.0	1.84	1.61	0.84	63.0	49.0	150.0	95.0	200.0	280.0	1.30	112.0	4.5
IRG4BC10KD	active	TO-220	600.0	5.0	9.0	9.0	38.0	2.39	0.25	0.14	49.0	28.0	97.0	140.0	19.0	16.0	1.50	40.0	2.9
IRG4BC10UD	active	TO-220	600.0	5.0	8.5	34.0	38.0	2.15	0.14	0.12	40.0	16.0	87.0	140.0	15.0	16.0	1.50	40.0	2.9
IRG4RC10UD	active	DPAK (TO-252)	600.0	5.0	8.5	34.0	38.0	2.15	0.14	0.12	40.0	16.0	87.0	140.0	15.0	16.0	1.50	40.0	2.9
IRG4IBC20UD	active	TO-220-3 FP	600.0	6.0	11.4	52.0	34.0	1.85	0.16	0.13	39.0	15.0	93.0	110.0	27.0	52.0	1.40	65.0	3.5
IRG4IBC20KD	active	TO-220-3 FP	600.0	6.3	11.5	23.0	34.0	2.27	0.34	0.30	54.0	34.0	180.0	72.0	34.0	23.0	1.40	65.0	3.5
IRG4BC20UD	active	TO-220	600.0	6.5	13.0	52.0	60.0	1.85	0.16	0.13	39.0	15.0	93.0	110.0	27.0	52.0	1.40	65.0	3.5
IRG4BC20UD-S	active	D2PAK (TO-263)	600.0	6.5	13.0	52.0	60.0	1.85	0.16	0.13	39.0	15.0	93.0	110.0	27.0	52.0	1.40	65.0	3.5
IRG4PSC71KD	active	Super-247 (TO-274)	600.0	60.0	85.0	200.0	350.0	1.83	3.95	2.33	82.0	107.0	282.0	97.0	340.0	200.0	1.40	364.0	8.2
IRG4PSC71UD	active	Super-247 (TO-274)	600.0	60.0	85.0	200.0	350.0	1.67	3.26	2.27	90.0	94.0	245.0	110.0	340.0	350.0	1.40	364.0	8.2
IRG4BC15UD	active	TO-220	600.0	7.8	14.0	42.0	49.0	2.02	0.24	0.26	17.0	20.0	160.0	83.0	23.0	16.0	1.50	40.0	2.9
IRG4BC15UD-L	active	I2PAK (TO-262)	600.0	7.8	14.0	42.0	49.0	2.02	0.24	0.26	17.0	20.0	160.0	83.0	23.0	16.0	1.50	40.0	2.9
IRG4BC15UD-S	active	D2PAK (TO-263)	600.0	7.8	14.0	42.0	49.0	2.02	0.24	0.26	17.0	20.0	160.0	83.0	23.0	16.0	1.50	40.0	2.9
IRG4IBC30UD	active	TO-220-3 FP	600.0	8.9	17.0	68.0	45.0	1.95	0.38	0.16	40.0	21.0	91.0	80.0	50.0	92.0	1.40	80.0	3.5
IRG4BC20KD	active	TO-220	600.0	9.0	16.0	32.0	60.0	2.27	0.34	0.30	54.0	34.0	180.0	72.0	34.0	32.0	1.40	65.0	3.5
IRG4BC20KD-S	active	D2PAK (TO-263)	600.0	9.0	16.0	32.0	60.0	2.27	0.34	0.30	54.0	34.0	180.0	72.0	34.0	32.0	1.40	65.0	3.5
IRG4IBC30KD	active	TO-220-3 FP	600.0	9.2	17.0	34.0	45.0	2.21	0.60	0.58	60.0	42.0	160.0	80.0	67.0	34.0	1.40	80.0	3.5

- Bare dies
- Discrete
- IGBT modules
- IPMs
- Stacks & boards
- Driver & controller
- SiC
- Presspacks
- SCR / diode modules
- Solid state relays

## Discrete IGBT with anti-parallel diode

Product	Product status	Package	V <sub>CE</sub> max [V]	I <sub>C</sub> (@ 100°) max [A]	I <sub>C</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max [W]	V <sub>CE(sat)</sub> [V]	E <sub>on</sub> [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]	I <sub>F</sub> max [A]	V <sub>F</sub> [V]	Q <sub>rr</sub> [nC]	I <sub>rrm</sub> [A]
Switching frequency: Gen 5 30-150 kHz																			
IRGB20B60PD1	active	TO-220	600.0	22.0	40.0	80.0	215.0	2.5	0.95	0.10	20.0	5.0	115.0	6.0	68.0	16.0	1.50	-	2.90
IRGP20B60PD	active	TO-247	600.0	22.0	40.0	40.0	220.0	2.5	0.095	0.1	20.0	5.0	115.0	6.0	68.0	42.0	1.40	80.0	3.5
IRGP35B60PD-E	active	TO-247	600.0	34.0	60.0	120.0	308.0	2.25	0.22	0.215	26.0	6.0	110.0	8.0	160.0	60.0	1.30	80.0	4.0
IRGP50B60PD	active	TO-247	600.0	42.0	75.0	150.0	370.0	2.0	0.61	0.46	34.0	26.0	130.0	43.0	240.0	150	1.50	112.0	4.5
IRGP50B60PD1	active	TO-247	600.0	45.0	75.0	150.0	390.0	2.14	0.255	0.375	30.0	10.0	130.0	11.0	205.0	150	1.30	80.0	4.0
IRGP50B60PD1-E	active	TO-247	600.0	45.0	75.0	150.0	390.0	2.0	0.255	0.375	30.0	10.0	130.0	11.0	205.0	150	1.30	80.0	4.0
Switching frequency: Gen 5 8-30 kHz																			
IRGP20B120UD-E	active	TO-247	1200.0	20.0	40.0	120.0	300.0	3.05	0.85	0.425	50.0	20.0	204.0	24.0	169.0	120.0	1.67	-	32.0
IRGP30B120KD-E	active	TO-247	1200.0	30.0	60.0	120.0	300.0	2.46	1.066	1.493	50.0	25.0	210.0	60.0	169.0	120.0	1.86	-	34.0
IRGPS40B120UD	active	Super-247 (TO-274)	1200.0	40.0	80.0	160.0	595.0	3.12	1.4	1.65	76.0	39.0	332.0	25.0	340.0	160.0	2.03	-	50.0
IRGB5B120KD	active	TO-220	1200.0	6.0	12.0	24.0	89.0	2.75	0.39	0.33	22.0	19.0	100.0	19.0	25.0	24.0	2.13	-	9.0
IRGPS60B120KD	active	Super-247 (TO-274)	1200.0	60.0	105.0	240.0	595.0	2.5	3.214	4.783	72.0	32.0	366.0	45.0	340.0	240.0	1.93	-	50.0
IRGB6B60KD	active	TO-220	600.0	10.0	18.0	26.0	90.0	1.8	0.15	0.19	25.0	17.0	215.0	13.2	18.2	26.0	1.25	-	10.0
IRGIB10B60KD1	active	TO-220-3 FP	600.0	10.0	16.0	32.0	44.0	1.7	0.156	0.165	25.0	24.0	180.0	62.0	41.0	32.0	1.80	553.0	14.0
IRGIB15B60KD1	active	TO-220-3 FP	600.0	12.0	19.0	38.0	52.0	1.8	0.258	0.57	30.0	25.0	173.0	41.0	56.0	38.0	1.69	984.0	23.0
IRGS10B60KD	active	D2PAK (TO-263)	600.0	12.0	22.0	44.0	104.0	1.8	0.14	0.25	30.0	20.0	230.0	23.0	38.0	44.0	1.3	-	19.0
IRGSL10B60KD	active	I2PAK (TO-262)	600.0	12.0	22.0	44.0	104.0	1.8	0.14	0.25	30.0	20.0	230.0	23.0	38.0	44.0	1.3	-	14.0
IRGB15B60KD	active	TO-220	600.0	15.0	31.0	62.0	139.0	1.8	0.355	0.49	34.0	16.0	184.0	20.0	56.0	64.0	1.20	-	29.0
IRGS15B60KD	active	D2PAK (TO-263)	600.0	15.0	31.0	62.0	139.0	1.8	0.22	0.34	34.0	16.0	184.0	20.0	56.0	64.0	1.2	-	29.0
IRGSL15B60KD	active	I2PAK (TO-262)	600.0	15.0	31.0	62.0	139.0	1.8	0.22	0.34	34.0	16.0	184.0	20.0	56.0	64.0	1.2	-	23.0
IRGB10B60KD	active	TO-220	600.0	19.0	35.0	44.0	104.0	1.8	0.23	0.35	30.0	20.0	230.0	23.0	38.0	44.0	1.30	-	19.0
IRGR2B60KD	active and preferred	DPAK (TO-252)	600.0	3.7	6.3	8.0	35.0	1.95	0.074	0.039	11	8.7	150	56	8.0	8.0	1.3	-	5.8
IRGP30B60KD-E	active	TO-247	600.0	30.0	60.0	120.0	304.0	1.95	0.635	1.150	46.0	28.0	185.0	31.0	102.0	120.0	1.30	-	43.0
IRGP35B60PD	active	TO-247	600.0	34.0	60.0	120.0	308.0	1.85	0.22	0.215	26.0	6.0	110.0	8.0	160.0	60.0	1.30	80.0	4.0
IRGR3B60KD2	active and preferred	DPAK (TO-252)	600.0	4.2	7.8	15.6	52.0	1.9	0.062	0.039	18	15	110	68	13	15.6	1.5	-	4.8
IRGIB6B60KD	active	TO-220-3 FP	600.0	7.0	11.0	22.0	32.0	1.8	0.11	0.135	25.0	17.0	215.0	13.2	18.2	18.0	1.25	350.0	10.0
IRGS6B60KD	active and preferred	D2PAK (TO-263)	600.0	7.0	13.0	26.0	90.0	1.8	0.11	0.135	25.0	17.0	215.0	13.2	18.2	26.0	1.25	-	10.0
IRGSL6B60KD	active	I2PAK (TO-262)	600.0	7.0	13.0	26.0	90.0	1.8	0.11	0.135	25.0	17.0	215.0	13.2	18.2	26.0	1.25	-	10.0
IRGB4B60KD1	active	TO-220	600.0	7.6	11.0	22.0	63.0	2.1	0.073	0.047	22.0	18.0	100.0	66.0	12.0	22.0	1.40	-	6.3
IRGS4B60KD1	active and preferred	D2PAK (TO-263)	600.0	7.6	11.0	22.0	63.0	2.1	0.073	0.047	22.0	18.0	100.0	66.0	12.0	22.0	1.4	-	6.3
IRGSL4B60KD1	active	I2PAK (TO-262)	600.0	7.6	11.0	22.0	63.0	2.1	0.073	0.047	22.0	18.0	100.0	66.0	12.0	22.0	1.4	-	6.3
IRGIB7B60KD	active	TO-220-3 FP	600.0	8.0	12.0	24.0	39.0	1.8	0.16	0.16	23.0	22.0	140.0	32.0	29.0	18.0	1.25	620.0	13.0

# Discrete IGBT with anti-parallel diode

Product	Product status	Package	V <sub>CE</sub> max [V]	I <sub>C</sub> (@ 100°) max [A]	I <sub>C</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max [W]	V <sub>CE(sat)</sub> [V]	E <sub>on</sub> [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]	I <sub>F</sub> max [A]	V <sub>F</sub> [V]	Q <sub>rr</sub> [nC]	I <sub>rrm</sub> [A]
Switching frequency: Gen 6.2 8-30 kHz																			
IRGP4072D	active and preferred	TO-247	300.0	40.0	70.0	120.0	180.0	1.46	0.409	0.838	18.0	36.0	144.0	95.0	73.0	120.0	2.26	-	36.0
IRGB4064D	active and preferred	TO-220	600.0	10.0	20.0	40.0	101.0	1.6	0.029	0.2	27.0	15.0	79.0	21.0	21.0	40.0	2.50	-	16.0
IRGB4610D	active and preferred	TO-220	600.0	10.0	16.0	18.0	77.0	1.7	0.056	0.122	27.0	11.0	75.0	17.0	13.0	24.0	1.60	-	12.0
IRGR4610D	active and preferred	DPAK (TO-252)	600.0	10.0	16.0	18.0	77.0	1.7	0.056	0.122	27.0	11.0	75.0	17.0	13.0	24.0	1.6	-	12.0
IRGS4064D	active and preferred	D2PAK (TO-263)	600.0	10.0	20.0	40.0	101.0	1.6	0.029	0.2	27.0	15.0	79.0	21.0	21.0	40.0	2.5	-	16.0
IRGS4610D	active and preferred	D2PAK (TO-263)	600.0	10.0	16.0	18.0	77.0	1.7	0.056	0.122	27.0	11.0	75.0	17.0	13.0	24.0	1.6	-	12.0
IRGB4056D	active and preferred	TO-220	600.0	12.0	24.0	48.0	140.0	1.55	0.075	0.225	31.0	17.0	83.0	24.0	25.0	48.0	2.10	-	19.0
IRGS4056D	active and preferred	D2PAK (TO-263)	600.0	12.0	24.0	48.0	140.0	1.55	0.075	0.225	31.0	17.0	83.0	24.0	25.0	48.0	2.1	-	19.0
IRGB4615D	active and preferred	TO-220	600.0	15.0	23.0	24.0	99.0	1.55	0.070	0.145	30.0	15.0	95.0	20.0	19.0	32.0	1.80	-	14.0
IRGS4615D	active and preferred	D2PAK (TO-263)	600.0	15.0	23.0	24.0	99.0	1.55	0.070	0.145	30.0	15.0	95.0	20.0	19.0	32.0	1.8	-	14.0
IRGPS4067D	active	Super-247 (TO-274)	600.0	160.0	240.0	360.0	750.0	1.75	5.75	7.99	80.0	70.0	190.0	40.0	240.0	480.0	1.70	-	36.0
IRGPS46160D	active and preferred	Super-247 (TO-274)	600.0	160.0	240.0	360.0	750.0	1.7	5.75	3.43	80.0	70.0	190.0	40.0	240.0	480.0	2.40	-	36.0
IRGPS66160D	active and preferred	Super-247 (TO-274)	600.0	160.0	240.0	360.0	750.0	1.65	4.470	3.430	80.0	75.0	190.0	40.0	220.0	480.0	1.80	-	34.0
IRGB4061D	active and preferred	TO-220	600.0	18.0	36.0	72.0	206.0	1.65	0.095	0.35	40.0	25.0	105.0	25.0	35.0	72.0	2.30	-	23.0
IRGB4620D	active and preferred	TO-220	600.0	20.0	16.0	36.0	140.0	1.55	0.075	0.225	31.0	17.0	83.0	24.0	25.0	48.0	2.10	-	19.0
IRGP4620D	active and preferred	TO-247	600.0	20.0	16.0	36.0	140.0	1.55	0.075	0.225	31.0	17.0	83.0	24.0	25.0	48.0	2.10	-	19.0
IRGS4620D	active and preferred	D2PAK (TO-263)	600.0	20.0	16.0	36.0	140.0	1.55	0.075	0.225	31.0	17.0	83.0	24.0	25.0	48.0	2.1	-	19.0
IRGB4062D	active and preferred	TO-220	600.0	24.0	48.0	72.0	250.0	1.6	0.115	0.6	41.0	22.0	104.0	29.0	50.0	96.0	1.80	-	37.0
IRGP4062D	active and preferred	TO-247	600.0	24.0	48.0	72.0	250.0	1.6	0.115	0.6	41.0	22.0	104.0	29.0	50.0	69.0	1.80	-	37.0
IRGS4062D	active and preferred	D2PAK (TO-263)	600.0	24.0	48.0	72.0	250.0	1.6	0.115	0.6	41.0	22.0	104.0	29.0	50.0	96.0	1.8	-	37.0
IRGSL4062D	active	I2PAK (TO-262)	600.0	24.0	48.0	72.0	250.0	1.6	0.115	0.6	41.0	22.0	104.0	29.0	50.0	96.0	1.8	-	37.0
IRGB4630D	active and preferred	TO-220	600.0	30.0	47.0	54.0	206.0	1.65	0.095	0.35	40.0	25.0	105.0	25.0	35.0	72.0	2.30	-	23.0
IRGP4630D	active and preferred	TO-247	600.0	30.0	47.0	54.0	206.0	1.65	0.095	0.35	40.0	25.0	105.0	25.0	35.0	72.0	2.30	-	23.0
IRGP6630D	active	TO-247	600.0	30.0	47.0	54.0	192.0	1.65	0.075	0.35	40.0	25.0	95.0	20.0	30.0	72.0	1.60	-	15.0
IRGS4630D	active and preferred	D2PAK (TO-263)	600.0	30.0	47.0	54.0	206.0	1.65	0.095	0.35	40.0	25.0	105.0	25.0	35.0	72.0	2.3	-	23.0
IRGB4059D	active and preferred	TO-220	600.0	4.0	8.0	16.0	56.0	1.75	0.035	0.075	25.0	10.0	65.0	15.0	9.0	16.0	1.60	-	11.0
IRGB4640D	active and preferred	TO-220	600.0	40.0	65.0	72.0	250.0	1.6	0.115	0.6	41.0	22.0	104.0	29.0	50.0	96.0	1.80	-	37.0
IRGP4640D	active and preferred	TO-247	600.0	40.0	65.0	72.0	250.0	1.6	0.115	0.6	41.0	22.0	104.0	29.0	50.0	96.0	1.80	-	37.0
IRGP6640D	active	TO-247	600.0	40.0	53.0	72.0	200.0	1.65	0.09	0.6	40	20	100	20	50	96	1.80	-	21.0
IRGS4640D	active and preferred	D2PAK (TO-263)	600.0	40.0	65.0	72.0	250.0	1.6	0.115	0.6	41.0	22.0	104.0	29.0	50.0	96.0	1.8	-	37.0
IRGSL4640D	active and preferred	I2PAK (TO-262)	600.0	40.0	65.0	72.0	250.0	1.6	0.115	0.6	41.0	22.0	104.0	29.0	50.0	96.0	1.8	-	37.0
IRGP4063D	active and preferred	TO-247	600.0	48.0	96.0	200.0	330.0	1.65	0.625	1.275	60.0	40.0ns	145.0	32.0	95.0	192.0	1.95	-	40.0
IRGP4068D	active and preferred	TO-247	600.0	48.0	96.0	144.0	330.0	1.65	0.625	1.275	145.0	35.0	165.0	45.0	95.0	192	0.96	-	-
IRGP4069D	active and preferred	TO-247	600.0	50.0	76.0	105.0	268.0	1.6	0.39	0.632	46.0	33.0	105.0	44.0	69.0	140.0	2.20	-	25.0
IRGP4078D	active and preferred	TO-247	600.0	50.0	74.0	150.0	278.0	1.9	-	1.1	116	33	113	54	61.0	200	1.28	-	-

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; Boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## Discrete IGBT with anti-parallel diode

Product	Product status	Package	V <sub>CE</sub> max [V]	I <sub>C</sub> (@ 100°) max [A]	I <sub>C</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max [W]	V <sub>CE(sat)</sub> [V]	E <sub>on</sub> [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]	I <sub>F</sub> max [A]	V <sub>F</sub> [V]	Q <sub>rr</sub> [nC]	I <sub>rrm</sub> [A]
Switching frequency: Gen 6.2 8-30 kHz																			
IRGP4650D	active and preferred	TO-247	600.0	50.0	76.0	105.0	268.0	1.6	0.39	0.632	46.0	33.0	105.0	44.0	69.0	140.0	2.00	-	25.0
IRGP6650D	active	TO-247	600.0	50.0	80.0	105.0	306.0	1.65	0.3	0.63	40.0	30.0	105.0	20.0	75.0	140.0	1.80	-	14.0
IRGB4045D	active and preferred	TO-220	600.0	6.0	12.0	18.0	77.0	1.7	0.056	0.122	27.0	11.0	75.0	17.0	13.0	24.0	1.60	-	12.0
IRGR4045D	active and preferred	DPAK (TO-252)	600.0	6.0	12.0	18.0	77.0	1.7	0.056	0.122	27.0	11.0	75.0	17.0	13.0	24.0	1.6	-	12.0
IRGS4045D	active and preferred	D2PAK (TO-263)	600.0	6.0	12.0	18.0	77.0	1.7	0.056	0.122	27.0	11.0	75.0	17.0	13.0	24.0	1.6	-	12.0
IRGP4063D1	active and preferred	TO-247	600.0	60.0	100.0	200.0	330.0	1.65	1.4	1.1	60.0	50.0	160.0	30.0	100.0	120.0	1.90	-	20.0
IRGP4660D	active and preferred	TO-247	600.0	60.0	100.0	144.0	330.0	1.6	0.625	1.275	60.0	40.0	145.0	35.0	95.0	192.0	1.95	-	40.0
IRGP6660D	active	TO-247	600.0	60.0	95.0	144.0	330.0	1.65	0.3	1.3	60.0	50.0	155.0	30.0	95.0	192.0	1.80	-	22.0
IRGB4607D	active and preferred	TO-220	600.0	7.0	11.0	12.0	58.0	1.75	0.14	0.062	27.0	15.0	120.0	10.0	9.0	16.0	1.70	-	5.10
IRGR4607D	active and preferred	DPAK (TO-252)	600.0	7.0	11.0	12.0	58.0	1.75	0.14	0.062	27.0	15.0	120.0	10.0	9.0	16.0	1.7	-	5.10
IRGS4607D	active and preferred	D2PAK (TO-263)	600.0	7.0	11.0	12.0	58.0	1.75	0.14	0.062	27.0	15.0	120.0	10.0	9.0	16.0	1.7	-	5.10
IRGB4060D	active and preferred	TO-220	600.0	8.0	16.0	32.0	99.0	1.55	0.07	0.145	30.0	15.0	95.0	20.0	19.0	32.0	1.80	-	14.0
IRGP4066D	active and preferred	TO-247	600.0	90.0	140.0	225.0	454.0	1.7	2.465	2.155	50.0	70.0	200.0	60.0	150.0	300.0	2.23	-	27.0
IRGP4690D	active and preferred	TO-247	600.0	90.0	140.0	225.0	454.0	1.7	2.465	2.155	300.0	70.0	200.0	60.0	150.0	300.0	2.23	-	27.0
IRGP6690D	active	TO-247	600.0	90.0	140.0	225.0	483.0	1.65	2.4	2.2	85.0	86.0	222.0	53.0	140.0	300.0	2.30	-	26.0
IRGB4715D	active and preferred	TO-220	650.0	15.0	21.0	24.0	100.0	1.7	0.2	0.09	30.0	20.0	100.0	20.0	20.0	32.0	1.80	-	8.0
IRGS4715D	active and preferred	D2PAK (TO-263)	650.0	15.0	21.0	24.0	100.0	1.7	0.2	0.09	30.0	20.0	100.0	20.0	20.0	32.0	1.8	-	14.0
IRGP4262D	active and preferred	TO-247	650.0	40.0	60.0	96.0	250.0	1.7	0.52	0.24	24.0	27.0	73.0	23.0	47.0	96.0	1.60	-	17.0
IRGP4740D	active and preferred	TO-247	650.0	40.0	60.0	72.0	250.0	1.7	0.52	0.24	24.0	27.0	73.0	23.0	47.0	96.0	1.60	-	17.0
IRGP4750D	active and preferred	TO-247	650.0	50.0	80.0	105.0	273.0	1.7	1.3	0.5	50.0	30.0	105.0	20.0	70.0	140.0	1.60	-	27.0
IRGP4263D-E	active and preferred	TO-247	650.0	60.0	90.0	192.0	325.0	1.7	1.7	1.0	70.0	60.0	140.0	30.0	96.0	192	1.90	-	25.0
IRGP4760D	active and preferred	TO-247	650.0	60.0	90.0	144.0	325.0	1.7	1.7	1.0	70.0	60.0	140.0	30.0	96.0	192.0	1.90	-	25.0
IRGP4266D	active and preferred	TO-247	650.0	90.0	140.0	300.0	455.0	1.7	2.5	2.2	50.0	70.0	200.0	60.0	140.0	300	2.10	-	27.0
IRGP4790D	active and preferred	TO-247	650.0	90.0	140.0	225.0	455.0	1.7	2.5	2.2	50.0	70.0	200.0	60.0	140.0	300.0	2.10	-	27.0
IRG6B330UD	active and preferred	TO-220	330.0	40.0	70.0	-	160.0	1.36	-	-	47.0	37.0	176.0	99.0	85.0	-	1.19	43.0	2.8
Switching frequency: Gen 7 8-30 kHz																			
IRG7PH35UD	active	TO-247	1200.0	25.0	50.0	60.0	180.0	1.9	1.06	0.62	30.0	15.0	160.0	80.0	85.0	80.0	2.80	-	40.0
IRG7PH42UD	active	TO-247	1200.0	45.0	85.0	90.0	320.0	1.7	2.11	1.18	25.0	32.0	229.0	63.0	157.0	120.0	2.00	-	34.0
IRG7PH46UD	active	TO-247	1200.0	57.0	108.0	160.0	390.0	1.7	2.61	1.85	45.0	40.0	410.0	45.0	220.0	160.0	3.10	-	40.0

# Discrete IGBT without anti-parallel diode

Product	Package	V <sub>CE</sub> max [V]	I <sub>C</sub> (@ 100°) max [A]	I <sub>C</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max [W]	V <sub>CE(sat)</sub> [V]	E <sub>on</sub> [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]
Switching frequency: HighSpeed3 20-100 kHz														
IGW15N120H3	TO-247	1200.0	15.0	30.0	60.0	217.0	2.05	1.1	0.45	21.0	34.0	260.0	14.0	75.0
IGW25N120H3	TO-247	1200.0	25.0	50.0	100.0	326.0	2.05	1.8	0.85	27.0	41.0	277.0	17.0	115.0
IGW40N120H3	TO-247	1200.0	40.0	80.0	160.0	483.0	2.05	3.2	1.2	30.0	57.0	290.0	16.0	185.0
IGW100N60H3	TO-247	600.0	120.0	140.0	300.0	714.0	1.85	3.7	1.9	30.0	47.0	265.0	30.0	625.0
IGP20N60H3	TO-220	600.0	20.0	40.0	80.0	170.0	1.95	0.45	0.24	16.0	194.0	194.0	11.0	120.0
IGB20N60H3	D2PAK (TO-263)	600.0	20.0	40.0	80.0	170.0	1.95	0.45	0.24	16.0	20.0	194.0	11.0	120.0
IGW20N60H3	TO-247	600.0	20.0	40.0	80.0	170.0	1.95	0.56	0.24	17.0	23.0	194.0	11.0	120.0
IGP30N60H3	TO-220	600.0	30.0	60.0	120.0	187.0	1.95	0.73	0.44	18.0	22.0	207.0	22.0	165.0
IGB30N60H3	D2PAK (TO-263)	600.0	30.0	60.0	120.0	187.0	1.95	0.73	0.44	18.0	22.0	207.0	22.0	165.0
IGW30N60H3	TO-247	600.0	30.0	60.0	120.0	187.0	1.95	0.94	0.6	20.0	30.0	239.0	23.0	165.0
IGW40N60H3	TO-247	600.0	40.0	80.0	160.0	306.0	1.95	1.1	0.58	19.0	33.0	197.0	21.0	223.0
IGW50N60H3	TO-247	600.0	50.0	100.0	200.0	-	1.85	1.45	0.91	23.0	37.0	235.0	24.0	315.0
IGW60N60H3	TO-247	600.0	60.0	80.0	180.0	416.0	1.85	2.1	1.13	27.0	44.0	252.0	27.0	375.0
IGW75N60H3	TO-247	600.0	75.0	140.0	225.0	428.0	1.85	3.0	1.7	31.0	60.0	265.0	27.0	470.0
Switching frequency: TRENCHSTOP™ 2-20 kHz														
IGW30N100T	TO-247	1000.0	30.0	60.0	90.0	412.0	1.55	2.2	1.6	33.0	21.0	535.0	34.0	217.0
IGW15T120	TO-247	1200.0	15.0	30.0	45.0	110.0	2.2	2.0	2.1	50.0	35.0	600.0	120.0	85.0
IGW25T120	TO-247	1200.0	25.0	50.0	75.0	190.0	2.2	3.0	4.0	50.0	32.0	660.0	130.0	155.0
IGW40T120	TO-247	1200.0	40.0	75.0	105.0	270.0	2.3	5.0	5.4	52.0	40.0	580.0	120.0	203.0
IGW60T120	TO-247	1200.0	60.0	100.0	150.0	375.0	2.3	6.4	9.4	50.0	45.0	600.0	130.0	280.0
IGW08T120	TO-247	1200.0	8.0	16.0	24.0	70.0	2.2	1.08	1.2	40.0	26.0	570.0	140.0	53.0
IGB10N60T	D2PAK (TO-263)	600.0	18.0	24.0	30.0	110.0	1.5	0.16	0.27	10.0	11.0	233.0	63.0	62.0
IGP10N60T	TO-220	600.0	18.0	24.0	30.0	110.0	1.5	0.16	0.27	12.0	8.0	215.0	38.0	62.0
IGB15N60T	D2PAK (TO-263)	600.0	23.0	26.0	45.0	130.0	1.5	0.22	0.35	17.0	11.0	188.0	50.0	87.0
IGP15N60T	TO-220	600.0	23.0	26.0	45.0	130.0	1.5	0.22	0.35	17.0	11.0	188.0	50.0	87.0
IGB30N60T	D2PAK (TO-263)	600.0	39.0	45.0	90.0	187.0	1.5	0.69	0.77	23.0	21.0	254.0	46.0	167.0
IGW30N60T	TO-247	600.0	39.0	45.0	90.0	187.0	1.5	0.69	0.77	23.0	21.0	254.0	46.0	167.0
IGU04N60T	TO-251	600.0	4.0	8.0	12.0	42.0	1.5	0.061	0.084	14.0	7.0	164.0	43.0	27.0
IGP06N60T	TO-220	600.0	6.0	12.0	18.0	88.0	1.5	0.09	0.11	9.0	6.0	130.0	58.0	42.0
IGD06N60T	DPAK (TO-252)	600.0	6.0	12.0	18.0	88.0	1.5	0.09	0.11	9.0	6.0	130.0	6.0	42.0
IGW50N60T	TO-247	600.0	64.0	90.0	150.0	333.0	1.5	1.2	1.4	26.0	29.0	299.0	29.0	310.0
IGP50N60T	TO-220	600.0	64.0	90.0	150.0	333.0	1.5	1.2	1.4	26.0	29.0	299.0	29.0	310.0
IGW75N60T	TO-247	600.0	75.0	150.0	225.0	428.0	1.5	2.0	2.5	33.0	36.0	330.0	35.0	470.0
IGB50N60T	D2PAK (TO-263)	600.0	90.0	64.0	150.0	333.0	1.5	1.2	1.4	26.0	29.0	299.0	29.0	310.0

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## Discrete IGBT without anti-parallel diode

Product	Package	V <sub>CE</sub> max [V]	I <sub>C</sub> (@ 100°) max [A]	I <sub>C</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max [W]	V <sub>CE(sat)</sub> [V]	E <sub>on</sub> [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]
Switching frequency: TRENCHSTOP™5 30-100 kHz														
IGZ100N65H5	TO-247-4	650.0	101.0	161.0	400.0	536.0	1.65	0.85	0.77	30.0	9.0	421.0	15.0	210.0
IGP20N65H5	TO-220	650.0	21.0	42.0	60.0	125.0	1.65	0.17	0.06	16.0	3.0	168.0	36.0	48.0
IGP30N65H5	TO-220	650.0	35.0	55.0	90.0	188.0	1.65	0.28	0.1	18.0	4.0	180.0	22.0	70.0
IGP40N65H5	TO-220	650.0	46.0	74.0	120.0	255.0	1.6	0.36	0.1	19.0	13.0	160.0	16.0	95.0
IGW40N65H5	TO-247	650.0	46.0	74.0	120.0	255.0	1.65	0.39	0.12	22.0	12.0	165.0	13.0	95.0
IGZ50N65H5	TO-247-4	650.0	54.0	85.0	200.0	273.0	1.65	0.41	0.19	20.0	7.0	250.0	21.0	109.0
IGW50N65H5	TO-247	650.0	56.0	80.0	150.0	305.0	1.65	0.52	0.18	21.0	15.0	180.0	18.0	120.0
IGZ75N65H5	TO-247-4	650.0	75.0	119.0	300.0	395.0	1.65	0.68	0.43	26.0	11.0	347.0	15.0	166.0
IGW75N65H5	TO-247	650.0	75.0	120.0	300.0	395.0	1.65	2.25	0.95	28.0	33.0	174.0	41.0	160.0
Switching frequency: TRENCHSTOP™5 50 Hz -20 kHz														
IGW30N65L5	TO-247	650.0	62.0	85.0	120.0	227.0	1.05	0.47	1.35	33.0	11.0	308.0	51.0	168.0
Switching frequency: TRENCHSTOP™5 60-120 kHz														
IGP20N65F5	TO-220	650.0	21.0	42.0	60.0	125.0	1.6	0.16	0.06	18.0	3.0	170.0	30.0	48.0
IGP30N65F5	TO-220	650.0	35.0	55.0	90.0	188.0	1.6	0.28	0.07	18.0	4.0	174.0	15.0	70.0
IGW40N65F5	TO-247	650.0	46.0	74.0	120.0	255.0	1.6	0.36	0.1	19.0	13.0	160.0	16.0	95.0
IGP40N65F5	TO-220	650.0	46.0	74.0	120.0	255.0	1.6	0.36	0.1	19.0	13.0	160.0	16.0	95.0
IGW50N65F5	TO-247	650.0	56.0	80.0	150.0	305.0	1.6	0.49	0.16	21.0	15.0	175.0	18.0	120.0



# Discrete IGBT without anti-parallel diode

Product	Product status	Package	$V_{CE}$ max [V]	$I_C$ (@ 100°) max [A]	$I_C$ (@ 25°) max [A]	$I_{Cpuls}$ max [A]	$P_{tot}$ max @ 25°C [W]	$V_{CE(sat)}$ @25°C [V]	$E_{on}$ @25°C [mJ]	$E_{off}$ [mJ]	$t_{d(on)}$ [ns]	$t_r$ [ns]	$t_{d(off)}$ [ns]	$t_f$ [ns]	$Q_{Gate}$ [nC]
Switching frequency: Gen 4 1 kHz															
IRG4PC50U	active	TO-247	600.0	27.0	55.0	220	200.0	1.65	0.12	0.54	31	23	230	120	180
IRG4RC10U	active	DPAK (TO-252)	600.0	5.0	8.5	34	38.0	2.15	0.08	0.16	18	14	180	150	15
IRG4BC20U	active	TO-220	600.0	6.5	13.0	52	60.0	1.85	0.1	0.12	20	14	190	140	27
Switching frequency: Gen 4 1-8 kHz															
IRG4BC20S	active	TO-220	600.0	10.0	19.0	38	60.0	1.4	0.12	2.05	25	13	760	780	27
IRG4BC30K	active	TO-220	600.0	16.0	28.0	56	100.0	2.21	0.36	0.51	25	29	190	190	67
IRG4PC30K	active	TO-247	600.0	16.0	28.0	56	100.0	2.21	0.36	0.51	25	29	190	190	67
IRG4PC40K	active	TO-247	600.0	25.0	42.0	84	160.0	2.1	0.62	0.33	30	18	190	150	120
IRG4PC50K	active	TO-247	600.0	30.0	52.0	104	200.0	1.84	0.49	0.68	37	35	260	170	200
IRG4PC50F-E	active	TO-247	600.0	39.0	70.0	280	200.0	1.45	0.37	2.1	28	24	390	230	190
Switching frequency: Gen 4 30-150 kHz															
IRG4PH20K	active	TO-247	1200.0	5.0	11.0	22	60.0	3.17	0.45	0.44	23	28	100	620	28

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## Discrete IGBT without anti-parallel diode

Product	Product status	Package	V <sub>CE</sub> max [V]	I <sub>C</sub> (@ 100°) max [A]	I <sub>C</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max @ 25°C [W]	V <sub>CE(sat)</sub> @25°C [V]	E <sub>on</sub> @25°C [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]
Switching frequency: Gen 4 8-30 kHz															
IRG4PH30K	active	TO-247	1200.0	10.0	20.0	40	100.0	3.1	0.64	0.92	27	26	310	330	53
IRG4PH40K	active	TO-247	1200.0	15.0	30.0	60	160.0	2.74	0.73	1.66	29	24	870	330	94
IRG4PH40U	active	TO-247	1200.0	21.0	41.0	82	160.0	2.43	1.04	3.40	42	32	240	510	86
IRG4PH50K	active	TO-247	1200.0	24.0	45.0	90	200.0	2.43	1.21	2.25	35	29	380	280	180
IRG4PH50U	active	TO-247	1200.0	24.0	45.0	180	200.0	2.78	0.53	1.41	31	18	320	280	160
IRG4PH50S	active	TO-247	1200.0	33.0	57.0	114	200.0	1.47	1.80	19.6	32	30	1170	1000	167
IRG4PH50S-E	active	TO-247	1200.0	33.0	57.0	114	200.0	1.47	1.80	19.6	32	30	1170	1000	167
IRG4BH20K-L	active	I2PAK (TO-262)	1200.0	5.0	11.0	22	60.0	3.17	0.45	0.44	23	28	100	620	28
IRG4BH20K-S	active	D2PAK (TO-263)	1200.0	5.0	11.0	22	60.0	3.17	0.45	0.44	23	28	100	620	28
IRGS14C40L	active	D2PAK (TO-263)	430.0	14.0	20.0	-	125.0	1.55	-	-	-	-	-	-	-
IRGSL14C40L	active	I2PAK (TO-262)	430.0	14.0	20.0	-	125.0	1.55	-	-	-	-	-	-	-
IRG4BC30U	active	TO-220	600.0	12.0	23.0	92	100.0	1.95	0.16	0.20	20	13	180	140	50
IRG4BC30W	active	TO-220	600.0	12.0	23.0	92	100.0	2.1	0.13	0.13	20	13	180	140	50
IRG4BC30W-S	active	D2PAK (TO-263)	600.0	12.0	23.0	92	100.0	2.1	0.13	0.13	20	13	180	140	50
IRG4PC30U	active	TO-247	600.0	12.0	23.0	92	100.0	1.95	0.16	0.20	20	13	180	140	50
IRG4PC30W	active	TO-247	600.0	12.0	23.0	92	100.0	2.1	0.13	0.13	20	13	180	140	50
IRG4RC20F	active	DPAK (TO-252)	600.0	12.0	22.0	44	66.0	1.82	0.19	0.92	25	26	263	443	27
IRG4IBC30S	active	TO-220-3 FP	600.0	13.0	23.5	68	45.0	1.4	0.26	3.45	21	19	790	760	50
IRG4BC30F	active	TO-220	600.0	17.0	31.0	124	100.0	1.59	0.23	1.18	20	16	290	350	51
IRG4PC30F	active	TO-247	600.0	17.0	31.0	124	100.0	1.59	0.23	1.18	20	16	290	350	51
IRG4BC30S	active	TO-220	600.0	18.0	34.0	68	100.0	1.4	0.26	3.45	21	19	790	760	50
IRG4PC30S	active	TO-247	600.0	18.0	34.0	68	100.0	1.4	0.26	3.45	21	19	790	760	50
IRG4BC40U	active	TO-220	600.0	20.0	40.0	160	160.0	1.72	0.32	0.35	30	19	220	160	100nC
IRG4BC40W	active	TO-220	600.0	20.0	40.0	160A	160.0	2.05	0.11	0.23	30	19	220	160	100nC
IRG4BC40WL	active	I2PAK (TO-262)	600.0	20.0	40.0	160	160.0	2.05	0.11	0.23	30	19	220	160	100nC
IRG4BC40WS	active	D2PAK (TO-263)	600.0	20.0	40.0	160	160.0	2.05	0.11	0.23	30	19	220	160	100nC
IRG4PC40U	active	TO-247	600.0	20.0	40.0	160	160.0	1.72	0.32	0.35	30	19	220	160	100nC
IRG4PC40W	active	TO-247	600.0	20.0	40.0	160A	160.0	2.05	0.11	0.23	30	19	220	160	100nC
IRG4BC40K	active	TO-220	600.0	25.0	42.0	84	160.0	2.1	0.62	0.33	30	18	190	150	120
IRG4BC40F	active	TO-220	600.0	27.0	49.0	196	160.0	1.5	0.37	1.81	25	21	380	310	100
IRG4PC40F	active	TO-247	600.0	27.0	49.0	196	160.0	1.5	0.37	1.81	25	21	380	310	100
IRG4PC50W	active	TO-247	600.0	27.0	55.0	220	200.0	1.93	0.08	0.32	31	23	230	120	180
IRG4BC40S	active	TO-220	600.0	31.0	60.0	120	160.0	1.32	0.45	6.5	23	21	1000	940	100
IRG4PC40S	active	TO-247	600.0	31.0	60.0	120	160.0	1.32	0.45	6.5	23	21	1000	940	100
IRG4PC50F	active	TO-247	600.0	39.0	70.0	280	200.0	1.45	0.37	2.1	28	24	390	230	190

# Discrete IGBT without anti-parallel diode

Product	Product status	Package	V <sub>CE</sub> max [V]	I <sub>C</sub> (@ 100°) max [A]	I <sub>C</sub> (@ 25°) max [A]	I <sub>Cpuls</sub> max [A]	P <sub>tot</sub> max @ 25°C [W]	V <sub>CE(sat)</sub> @25°C [V]	E <sub>on</sub> @25°C [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]
Switching frequency: Gen 4 8-30 kHz															
IRG4PC60U	active	TO-247	600.0	40.0	75.0	300	520.0	1.7	0.28	1.1	36	42	300	160	310
IRG4PC50S	active	TO-247	600.0	41.0	70.0	140	200.0	1.28	0.72	8.27	31	31	1080	620	180
IRG4IBC20W	active	TO-220-3 FP	600.0	6.0	12.0	52	34.0	2.16	0.06	0.08	20	14	190	140	27
IRG4BC20W	active	TO-220	600.0	6.5	13.0	52	60.0	2.16	0.06	0.08	20	14	190	140	27
IRG4BC20W-S	active	D2PAK (TO-263)	600.0	6.5	13.0	52	60.0	2.16	0.06	0.08	20	14	190	140	27
IRG4PC60F	active	TO-247	600.0	60.0	90.0	360	520.0	1.5	0.3	4.6	39	66	470	300	290
IRG4PSC71K	active	Super-247 (TO-274)	600.0	60.0	85.0	200	350.0	1.83	0.79	1.98	37	56	356	177	340
IRG4PSC71U	active	Super-247 (TO-274)	600.0	60.0	85.0	200	350.0	1.67	0.42	1.99	30	49	129	175	340
IRG4IBC30W	active	TO-220-3 FP	600.0	8.4	17.0	92	45.0	2.1	0.13	0.13	20	13	180	140	50
IRG4BC20F	active	TO-220	600.0	9.0	16.0	64	60.0	1.66	0.07	0.6	24	17	300	340	27
IRG4PF50W	active	TO-247	900.0	28.0	51.0	300	200.0	2.25	0.19	1.06	36	42	300	160	310
Switching frequency: Gen 5 30-150 kHz															
IRGB30B60K	active	TO-220	600.0	50.0	78.0	120.0	370.0	1.95	0.35	0.825	46.0	28.0	185.0	31.0	102.0
IRGS30B60K	active	D2PAK (TO-263)	600.0	50.0	78.0	120.0	370.0	1.95	0.35	0.825	46.0	28.0	185.0	31.0	102.0
IRGSL30B60K	active	I2PAK (TO-262)	600.0	50.0	78.0	120.0	370.0	1.95	0.35	0.825	46.0	28.0	185.0	31.0	102.0
Switching frequency: Gen 5 8-30 kHz															
IRGP20B120U-E	active	TO-247	1200.0	20.0	40.0	120.0	300.0	3.05	0.85	0.425	50.0	20.0	204.0	24.0	169.0
IRGPS40B120U	active	Super-247 (TO-274)	1200.0	40.0	80.0	160.0	595.0	3.12	1.4	1.65	76.0	39.0	332.0	25.0	340.0
IRGS15B60K	active	D2PAK (TO-263)	600.0	15.0	31.0	62.0	208.0	1.8	0.22	0.34	34.0	16.0	184.0	20.0	56.0
IRGB8B60K	active	TO-220	600.0	19.0	28.0	56	167.0	1.8	0.160	0.160	23	22	140	32	29
IRGS8B60K	active	D2PAK (TO-263)	600.0	19.0	28.0	56	167.0	1.8	0.16	0.16	23	22	140	32	29
IRGB4B60K	active	TO-220	600.0	6.8	12.0	22.0	63.0	2.1	0.073	0.047	22.0	18.0	100.0	66.0	12.0
IRGS4B60K	active	D2PAK (TO-263)	600.0	6.8	12.0	22.0	63.0	2.1	0.073	0.047	22.0	18.0	100.0	66.0	12.0
IRGB6B60K	active	TO-220	600.0	7.0	13.0	26.0	90.0	1.8	0.150	0.190	25.0	17.0	215.0	13.2	18.2
IRGS6B60K	active	D2PAK (TO-263)	600.0	7.0	13.0	26.0	90.0	1.8	0.11	0.135	25.0	17.0	215.0	13.2	18.2

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## 600V/1200V ultra soft diode

Product	Product status	Package	V <sub>CE</sub> max [V]	I <sub>C</sub> (@ 100°) max [A]	I <sub>C</sub> (@ 25°) max [A]	I <sub>C,puls</sub> max [A]	P <sub>tot</sub> max @ 25°C [W]	V <sub>CE(sat)</sub> @25°C [V]	E <sub>on</sub> @25°C [mJ]	E <sub>off</sub> [mJ]	t <sub>d(on)</sub> [ns]	t <sub>r</sub> [ns]	t <sub>d(off)</sub> [ns]	t <sub>f</sub> [ns]	Q <sub>Gate</sub> [nC]
Switching frequency: Gen 6.2 8-30 kHz															
IRGP4062-E	active and preferred	TO-247	600.0	24.0	48.0	72.0	250.0	1.6	0.420	0.840	41.0	22.0	104.0	29.0	50.0
IRGP4640	active and preferred	TO-247	600.0	40.0	65.0	72.0	250.0	1.6	0.1	0.6	41.0	22.0	104.0	29.0	50.0
IRGP4063	active and preferred	TO-247	600.0	48.0	96.0	200.0	330.0	1.65	1.625	1.585	60.0	40.0ns	145.0	32.0	95.0
IRGP4069	active and preferred	TO-247	600.0	50.0	76.0	105.0	268.0	1.6	0.39	0.632	46.0	33.0	105.0	44.0	69.0
IRGP4066	active and preferred	TO-247	600.0	90.0	140.0	225.0	454.0	1.7	2.465	2.155	50.0	70.0	200.0	60.0	150.0
IRGP4263	active and preferred	TO-247	650.0	60.0	90.0	192.0	300.0	1.7	1.7	1.0	70.0	60.0	140.0	30.0	96.0
IRGP4760	active and preferred	TO-247	650.0	60.0	90.0	144.0	325.0	1.7	1.7	1.0	70.0	60.0	140.0	30.0	96.0
IRGP4266	active and preferred	TO-247	650.0	90.0	140.0	300.0	450.0	1.7	3.2	1.7	50.0	70.0	200.0	60.0	140.0
IRGP4790	active and preferred	TO-247	650.0	90.0	140.0	225.0	455.0	1.7	3.9	2.8	50.0	70.0	200.0	60.0	140.0
Switching frequency: Gen 7 8-30 kHz															
IRG7PSH73K10	active	Super-247 (TO-274)	1200.0	130.0	220.0	225	1150.0	2.0	11.0	7.4	63	118	267	114	360
IRG7PH42U	active	TO-247	1200.0	60.0	90.0	90.0	385.0	1.7	3.186	2.153	25.0	32.0	229.0	63.0	157.0
IRG7PH50U	active	TO-247	1200.0	90.0	140.0	150	556.0	1.7	5.6	3.9	35	40	430	45	290
IRGB14C40L	active	TO-220	430.0	14.0	20.0	-	125.0	1.55	-	-	-	-	-	-	-

## 600V/1200V ultra soft diode

Product	Product status	Packages	Configuration	$I_F$ [A]	$I_F$ max [A]	$I_{(FSM)}$ max [A]	$V_F$ [V]	$V_F$ max [V]	$I_R$ max [uA]	$I_{rrm}$ [A]	$Q_{rr}$ [nC]	$t_{rr}$ [ns]	$P_{tot}$ max [W]	$R_{thJC}$ max [K/W]	Operating temperature min	Operating temperature max	Mounting
<b>600V</b>																	
IDB15E60	active and preferred	PG-TO263-3	Single	15.0	29.2	60.0	1.5	1.5	50.0	13.7	595.0	87.0	83.3	1.8	-55.0 °C	175.0 °C	SMD
IDB30E60	active and preferred	PG-TO263-3	Single	30.0	52.3	117.0	1.5	1.5	50.0	19.0	1100.0	126.0	142.9	1.05	-55.0 °C	175.0 °C	SMD
IDW75E60	active and preferred	PG-TO247-3	Single	75.0	120.0	220.0	1.65	1.65	40.0	-	2400.0 3600.0	121.0	300.0	0.5	-55.0 °C	175.0 °C	THT
IDW100E60	active and preferred	PG-TO247-3	Single	100.0	150.0	400.0	1.65	1.65	40.0	-	3.6	120.0	375.0	0.4	-55.0 °C	175.0 °C	THT
IDD06E60	active and preferred	PG-TO252-3	Single	6.0	14.7	29.0	1.5	1.5	50.0	6.5	240.0	70.0	46.8	3.2	-55.0 °C	175.0 °C	SMD
IDD09E60	active and preferred	PG-TO252-3	Single	9.0	19.3	40.0	1.5	1.5	50.0	10.2	343.0	75.0	57.7	2.6	-55.0 °C	175.0 °C	SMD
IDP15E60	active and preferred	PG-TO220-2	Single	15.0	29.2	60.0	1.5	1.5	50.0	13.7	595.0	87.0	83.3	1.8	-55.0 °C	175.0 °C	THT
IDP30E60	active and preferred	PG-TO220-2	Single	30.0	52.3	117.0	1.5	1.5	50.0	19.0	1100.0	126.0	142.9	1.05	-55.0 °C	175.0 °C	THT
IDP45E60	active and preferred	PG-TO220-2	Single	45.0	71.0	162.0	1.5	1.5	50.0	23.0	1400.0	140.0	187.0	0.8	-55.0 °C	175.0 °C	THT
IDW50E60	active and preferred	PG-TO247-3	Single	50.0	80.0	240.0	1.65	1.65	40.0	30.0	1500.0	115.0	187.0	0.8	-40.0 °C	175.0 °C	THT
IDW30E60	active and preferred	PG-TO247-3	Single	75.0	120.0	150.0	1.65	-	40.0	13.0	1200.0	143.0	143.0	1.05	-40.0 °C	175.0 °C	THT
IDD15E60	active and preferred	PG-TO252-3	Single	15.0	29.2	60.0	1.5	2.0	50.0	13.7	595.0	87.0	83.3	1.8	-40.0 °C	175.0 °C	SMD
<b>1200V</b>																	
IDB30E120	active and preferred	PG-TO263-3	Single	30.0	50.0	102.0	1.65	1.65	100.0	23.7	2630.0	243.0	138.0	0.9	-55.0 °C	150.0 °C	SMD
IDP12E120	active and preferred	PG-TO220-2	Single	12.0	28.0	63.0	1.65	1.65	100.0	17.0	1200.0	150.0	96.0	1.3	-55.0 °C	150.0 °C	THT
IDP18E120	active and preferred	PG-TO220-2	Single	18.0	31.0	78.0	1.65	1.65	100.0	20.2	1880.0	195.0	113.0	1.1	-55.0 °C	150.0 °C	THT
IDP30E120	active and preferred	PG-TO220-2	Single	30.0	50.0	102.0	1.65	1.65	100.0	23.7	2630.0	243.0	138.0	0.9	-55.0 °C	150.0 °C	THT
IDB18E120	active and preferred	PG-TO263-3	Single	18.0	31.0	78.0	1.65	-	100.0	20.2	1880.0	195.0	113.0	1.1	-55.0 °C	150.0 °C	SMD

Bare dies

Discrete

IGBT  
modules

IPMs

Stacks &  
boardsDriver &  
controller

SiC

Presspacks

SCR / diode  
modulesSolid state  
relays

## 650V Rapid 1 and Rapid 2 diode

Product	Product status	Packages	Configuration	$I_F$ [A]	$I_F$ max [A]	$I_{(FSM)}$ max [A]	$V_F$ [V]	$V_F$ max [V]	$I_R$ max [uA]	$I_{rrm}$ [A]	$Q_{rr}$ [uC]	$t_{rr}$ [ns]	$P_{tot}$ max [W]	$R_{thJC}$ max [K/W]	Operating temperature min	Operating temperature max	Mounting
IDP08E65D1	active and preferred	PG-TO220-2	Single	8.0	16.0	64.0	1.35	1.35	40.0	2.8	0.17	80.0	56.0	2.69	-40.0 °C	175.0 °C	THT
IDV15E65D2	active and preferred	PG-TO220-2	Single	15.0	15.0	100.0	1.6	1.6	40.0	3.3	0.07	47.0	34.0	4.4	-40.0 °C	175.0 °C	THT
IDP15E65D1	active and preferred	PG-TO220-2	Single	15.0	30.0	120.0	1.35	1.35	40.0	3.4	0.28	114.0	92.0	1.64	-40.0 °C	175.0 °C	THT
IDW15E65D2	active and preferred	PG-TO247-3	Single	15.0	30.0	100.0	1.6	1.6	40.0	3.3	0.07 nC	47.0	85.7	1.75	-40.0 °C	175.0 °C	THT
IDW30E65D1	active and preferred	PG-TO247-3	Single	30.0	60.0	240.0	1.35	1.35	40.0	5.4	0.45	115.0	142.0	1.06	-40.0 °C	175.0 °C	THT
IDW40E65D1	active and preferred	PG-TO247-3	Single	40.0	80.0	320.0	1.35	1.35	40.0	6.9	0.49	129.0	179.0	0.84	-40.0 °C	175.0 °C	THT
IDP08E65D2	active and preferred	PG-TO220-2	Single	8.0	16.0	60.0	1.6	1.6	40.0	2.5	0.08	40.0	56.0	2.69	-40.0 °C	175.0 °C	THT
IDV08E65D2	active and preferred	PG-TO220-2	Single	8.0	8.0	60.0	1.6	1.6	40.0	2.5	0.08	40.0	27.3	5.5	-40.0 °C	175.0 °C	THT
IDP15E65D2	active and preferred	PG-TO220-2	Single	15.0	30.0	100.0	1.6	1.6	40.0	3.3	0.07	47.0	92.0	1.63	-40.0 °C	175.0 °C	THT
IDP40E65D2	active and preferred	PG-TO220-2	Single	40.0	80.0	250.0	1.6	1.6	40.0	2.9	0.13	75.0	200.0	0.75	-40.0 °C	175.0 °C	THT
IDW40E65D2	active and preferred	PG-TO247-3	Single	40.0	80.0	320.0	1.6	1.6	40.0	2.9	0.13	75.0	180.0	0.84	-40.0 °C	175.0 °C	THT
IDW75D65D1	active and preferred	PG-TO247-3	Dual node	75.0	150.0	580.0	1.35	1.7	40.0	6.4	0.48	127.0	326.0	0.46	-40.0 °C	175.0 °C	THT
IDW30C65D1	active and preferred	PG-TO247-3	Common Cathode	15.0	30.0	120.0	1.35	1.7	40.0	3.4	0.28	114.0	92.0	1.64	-40.0 °C	175.0 °C	THT
IDW60C65D1	active and preferred	PG-TO247-3	Common Cathode	30.0	60.0	240.0	1.35	1.7	40.0	5.4	0.45	115.0	142.0	1.06	-40.0 °C	175.0 °C	THT
IDW20C65D2	active and preferred	PG-TO247-3	Common Cathode	10.0	20.0	60.0	1.6	2.2	40.0	4.3	0.13	50.0	68.0	2.2	-40.0 °C	175.0 °C	THT
IDW30C65D2	active and preferred	PG-TO247-3	Common Cathode	15.0	30.0	100.0	1.6	2.2	40.0	3.3	0.12	51.0	86.0	1.75	-40.0 °C	175.0 °C	THT
IDV30E65D2	active and preferred	PG-TO220-2	Single	17.5	30.0	180.0	1.6	2.2	40.0	5.7	0.25	70.0	47.0	3.2	-40.0 °C	175.0 °C	THT
IDP20E65D2	active and preferred	PG-TO220-2	Single	20.0	40.0	120.0	1.6	2.2	40.0	6.3	0.19	43.0	120.0	1.25	-40.0 °C	175.0 °C	THT
IDP20C65D2	active and preferred	PG-TO220-3	Common Cathode	10.0	20.0	60.0	1.6	2.2	40.0	4.3	0.13	50.0	68.0	2.2	-40.0 °C	175.0 °C	THT
IDW80C65D2	active and preferred	PG-TO247-3	Common Cathode	40.0	80.0	250.0	1.6	2.2	40.0	3.6	0.18	68.0	180.0	0.84	-40.0 °C	175.0 °C	THT
IDW80C65D1	active and preferred	PG-TO247-3	Common Cathode	40.0	80.0	320.0	1.35	1.7	40.0	6.9	0.49	129.0	179.0	0.84	-40.0 °C	175.0 °C	THT
IDP30E65D2	active and preferred	PG-TO220-2	Single	30.0	60.0	180.0	1.6	2.2	40.0	5.7	0.25	70.0	143.0	1.05	-40.0 °C	175.0 °C	THT
IDP30C65D2	active and preferred	PG-TO220-3	Common Cathode	15.0	30.0	100.0	1.6	2.2	40.0	5.4	0.16	42.0	92.0	1.63	-40.0 °C	175.0 °C	THT
IDP30E65D1	active and preferred	PG-TO220-2	Single	30.0	60.0	180.0	1.35	1.7	40.0	7.0	0.51	95.0	143.0	1.05	-40.0 °C	175.0 °C	THT
IDV20E65D1	active and preferred	PG-TO220-2	Single	15.0	28.0	120.0	1.35	1.7	40.0	7.6	0.31	65.0	38.0	4.0	-40.0 °C	175.0 °C	THT

Solid state relays

SCR / diode modules

Presspacks

SiC

Driver & controller

Stacks & boards

IPMs

IGBT modules

Discrete

Bare dies





## IGBT modules

# Low, medium and high power IGBT modules

We offer module concepts providing electrical performance and highest reliability without limiting the design flexibility.

## Highlights



### XHP™ – FleXible High-Power Platform

The new housing for high-power IGBT modules is designed to cover the full-voltage range of IGBT chips from 3.3 to 6.5 kV. Principle applications of the new package are expected in industrial drives, traction, renewable energy and power transmission applications.

[www.infineon.com/xhp](http://www.infineon.com/xhp)



### PrimePACK™ with IGBT5 and .XT

The innovative technologies IGBT5 and .XT will at first extend the well-known PrimePACK™ portfolio. With these new technologies the power density can be increased by 25 % or the life time can be extended by a factor 10.

[www.infineon.com/primepack](http://www.infineon.com/primepack)



### Thermal Interface Material (TIM)

TIM is the abbreviation for Infineon's new Thermal Interface Material. With the ongoing increase of power densities in power electronics the thermal interface between power module and heatsink becomes a larger challenge.

[www.infineon.com/tim](http://www.infineon.com/tim)



### 6.5 kV modules in IHV housing

New RCDC technology introduced to address customers' demand of high power density, efficiency, long lifecycle, reliability, improved temperature behavior and reduced systems costs in high voltage applications. It combines IGBT and diode function in one chip. IHV housing established a standard for high power IGBT modules which was used in countless applications all over the world.

[www.infineon.com/rcdc](http://www.infineon.com/rcdc)

# IGBT modules up to 600 V / 650 V

Product	Product status	Packages	Configuration	$I_{(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	Housing
<b>IGBT HighSpeed 3, 3-level</b>								
FS3L50R07W2H3F_B11	active and preferred	AG-EASY2B-2	3-level	50.0 A	IGBT HighSpeed 3	1.45 V	1.6 V	EasyPACK 2B
FS3L50R07W2H3_B11	active and preferred	AG-EASY2B-2	3-level	50.0 A	IGBT HighSpeed 3	1.45 V	1.6 V	EasyPACK 2B
FS3L30R07W2H3F_B11	active and preferred	AG-EASY2B-2	3-level	30.0 A	IGBT HighSpeed 3	1.5 V	1.6 V	EasyPACK 2B
<b>IGBT HighSpeed 3, Fourpack</b>								
F4-75R07W2H3_B51	active and preferred	AG-EASY2B-2	Fourpack	75.0 A	IGBT HighSpeed 3	1.35 V	1.45 V	EasyPACK 2B
F4-50R07W2H3_B51	active and preferred	AG-EASY2B-2	Fourpack	50.0 A	IGBT HighSpeed 3	1.35 V	1.6 V	EasyPACK 2B
<b>IGBT4 - E4, 3-level</b>								
F3L400R07ME4_B22	active and preferred	AG-ECONOD-3	3-level	400.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoDUAL™ 3
F3L400R07ME4_B23	active and preferred	AG-ECONOD-3	3-level	400.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoDUAL™ 3
F3L300R07PE4	active and preferred	AG-ECONO4-1	3-level	300.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 4
F3L200R07PE4	active and preferred	AG-ECONO4-1	3-level	200.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 4
<b>IGBT4 - E4, Chopper</b>								
DF400R07PE4R_B6	active and preferred	AG-ECONO4-1	Chopper	400.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 4
FD400R07PE4R_B6	active and preferred	AG-ECONO4-1	Chopper	400.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 4
DF300R07PE4_B6	active and preferred	AG-ECONO4-1	Chopper	300.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 4
FD300R07PE4_B6	active and preferred	AG-ECONO4-1	Chopper	300.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 4
<b>IGBT4 - E4, Dual</b>								
FF600R07ME4_B11	active and preferred	AG-ECONOD-3	Dual	600.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoDUAL™ 3
FF450R07ME4_B11	active and preferred	AG-ECONOD-3	Dual	450.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoDUAL™ 3
FF400R07KE4	active and preferred	AG-62MM-1	Dual	400.0 A	IGBT4 - E4	1.55 V	1.55 V	62 mm
FF300R07ME4_B11	active and preferred	AG-ECONOD-3	Dual	300.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoDUAL™ 3
FF300R07KE4	active and preferred	AG-62MM-1	Dual	300.0 A	IGBT4 - E4	1.55 V	1.55 V	62 mm
<b>IGBT4 - E4, PIM</b>								
FP150R07N3E4	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	150.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPIM™ 3
FP150R07N3E4_B11	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	150.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPIM™ 3
FP100R07N3E4	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	100.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPIM™ 3
FP100R07N3E4_B11	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	100.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPIM™ 3
FP75R07N2E4	active and preferred	AG-ECONO2-4	PIM three phase input rectifier	75.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPIM™ 2
FP75R07N2E4_B11	active and preferred	AG-ECONO2-4	PIM three phase input rectifier	75.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPIM™ 2
FP50R07N2E4	active and preferred	AG-ECONO2-4	PIM three phase input rectifier	50.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPIM™ 2
FP50R07N2E4_B11	active and preferred	AG-ECONO2-4	PIM three phase input rectifier	50.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPIM™ 2
FP50R07U1E4	active and preferred	AG-SMART1-1	PIM three phase input rectifier	50.0 A	IGBT4 - E4	1.55 V	1.55 V	SmartPIM 1
FP30R07U1E4	active and preferred	AG-SMART1-1	PIM three phase input rectifier	30.0 A	IGBT4 - E4	1.6 V	1.6 V	SmartPIM 1

Further information about additional modules especially those with pre-applied TIM, PrimePACK™ with IGBT5 and .XT as well as our new XHP™ platform can be found on our website: [www.infineon.com/igbtmodules](http://www.infineon.com/igbtmodules)

# IGBT modules up to 600 V / 650 V

Product	Product status	Packages	Configuration	$I_{(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	Housing
<b>IGBT4 - E4, Sixpack</b>								
FS200R07PE4	active and preferred	AG-ECONO4-1	Sixpack	200.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 4
FS200R07N3E4R	active and preferred	AG-ECONO3-4	Sixpack	200.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 3
FS200R07N3E4R_B11	active and preferred	AG-ECONO3-4	Sixpack	200.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 3
FS150R07PE4	active and preferred	AG-ECONO4-1	Sixpack	150.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 4
FS150R07N3E4	active and preferred	AG-ECONO3-4	Sixpack	150.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 3
FS150R07N3E4_B11	active and preferred	AG-ECONO3-4	Sixpack	150.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 3
FS100R07PE4	active and preferred	AG-ECONO4-1	Sixpack	100.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 4
FS100R07N3E4	active and preferred	AG-ECONO3-4	Sixpack	100.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 3
FS100R07N3E4_B11	active and preferred	AG-ECONO3-4	Sixpack	100.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 3
FS100R07N2E4	active and preferred	AG-ECONO2-6	Sixpack	100.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 2
FS100R07N2E4_B11	active and preferred	AG-ECONO2-6	Sixpack	100.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 2
FS75R07N2E4	active and preferred	AG-ECONO2-6	Sixpack	75.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 2
FS75R07N2E4_B11	active and preferred	AG-ECONO2-6	Sixpack	75.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 2
FS50R07N2E4	active and preferred	AG-ECONO2-6	Sixpack	50.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 2
FS50R07N2E4_B11	active and preferred	AG-ECONO2-6	Sixpack	50.0 A	IGBT4 - E4	1.55 V	1.55 V	EconoPACK™ 2
FS75R07U1E4	active and preferred	AG-SMART1-1	Sixpack	75.0 A	IGBT4 - E4	1.55 V	1.55 V	SmartPACK 1
FS50R07U1E4	active and preferred	AG-SMART1-1	Sixpack	50.0 A	IGBT4 - E4	1.55 V	1.55 V	SmartPACK 1
<b>IGBT3 - E3, 3-level</b>								
F3L150R07W2E3_B11	active and preferred	AG-EASY2B-2	3-level	150.0 A	IGBT3 - E3	1.45 V	1.55 V	EasyPACK 2B
F3L100R07W2E3_B11	active and preferred	AG-EASY2B-2	3-level	100.0 A	IGBT3 - E3	1.45 V	1.55 V	EasyPACK 2B
F3L75R07W2E3_B11	active and preferred	AG-EASY2B-2	3-level	75.0 A	IGBT3 - E3	1.45 V	1.55 V	EasyPACK 2B
F3L50R06W1E3_B11	active and preferred	AG-EASY1B-2	3-level	50.0 A	IGBT3 - E3	1.45 V	1.55 V	EasyPACK 1B
<b>IGBT3 - E3, Chopper</b>								
FD600R06ME3_S2	active and preferred	AG-ECONOD-3	Chopper	600.0 A	IGBT3 - E3	1.3 V	1.15 V	EconoDUAL™ 3
FD300R06KE3	active and preferred	AG-62MM-1	Chopper	300.0 A	IGBT3 - E3	1.45 V	1.55 V	62 mm
<b>IGBT3 - E3, Dual</b>								
FF400R06KE3	active and preferred	AG-62MM-1	Dual	400.0 A	IGBT3 - E3	1.45 V	1.55 V	62 mm
FF300R06KE3	active and preferred	AG-62MM-1	Dual	300.0 A	IGBT3 - E3	1.45 V	1.55 V	62 mm
FF300R06KE3_B2	active and preferred	AG-62MM-1	Dual	300.0 A	IGBT3 - E3	1.45 V	1.55 V	62 mm
FF200R06KE3	active and preferred	AG-62MM-1	Dual	200.0 A	IGBT3 - E3	1.45 V	1.55 V	62 mm
<b>IGBT3 - E3, Fourpack</b>								
F4-75R06W1E3	active and preferred	AG-EASY1B-1	Fourpack	75.0 A	IGBT3 - E3	1.45 V	1.55 V	EasyPACK 1B

Further information about additional modules especially those with pre-applied TIM, PrimePACK™ with IGBT5 and .XT as well as our new XHP™ platform can be found on our website: [www.infineon.com/igbtmodules](http://www.infineon.com/igbtmodules)

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## IGBT modules up to 600 V / 650 V

Product	Product status	Packages	Configuration	$I_{(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	Housing
IGBT3 - E3, PIM								
FP100R06KE3	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	100.0 A	IGBT3 - E3	1.45 V	1.55 V	EconoPIM™ 3
FP75R06KE3	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	75.0 A	IGBT3 - E3	1.45 V	1.55 V	EconoPIM™ 3
FP50R06KE3	active and preferred	AG-ECONO2-5	PIM three phase input rectifier	50.0 A	IGBT3 - E3	1.45 V	1.55 V	EconoPIM™ 2
FP30R06KE3	active and preferred	AG-ECONO2-5	PIM three phase input rectifier	30.0 A	IGBT3 - E3	1.55 V	1.6 V	EconoPIM™ 2
FP50R06W2E3	active and preferred	AG-EASY2B-1	PIM three phase input rectifier	50.0 A	IGBT3 - E3	1.45 V	1.55 V	EasyPIM™ 2B
FP50R06W2E3_B11	active and preferred	AG-EASY2B-2	PIM three phase input rectifier	50.0 A	IGBT3 - E3	1.45 V	1.55 V	EasyPIM™ 2B
FB30R06W1E3	active and preferred	AG-EASY1B-1	PIM Single Phase Input Rectifier	30.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPIM™ 1B
FP30R06W1E3	active and preferred	AG-EASY1B-1	PIM three phase input rectifier	30.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPIM™ 1B
FP30R06W1E3_B11	active and preferred	AG-EASY1B-2	PIM three phase input rectifier	30.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPIM™ 1B
FB20R06W1E3	active and preferred	AG-EASY1B-1	PIM Single Phase Input Rectifier	20.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPIM™ 1B
FB20R06W1E3_B11	active and preferred	AG-EASY1B-2	PIM Single Phase Input Rectifier	20.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPIM™ 1B
FP20R06W1E3	active and preferred	AG-EASY1B-1	PIM three phase input rectifier	20.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPIM™ 1B
FP20R06W1E3_B11	active and preferred	AG-EASY1B-2	PIM three phase input rectifier	20.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPIM™ 1B
FP15R06W1E3	active and preferred	AG-EASY1B-1	PIM three phase input rectifier	15.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPIM™ 1B
FP15R06W1E3_B11	active and preferred	AG-EASY1B-2	PIM three phase input rectifier	15.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPIM™ 1B
FP10R06W1E3	active and preferred	AG-EASY1B-1	PIM three phase input rectifier	10.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPIM™ 1B
FP10R06W1E3_B11	active and preferred	AG-EASY1B-2	PIM three phase input rectifier	10.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPIM™ 1B
IGBT3 - E3, Sixpack								
FS200R06KE3	active and preferred	AG-ECONO3-4	Sixpack	200.0 A	IGBT3 - E3	1.45 V	1.55 V	EconoPACK™ 3
FS150R06KE3	active and preferred	AG-ECONO3-4	Sixpack	150.0 A	IGBT3 - E3	1.45 V	1.55 V	EconoPACK™ 3
FS100R06KE3	active and preferred	AG-ECONO3-4	Sixpack	100.0 A	IGBT3 - E3	1.45 V	1.55 V	EconoPACK™ 3
FS75R06KE3	active and preferred	AG-ECONO2-6	Sixpack	75.0 A	IGBT3 - E3	1.45 V	1.55 V	EconoPACK™ 2
FS50R06KE3	active and preferred	AG-ECONO2-6	Sixpack	50.0 A	IGBT3 - E3	1.45 V	1.55 V	EconoPACK™ 2
FS50R06W1E3	active and preferred	AG-EASY1B-1	Sixpack	50.0 A	IGBT3 - E3	1.45 V	1.55 V	EasyPACK 1B
FS50R06W1E3_B11	active and preferred	AG-EASY1B-2	Sixpack	50.0 A	IGBT3 - E3	1.45 V	1.55 V	EasyPACK 1B
FS30R06VE3	active and preferred	AG-EASY750-1	Sixpack	30.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPACK 750
FS30R06W1E3	active and preferred	AG-EASY1B-1	Sixpack	30.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPACK 1B
FS30R06W1E3_B11	active and preferred	AG-EASY1B-2	Sixpack	30.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPACK 1B
FS20R06VE3	active and preferred	AG-EASY750-1	Sixpack	20.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPACK 750
FS20R06VE3_B2	active and preferred	AG-EASY750-1	Sixpack	20.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPACK 750
FS20R06W1E3	active and preferred	AG-EASY1B-1	Sixpack	20.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPACK 1B
FS20R06W1E3_B11	active and preferred	AG-EASY1B-2	Sixpack	20.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPACK 1B
FS15R06VE3_B2	active and preferred	AG-EASY750-1	Sixpack	15.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPACK 750
FS10R06VE3	active and preferred	AG-EASY750-1	Sixpack	10.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPACK 750
FS10R06VE3_B2	active and preferred	AG-EASY750-1	Sixpack	10.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPACK 750
FS6R06VE3_B2	active and preferred	AG-EASY750-1	Sixpack	6.0 A	IGBT3 - E3	1.55 V	1.6 V	EasyPACK 750

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# IGBT modules up to 1200 V

Product	Product status	Packages	Configuration	$I_{C(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	Housing
<b>IGBT HighSpeed 3, 3-level</b>								
F3L200R12W2H3_B11	active and preferred	AG-EASY2B-2	3-level	200.0 A	3-level phase leg with NTC	1.55 V	1.55 V	EasyPACK 2B
F3L150R12W2H3_B11	active and preferred	AG-EASY2B-2	3-level	150.0 A	3-level phase leg with NTC	1.55 V	1.45 V	EasyPACK 2B
F3L100R12W2H3_B11	active and preferred	AG-EASY2B-2	3-level	100.0 A	3-level phase leg with NTC	1.55 V	1.35 V	EasyPACK 2B
F3L75R12W1H3_B11	active and preferred	AG-EASY1B-2	3-level	75.0 A	3-level phase leg with NTC	1.45 V	2.15 V	EasyPACK 1B
F3L75R12W1H3_B27	active and preferred	AG-EASY1B-2	3-level	75.0 A	3-level phase leg with NTC	1.45 V	1.85 V	EasyPACK 1B
FS3L25R12W2H3_B11	active and preferred	AG-EASY2B-2	3-level	25.0 A	3-level full-bridge with NTC	2.05 V	1.75 V	EasyPACK 2B
F3L15R12W2H3_B27	active and preferred	AG-EASY2B-2	3-level	15.0 A	3-level full-bridge with NTC	2.05 V	1.75 V	EasyPACK 2B
<b>IGBT HighSpeed 3, Booster</b>								
DF200R12W1H3F_B11	active and preferred	AG-EASY1B-2	Chopper	200.0 A	Booster with NTC	1.3 V	1.6 V	EasyPACK 1B
DF200R12W1H3_B27	active and preferred	AG-EASY1B-2	Chopper	200.0 A	Booster with NTC	1.3 V	2.0 V	EasyPACK 1B
DF160R12W2H3_B11	active and preferred	AG-EASY2B-2	Chopper	160.0 A	Booster with NTC	1.55 V	1.7 V	EasyPACK 2B
DF160R12W2H3F_B11	active and preferred	AG-EASY2B-2	Chopper	160.0 A	Booster with NTC	1.55 V	1.6 V	EasyPACK 2B
DF120R12W2H3_B27	active and preferred	AG-EASY2B-2	Chopper	120.0 A	Booster with NTC	2.05 V	2.0 V	EasyPACK 2B
FD-DF80R12W1H3_B52	active and preferred	AG-EASY1B-2	Chopper	80.0 A	Buck-boost with NTC	2.05 V	1.75 V	EasyPACK 1B
DF80R12W2H3F_B11	active and preferred	AG-EASY2B-2	Chopper	80.0 A	Booster with NTC	1.55 V	1.6 V	EasyPACK 2B
DF80R12W2H3_B11	active and preferred	AG-EASY2B-2	Chopper	80.0 A	Booster with NTC	1.55 V	1.7 V	EasyPACK 2B
<b>IGBT HighSpeed 2, Chopper</b>								
DF75R12W1H4F_B11	active and preferred	AG-EASY1B-2	Chopper	75.0 A	IGBT HighSpeed 2	2.1 V	1.6 V	EasyPACK 1B
<b>IGBT4 - T4, 3-level</b>								
F3L400R12PT4_B26	active and preferred	AG-ECONO4-1	3-level	400.0 A	IGBT4 - T4	1.75 V	1.8 V	EconoPACK™ 4
F3L300R12PT4_B26	active and preferred	AG-ECONO4-1	3-level	300.0 A	IGBT4 - T4	1.75 V	1.65 V	EconoPACK™ 4
F3L300R12MT4_B23	active and preferred	AG-ECONOD-3	3-level	300.0 A	IGBT4 - T4	1.75 V	1.65 V	EconoDUAL™ 3
F3L300R12MT4_B22	active and preferred	AG-ECONOD-3	3-level	300.0 A	IGBT4 - T4	1.75 V	1.65 V	EconoDUAL™ 3
<b>IGBT4 - T4, Chopper</b>								
FD200R12PT4_B6	active and preferred	AG-ECONO4-1	Chopper	200.0 A	IGBT4 - T4	1.75 V	1.75 V	EconoPACK™ 4
DF200R12PT4_B6	active and preferred	AG-ECONO4-1	Chopper	200.0 A	IGBT4 - T4	1.75 V	1.75 V	EconoPACK™ 4
FD150R12RT4	active and preferred	AG-34MM-1	Chopper	150.0 A	IGBT4 - T4	1.75 V	1.75 V	34 mm
DF150R12RT4	active and preferred	AG-34MM-1	Chopper	150.0 A	IGBT4 - T4	1.75 V	1.75 V	34 mm

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Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## IGBT modules up to 1200 V

Product	Product status	Packages	Configuration	$I_{C(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	Housing
IGBT4 - T4, Dual								
FF450R12KT4	active and preferred	AG-62MM-1	Dual	450.0 A	IGBT4 - T4	1.75 V	1.7 V	62 mm
FF300R12KT4	active and preferred	AG-62MM-1	Dual	300.0 A	IGBT4 - T4	1.75 V	1.65 V	62 mm
FF200R12MT4	active and preferred	AG-ECONOD-2	Dual	200.0 A	IGBT4 - T4	1.75 V	1.7 V	EconoDUAL™ 2
FF200R12KT4	active and preferred	AG-62MM-1	Dual	200.0 A	IGBT4 - T4	1.75 V	1.65 V	62 mm
FF150R12RT4	active and preferred	AG-34MM-1	Dual	150.0 A	IGBT4 - T4	1.75 V	1.75 V	34 mm
FF100R12RT4	active and preferred	AG-34MM-1	Dual	100.0 A	IGBT4 - T4	1.75 V	1.75 V	34 mm
FF75R12RT4	active and preferred	AG-34MM-1	Dual	75.0 A	IGBT4 - T4	1.85 V	1.7 V	34 mm
FF50R12RT4	active and preferred	AG-34MM-1	Dual	50.0 A	IGBT4 - T4	1.85 V	1.75 V	34 mm
IGBT4 - T4, PIM								
FP100R12KT4	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	100.0 A	IGBT4 - T4	1.75 V	1.7 V	EconoPIM™ 3
FP100R12KT4_B11	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	100.0 A	IGBT4 - T4	1.75 V	1.7 V	EconoPIM™ 3
FP75R12KT4	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	75.0 A	IGBT4 - T4	1.85 V	1.7 V	EconoPIM™ 3
FP75R12KT4_B11	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	75.0 A	IGBT4 - T4	1.85 V	1.7 V	EconoPIM™ 3
FP75R12KT4_B15	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	75.0 A	IGBT4 - T4	1.85 V	1.7 V	EconoPIM™ 3
FP50R12KT4G	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	50.0 A	IGBT4 - T4	1.85 V	1.7 V	EconoPIM™ 3
FP50R12KT4	active and preferred	AG-ECONO2-4	PIM three phase input rectifier	50.0 A	IGBT4 - T4	1.85 V	1.7 V	EconoPIM™ 2
FP50R12KT4_B11	active and preferred	AG-ECONO2-4	PIM three phase input rectifier	50.0 A	IGBT4 - T4	1.85 V	1.7 V	EconoPIM™ 2
FP35R12KT4	active and preferred	AG-ECONO2-4	PIM three phase input rectifier	35.0 A	IGBT4 - T4	1.85 V	1.7 V	EconoPIM™ 2
FP35R12KT4_B11	active and preferred	AG-ECONO2-4	PIM three phase input rectifier	35.0 A	IGBT4 - T4	1.85 V	1.7 V	EconoPIM™ 2
FP35R12KT4_B15	active and preferred	AG-ECONO2-5	PIM three phase input rectifier	35.0 A	IGBT4 - T4	1.85 V	1.7 V	EconoPIM™ 2
FP35R12U1T4	active and preferred	AG-SMART1-1	PIM three phase input rectifier	35.0 A	IGBT4 - T4	1.85 V	1.65 V	SmartPIM 1
FP35R12W2T4	active and preferred	AG-EASY2B-1	PIM three phase input rectifier	35.0 A	IGBT4 - T4	1.85 V	1.65 V	EasyPIM™ 2B
FP35R12W2T4_B11	active and preferred	AG-EASY2B-2	PIM three phase input rectifier	35.0 A	IGBT4 - T4	1.85 V	1.65 V	EasyPIM™ 2B
FP25R12KT4	active and preferred	AG-ECONO2-4	PIM three phase input rectifier	25.0 A	IGBT4 - T4	1.85 V	1.75 V	EconoPIM™ 2
FP25R12KT4_B11	active and preferred	AG-ECONO2-4	PIM three phase input rectifier	25.0 A	IGBT4 - T4	1.85 V	1.75 V	EconoPIM™ 2
FP25R12KT4_B15	active and preferred	AG-ECONO2-5	PIM three phase input rectifier	25.0 A	IGBT4 - T4	1.85 V	1.75 V	EconoPIM™ 2
FP25R12U1T4	active and preferred	AG-SMART1-1	PIM three phase input rectifier	25.0 A	IGBT4 - T4	1.85 V	1.75 V	SmartPIM 1
FP25R12W2T4	active and preferred	AG-EASY2B-1	PIM three phase input rectifier	25.0 A	IGBT4 - T4	1.85 V	1.75 V	EasyPIM™ 2B
FP25R12W2T4_B11	active and preferred	AG-EASY2B-2	PIM three phase input rectifier	25.0 A	IGBT4 - T4	1.85 V	1.75 V	EasyPIM™ 2B
FP15R12W2T4	active and preferred	AG-EASY2B-1	PIM three phase input rectifier	15.0 A	IGBT4 - T4	1.85 V	1.75 V	EasyPIM™ 2B
FP15R12W1T4	active and preferred	AG-EASY1B-1	PIM three phase input rectifier	15.0 A	IGBT4 - T4	1.85 V	2.0 V	EasyPIM™ 1B
FP15R12W1T4_B3	active and preferred	AG-EASY1B-1	PIM three phase input rectifier	15.0 A	IGBT4 - T4	1.85 V	2.0 V	EasyPIM™ 1B
FP15R12W1T4_B11	active and preferred	AG-EASY1B-2	PIM three phase input rectifier	15.0 A	IGBT4 - T4	1.85 V	2.0 V	EasyPIM™ 1B
FP10R12W1T4	active and preferred	AG-EASY1B-1	PIM three phase input rectifier	10.0 A	IGBT4 - T4	1.85 V	1.75 V	EasyPIM™ 1B
FP10R12W1T4_B3	active and preferred	AG-EASY1B-1	PIM three phase input rectifier	10.0 A	IGBT4 - T4	1.85 V	1.75 V	EasyPIM™ 1B

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# IGBT modules up to 1200 V

Product	Product status	Packages	Configuration	$I_{C(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	Housing
<b>IGBT4 - T4, PIM</b>								
FP10R12W1T4_B11	active and preferred	AG-EASY1B-2	PIM three phase input rectifier	10.0 A	IGBT4 - T4	1.85 V	1.75 V	EasyPIM™ 1B
FP06R12W1T4_B3	active	AG-EASY1B-1	PIM three phase input rectifier	6.0 A	IGBT4 - T4	1.5 V	1.45 V	EasyPIM™ 1B
<b>IGBT4 - T4, Sixpack</b>								
FS200R12PT4	active and preferred	AG-ECONO4-1	Sixpack	200.0 A	IGBT4 - T4	1.75 V	1.7 V	EconoPACK™ 4
FS200R12KT4R	active and preferred	AG-ECONO3-4	Sixpack	200.0 A	IGBT4 - T4	1.75 V	1.7 V	EconoPACK™ 3
FS200R12KT4R_B11	active and preferred	AG-ECONO3-4	Sixpack	200.0 A	IGBT4 - T4	1.75 V	1.7 V	EconoPACK™ 3
FS150R12PT4	active and preferred	AG-ECONO4-1	Sixpack	150.0 A	IGBT4 - T4	1.75 V	1.7 V	EconoPACK™ 4
FS150R12KT4	active and preferred	AG-ECONO3-4	Sixpack	150.0 A	IGBT4 - T4	1.75 V	1.7 V	EconoPACK™ 3
FS150R12KT4_B9	active and preferred	AG-ECONO3-4	Sixpack	150.0 A	IGBT4 - T4	1.75 V	1.7 V	EconoPACK™ 3
FS150R12KT4_B11	active and preferred	AG-ECONO3-4	Sixpack	150.0 A	IGBT4 - T4	1.75 V	1.4 V	EconoPACK™ 3
FS100R12PT4	active and preferred	AG-ECONO4-1	Sixpack	100.0 A	IGBT4 - T4	1.75 V	1.7 V	EconoPACK™ 4
FS100R12KT4G	active and preferred	AG-ECONO3-4	Sixpack	100.0 A	IGBT4 - T4	1.75 V	1.7 V	EconoPACK™ 3
FS100R12KT4G_B11	active and preferred	AG-ECONO3-4	Sixpack	100.0 A	IGBT4 - T4	1.75 V	1.7 V	EconoPACK™ 3
FS100R12KT4	active and preferred	AG-ECONO2-6	Sixpack	100.0 A	IGBT4 - T4	1.75 V	1.7 V	EconoPACK™ 2
FS100R12KT4_B11	active and preferred	AG-ECONO2-6	Sixpack	100.0 A	IGBT4 - T4	1.75 V	1.7 V	EconoPACK™ 2
FS75R12KT4_B11	active and preferred	AG-ECONO2-6	Sixpack	75.0 A	IGBT4 - T4	1.85 V	1.7 V	EconoPACK™ 2
FS75R12KT4_B15	active and preferred	AG-ECONO2-6	Sixpack	75.0 A	IGBT4 - T4	1.85 V	1.7 V	EconoPACK™ 2
FS75R12W2T4	active and preferred	AG-EASY2B-1	Sixpack	75.0 A	IGBT4 - T4	1.85 V	1.7 V	EasyPACK 2B
FS75R12W2T4_B11	active and preferred	AG-EASY2B-2	Sixpack	75.0 A	IGBT4 - T4	1.85 V	1.7 V	EasyPACK 2B
FS50R12KT4_B11	active and preferred	AG-ECONO2-6	Sixpack	50.0 A	IGBT4 - T4	1.85 V	1.7 V	EconoPACK™ 2
FS50R12KT4_B15	active and preferred	AG-ECONO2-6	Sixpack	50.0 A	IGBT4 - T4	1.85 V	1.7 V	EconoPACK™ 2
FS50R12W2T4	active and preferred	AG-EASY2B-1	Sixpack	50.0 A	IGBT4 - T4	1.85 V	1.7 V	EasyPACK 2B
FS50R12W2T4_B11	active and preferred	AG-EASY2B-2	Sixpack	50.0 A	IGBT4 - T4	1.85 V	1.7 V	EasyPACK 2B
FS50R12U1T4	active and preferred	AG-SMART1-1	Sixpack	50.0 A	IGBT4 - T4	1.85 V	1.7 V	SmartPACK 1
FS35R12W1T4	active and preferred	AG-EASY1B-1	Sixpack	35.0 A	IGBT4 - T4	1.85 V	1.65 V	EasyPACK 1B
FS35R12W1T4_B11	active and preferred	AG-EASY1B-2	Sixpack	35.0 A	IGBT4 - T4	1.85 V	1.65 V	EasyPACK 1B
FS35R12U1T4	active and preferred	AG-SMART1-1	Sixpack	35.0 A	IGBT4 - T4	1.85 V	1.7 V	SmartPACK 1
FS25R12W1T4	active and preferred	AG-EASY1B-1	Sixpack	25.0 A	IGBT4 - T4	1.85 V	1.75 V	EasyPACK 1B
FS25R12W1T4_B11	active and preferred	AG-EASY1B-2	Sixpack	25.0 A	IGBT4 - T4	1.85 V	1.75 V	EasyPACK 1B
<b>IGBT4 - T4, Twelvepack</b>								
F12-25R12KT4G	active and preferred	AG-ECONO3-4	Twelvepack	25.0 A	IGBT4 - T4	1.85 V	1.75 V	EconoPACK™ 3

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Stacks &amp; boards

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SCR / diode modules

Solid state relays

## IGBT modules up to 1200 V

Product	Product status	Packages	Configuration	$I_{C(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	Housing
IGBT4 - E4, 3-level								
F3L300R12ME4_B23	active and preferred	AG-ECONOD-3	3-level	300.0 A	IGBT4 - E4	1.75 V	1.65 V	EconoDUAL™ 3
F3L300R12ME4_B22	active and preferred	AG-ECONOD-3	3-level	300.0 A	IGBT4 - E4	1.75 V	1.65 V	EconoDUAL™ 3
FF450R12KE4_E	active and preferred	AG-62MM-1	3-level	450.0 A	IGBT4 - E4	1.75 V	1.7 V	62 mm
FF300R12KE4_E	active and preferred	AG-62MM-1	3-level	300.0 A	IGBT4 - E4	1.75 V	1.65 V	62 mm
IGBT4 - E4, Dual								
FF900R12IE4	active and preferred	AG-PRIME2-1	Dual	900.0 A	IGBT4 - E4	1.75 V	1.9 V	PrimePACK™ 2
FF900R12IE4V	active and preferred	AG-PRIME2-1	Dual	900.0 A	IGBT4 - E4	1.75 V	1.9 V	PrimePACK™ 2
FF600R12IE4	active and preferred	AG-PRIME2-1	Dual	600.0 A	IGBT4 - E4	1.75 V	1.8 V	PrimePACK™ 2
FF600R12IE4V	active and preferred	AG-PRIME2-1	Dual	600.0 A	IGBT4 - E4	1.75 V	1.8 V	PrimePACK™ 2
FF600R12ME4A_B11	active and preferred	AG-ECONOD-3	Dual	600.0 A	IGBT4 - E3	1.75 V	1.9 V	EconoDUAL™ 3
FF600R12ME4C	active	AG-ECONOD-3	Dual	600.0 A	IGBT4 - E4	1.75 V	1.9 V	EconoDUAL™ 3
FF600R12ME4C_B11	active and preferred	AG-ECONOD-3	Dual	600.0 A	IGBT4 - E4	1.75 V	1.9 V	EconoDUAL™ 3
FF600R12ME4	active	AG-ECONOD-3	Dual	600.0 A	IGBT4 - E4	1.75 V	1.65 V	EconoDUAL™ 3
FF600R12ME4_B11	active and preferred	AG-ECONOD-3	Dual	600.0 A	IGBT4 - E4	1.75 V	1.65 V	EconoDUAL™ 3
FF450R12IE4	active and preferred	AG-PRIME2-1	Dual	450.0 A	IGBT4 - E4	1.75 V	1.9 V	PrimePACK™ 2
FF450R12ME4	active	AG-ECONOD-3	Dual	450.0 A	IGBT4 - E4	1.75 V	1.65 V	EconoDUAL™ 3
FF450R12ME4_B11	active and preferred	AG-ECONOD-3	Dual	450.0 A	IGBT4 - E4	1.75 V	1.65 V	EconoDUAL™ 3
FF450R12KE4	active and preferred	AG-62MM-1	Dual	450.0 A	IGBT4 - E4	1.75 V	1.7 V	62 mm
FF300R12ME4	active	AG-ECONOD-3	Dual	300.0 A	IGBT4 - E4	1.75 V	1.65 V	EconoDUAL™ 3
FF300R12ME4_B11	active and preferred	AG-ECONOD-3	Dual	300.0 A	IGBT4 - E4	1.75 V	1.65 V	EconoDUAL™ 3
FF300R12KE4	active and preferred	AG-62MM-1	Dual	300.0 A	IGBT4 - E4	1.75 V	1.65 V	62 mm
FF300R12KE4_B2	active and preferred	AG-62MM-1	Dual	300.0 A	IGBT4 - E4	1.75 V	1.65 V	62 mm
FF225R12ME4	active	AG-ECONOD-3	Dual	225.0 A	IGBT4 - E4	1.85 V	1.65 V	EconoDUAL™ 3
FF225R12ME4_B11	active and preferred	AG-ECONOD-3	Dual	225.0 A	IGBT4 - E4	1.85 V	1.65 V	EconoDUAL™ 3
FF200R12KE4	active and preferred	AG-62MM-1	Dual	200.0 A	IGBT4 - E4	1.75 V	1.65 V	62 mm
IGBT4 - E4, Single switch								
FZ2400R12HE4_B9	active and preferred	AG-IHMB190-2	Single switch	2400.0 A	IGBT4 - E4	1.75 V	1.8 V	IHM B 190 mm
FZ1800R12HE4_B9	active and preferred	AG-IHMB190-2	Single switch	1800.0 A	IGBT4 - E4	1.75 V	1.8 V	IHM B 190 mm
FZ1200R12HE4	active and preferred	A-IHMB130-2	Single switch	1200.0 A	IGBT4 - E4	1.75 V	1.8 V	IHM B 130 mm
FZ900R12KE4	active and preferred	AG-62MM-2	Single switch	900.0 A	IGBT4 - E4	1.75 V	1.9 V	62 mm
FZ600R12KE4	active and preferred	AG-62MM-2	Single switch	600.0 A	IGBT4 - E4	1.75 V	1.8 V	62 mm
FZ400R12KE4	active and preferred	AG-62MM-2	Single switch	400.0 A	IGBT4 - E4	1.75 V	1.65 V	62 mm

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<b>IGBT4 - E4, Sixpack</b>								
FS450R12OE4	active and preferred	AG-ECONOPP-2	Sixpack	450.0 A	IGBT4 - E4	1.75 V	1.65 V	EconoPACK™ + D
FS300R12OE4	active and preferred	AG-ECONOPP-2	Sixpack	300.0 A	IGBT4 - E4	1.75 V	1.65 V	EconoPACK™ + D
FS225R12OE4	active and preferred	AG-ECONOPP-2	Sixpack	225.0 A	IGBT4 - E4	1.85 V	1.65 V	EconoPACK™ + D
<b>IGBT4 - P4, Chopper</b>								
DF1400R12IP4D	active and preferred	AG-PRIME3-1	Chopper	1400.0 A	IGBT4 - P4	1.75 V	1.65 V	PrimePACK™ 3
FD1400R12IP4D	active and preferred	AG-PRIME3-1	Chopper	1400.0 A	IGBT4 - P4	1.75 V	1.65 V	PrimePACK™ 3
DF900R12IP4D	active and preferred	AG-PRIME2-1	Chopper	900.0 A	IGBT4 - P4	1.7 V	1.65 V	PrimePACK™ 2
DF900R12IP4DV	active and preferred	AG-PRIME2-1	Chopper	900.0 A	IGBT4 - P4	1.7 V	1.65 V	PrimePACK™ 2
FD900R12IP4D	active and preferred	AG-PRIME2-1	Chopper	900.0 A	IGBT4 - P4	1.7 V	1.65 V	PrimePACK™ 2
FD900R12IP4DV	active and preferred	AG-PRIME2-1	Chopper	900.0 A	IGBT4 - P4	1.7 V	1.65 V	PrimePACK™ 2
DF600R12IP4D	active	AG-PRIME2-1	Chopper	600.0 A	IGBT4 - P4	1.7 V	1.65 V	PrimePACK™ 2
<b>IGBT4 - P4, Dual</b>								
FF1400R12IP4	active and preferred	AG-PRIME3-1	Dual	1400.0 A	IGBT4 - P4	1.75 V	1.9 V	PrimePACK™ 3
FF900R12IP4	active and preferred	AG-PRIME2-1	Dual	900.0 A	IGBT4 - P4	1.7 V	1.9 V	PrimePACK™ 2
FF900R12IP4V	active and preferred	AG-PRIME2-1	Dual	900.0 A	IGBT4 - P4	1.7 V	1.9 V	PrimePACK™ 2
FF900R12IP4D	active and preferred	AG-PRIME2-1	Dual	900.0 A	IGBT4 - P4	1.7 V	1.65 V	PrimePACK™ 2
FF900R12IP4DV	active and preferred	AG-PRIME2-1	Dual	900.0 A	IGBT4 - P4	1.7 V	1.65 V	PrimePACK™ 2
FF600R12IP4	active and preferred	AG-PRIME2-1	Dual	600.0 A	IGBT4 - P4	1.7 V	1.8 V	PrimePACK™ 2
FF600R12IP4V	active and preferred	AG-PRIME2-1	Dual	600.0 A	IGBT4 - P4	1.7 V	1.8 V	PrimePACK™ 2
<b>IGBT4 - P4, Single switch</b>								
FZ3600R12HP4	active and preferred	AG-IHMB190-2	Single switch	3600.0 A	IGBT4 - P4	1.7 V	1.8 V	IHM B 190 mm
FZ2400R12HP4_B9	active and preferred	AG-IHMB190-2	Single switch	2400.0 A	IGBT4 - P4	1.7 V	1.8 V	IHM B 190 mm
FZ2400R12HP4	active and preferred	A-IHMB130-2	Single switch	2400.0 A	IGBT4 - P4	1.7 V	1.8 V	IHM B 130 mm
FZ1800R12HP4_B9	active and preferred	AG-IHMB190-2	Single switch	1800.0 A	IGBT4 - P4	1.7 V	1.8 V	IHM B 190 mm
FZ1600R12HP4	active and preferred	A-IHMB130-2	Single switch	1600.0 A	IGBT4 - P4	1.7 V	1.8 V	IHM B 130 mm
FZ1200R12HP4	active and preferred	A-IHMB130-2	Single switch	1200.0 A	IGBT4 - P4	1.7 V	1.8 V	IHM B 130 mm
FZ900R12KP4	active and preferred	AG-62MM-2	Single switch	900.0 A	IGBT4 - P4	1.7 V	1.9 V	62 mm
FZ600R12KP4	active and preferred	AG-62MM-2	Single switch	600.0 A	IGBT4 - P4	1.7 V	1.8 V	62 mm
FZ400R12KP4	active and preferred	AG-62MM-2	Single switch	400.0 A	IGBT4 - P4	1.7 V	1.65 V	62 mm
<b>IGBT3 - T3, 3-level</b>								
FF400R12KT3_E	active	AG-62MM-1	Dual	400.0 A	IGBT3 - T3	1.7 V	1.65 V	62 mm
FF300R12KT3_E	active	AG-62MM-1	Dual	300.0 A	IGBT3 - T3	1.7 V	1.65 V	62 mm
FF200R12KT3_E	active	AG-62MM-1	Dual	200.0 A	IGBT3 - T3	1.7 V	1.65 V	62 mm

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Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## IGBT modules up to 1200 V

Product	Product status	Packages	Configuration	$I_{C(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	Housing
<b>IGBT3 - T3, Dual</b>								
FF400R12KT3	active	AG-62MM-1	Dual	400.0 A	IGBT3 - T3	1.7 V	1.65 V	62 mm
FF300R12KT3	active	AG-62MM-1	Dual	300.0 A	IGBT3 - T3	1.7 V	1.65 V	62 mm
FF200R12KT3	active	AG-62MM-1	Dual	200.0 A	IGBT3 - T3	1.7 V	1.65 V	62 mm
FF150R12KT3G	active	AG-62MM-1	Dual	150.0 A	IGBT3 - T3	1.7 V	1.65 V	62 mm
FF150R12YT3	active and preferred	AG-EASY2-1	Dual	150.0 A	IGBT3 - T3	1.7 V	1.65 V	EasyDUAL 2
FF100R12YT3_B60	active and preferred	AG-EASY2-1	Dual	100.0 A	IGBT3 - T3	1.7 V	1.65 V	EasyDUAL 2
FF75R12YT3	active and preferred	AG-EASY2-1	Dual	75.0 A	IGBT3 - T3	1.8 V	1.75 V	EasyDUAL 2
<b>IGBT3 - T3, PIM</b>								
FP75R12KT3	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	75.0 A	IGBT3 - T3	1.7 V	1.65 V	EconoPIM™ 3
FP50R12KT3	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	50.0 A	IGBT3 - T3	1.7 V	1.65 V	EconoPIM™ 3
FP40R12KT3G	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	40.0 A	IGBT3 - T3	1.8 V	1.75 V	EconoPIM™ 3
FP40R12KT3	active and preferred	AG-ECONO2-5	PIM three phase input rectifier	40.0 A	IGBT3 - T3	1.8 V	1.75 V	EconoPIM™ 2
FP25R12KT3	active and preferred	AG-ECONO2-5	PIM three phase input rectifier	25.0 A	IGBT3 - T3	1.7 V	1.65 V	EconoPIM™ 2
FP15R12KT3	active and preferred	AG-ECONO2-5	PIM three phase input rectifier	15.0 A	IGBT3 - T3	1.7 V	1.65 V	EconoPIM™ 2
<b>IGBT3 - T3, Sixpack</b>								
FS150R12KT3	active and preferred	AG-ECONO3-4	Sixpack	150.0 A	IGBT3 - T3	1.7 V	1.65 V	EconoPACK™ 3
FS100R12KT3	active and preferred	AG-ECONO3-4	Sixpack	100.0 A	IGBT3 - T3	1.7 V	1.65 V	EconoPACK™ 3
FS75R12KT3G	active and preferred	AG-ECONO3-4	Sixpack	75.0 A	IGBT3 - T3	1.7 V	1.65 V	EconoPACK™ 3
FS75R12KT3	active and preferred	AG-ECONO2-6	Sixpack	75.0 A	IGBT3 - T3	1.7 V	1.65 V	EconoPACK™ 2
FS50R12KT3	active and preferred	AG-ECONO2-6	Sixpack	50.0 A	IGBT3 - T3	1.7 V	1.65 V	EconoPACK™ 2
FS35R12KT3	active and preferred	AG-ECONO2-6	Sixpack	35.0 A	IGBT3 - T3	1.7 V	1.65 V	EconoPACK™ 2
FS25R12KT3	active and preferred	AG-ECONO2-6	Sixpack	25.0 A	IGBT3 - T3	1.7 V	1.65 V	EconoPACK™ 2
FS15R12VT3	active and preferred	AG-EASY750-1	Sixpack	15.0 A	IGBT3 - T3	1.7 V	1.65 V	EasyPACK 750
FS10R12VT3	active and preferred	AG-EASY750-1	Sixpack	10.0 A	IGBT3 - T3	1.9 V	1.65 V	EasyPACK 750
<b>IGBT3 - E3, Chopper</b>								
DF400R12KE3	active and preferred	AG-62MM-1	Chopper	400.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
FD400R12KE3	active and preferred	AG-62MM-1	Chopper	400.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
DF300R12KE3	active and preferred	AG-62MM-1	Chopper	300.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
FD300R12KE3	active and preferred	AG-62MM-1	Chopper	300.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
DF200R12KE3	active and preferred	AG-62MM-1	Chopper	200.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
FD200R12KE3	active and preferred	AG-62MM-1	Chopper	200.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm

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# IGBT modules up to 1200 V

Product	Product status	Packages	Configuration	$I_{C(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	Housing
<b>IGBT3 - E3, Dual</b>								
FF1200R12KE3	active and preferred	A-IHM130-2	Dual	1200.0 A	IGBT3 - E3	1.7 V	2.2 V	IHM 130 mm
FF800R12KE3	active and preferred	A-IHM130-2	Dual	800.0 A	IGBT3 - E3	1.7 V	2.2 V	IHM 130 mm
FF600R12KE3	active and preferred	A-IHM130-2	Dual	600.0 A	IGBT3 - E3	1.7 V	2.0 V	IHM 130 mm
FF400R12KE3	active	AG-62MM-1	Dual	400.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
FF400R12KE3_B2	active	AG-62MM-1	Dual	400.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
FF300R12KE3	active	AG-62MM-1	Dual	300.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
FF200R12KE3	active	AG-62MM-1	Dual	200.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
FF150R12KE3G	active	AG-62MM-1	Dual	150.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
<b>IGBT3 - E3, PIM</b>								
FP75R12KE3	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	75.0 A	IGBT3 - E3	1.7 V	1.65 V	EconoPIM™ 3
FP50R12KE3	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	50.0 A	IGBT3 - E3	1.7 V	1.65 V	EconoPIM™ 3
FP40R12KE3G	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	40.0 A	IGBT3 - E3	1.8 V	1.75 V	EconoPIM™ 3
FP40R12KE3	active and preferred	AG-ECONO2-5	PIM three phase input rectifier	40.0 A	IGBT3 - E3	1.8 V	1.75 V	EconoPIM™ 2
FP25R12KE3	active and preferred	AG-ECONO2-5	PIM three phase input rectifier	25.0 A	IGBT3 - E3	1.7 V	1.65 V	EconoPIM™ 2
FP15R12KE3G	active and preferred	AG-ECONO2-5	PIM three phase input rectifier	15.0 A	IGBT3 - E3	1.7 V	1.65 V	EconoPIM™ 2
<b>IGBT3 - E3, Single switch</b>								
FZ3600R12KE3	active and preferred	A-IHM190-2	Single switch	3600.0 A	IGBT3 - E3	1.7 V	2.2 V	IHM 190 mm
FZ2400R12KE3	active and preferred	A-IHM130-2	Single switch	2400.0 A	IGBT3 - E3	1.7 V	2.2 V	IHM 130 mm
FZ1600R12KE3	active and preferred	A-IHM130-2	Single switch	1600.0 A	IGBT3 - E3	1.7 V	2.2 V	IHM 130 mm
FZ800R12KE3	active	AG-62MM-2	Single switch	800.0 A	IGBT3 - E3	1.7 V	2.2 V	62 mm
FZ600R12KE3	active	AG-62MM-2	Single switch	600.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
FZ400R12KE3	active	AG-62MM-2	Single switch	400.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
FZ400R12KE3B1	active	AG-62MM-2	Single switch	400.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
FD400R12KE3_B5	active	AG-62MM-1	Single switch	400.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
FZ300R12KE3G	active	AG-62MM-2	Single switch	300.0 A	IGBT3 - E3	1.7 V	1.65 V	62 mm
<b>IGBT3 - E3, Sixpack</b>								
FS150R12KE3	active and preferred	AG-ECONO3-4	Sixpack	150.0 A	IGBT3 - E3	1.7 V	1.65 V	EconoPACK™ 3
FS100R12KE3	active and preferred	AG-ECONO3-4	Sixpack	100.0 A	IGBT3 - E3	1.7 V	1.65 V	EconoPACK™ 3
FS75R12KE3G	active and preferred	AG-ECONO3-4	Sixpack	75.0 A	IGBT3 - E3	1.7 V	1.65 V	EconoPACK™ 3
FS75R12KE3_B9	active and preferred	AG-ECONO2-6	Sixpack	75.0 A	IGBT3 - E3	1.7 V	1.65 V	EconoPACK™ 2
FS75R12KE3	active and preferred	AG-ECONO2-6	Sixpack	75.0 A	IGBT3 - E3	1.7 V	1.65 V	EconoPACK™ 2
FS50R12KE3	active and preferred	AG-ECONO2-6	Sixpack	50.0 A	IGBT3 - E3	1.7 V	1.65 V	EconoPACK™ 2
FS35R12KE3G	active and preferred	AG-ECONO2-6	Sixpack	35.0 A	IGBT3 - E3	1.7 V	1.65 V	EconoPACK™ 2
FS25R12KE3G	active and preferred	AG-ECONO2-6	Sixpack	25.0 A	IGBT3 - E3	1.7 V	1.65 V	EconoPACK™ 2

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Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## IGBT modules up to 1200 V

Product	Product status	Packages	Configuration	$I_{C(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	Housing
IGBT2 - Fast, Single switch								
FZ600R12KS4	active	AG-62MM-2	Single switch	600.0 A	IGBT2 Fast	3.2 V	2.0 V	62 mm
FZ400R12KS4	active	AG-62MM-2	Single switch	400.0 A	IGBT2 Fast	3.2 V	2.0 V	62 mm
FD300R12KS4_B5	active	AG-62MM-1	Single switch	300.0 A	IGBT2 Fast	3.2 V	2.0 V	62 mm
IGBT2 - Fast, Chopper								
FD300R12KS4	active	AG-62MM-1	Chopper	300.0 A	IGBT2 Fast	3.2 V	2.0 V	62 mm
IGBT2 - Fast, Dual								
FF600R12IS4F	active and preferred	AG-PRIME2-1	Dual	600.0 A	IGBT2 Fast	3.2 V	1.6 V	PrimePACK™ 2
FF300R12MS4	active and preferred	AG-ECONOD-3	Dual	300.0 A	IGBT2 Fast	3.2 V	2.0 V	EconoDUAL™ 3
FF225R12MS4	active and preferred	AG-ECONOD-3	Dual	225.0 A	IGBT2 Fast	3.2 V	2.0 V	EconoDUAL™ 3
FF150R12MS4G	active and preferred	AG-ECONOD-3	Dual	150.0 A	IGBT2 Fast	3.2 V	2.0 V	EconoDUAL™ 3
FF300R12KS4	active	AG-62MM-1	Dual	300.0 A	IGBT2 Fast	3.2 V	2.0 V	62 mm
FF200R12KS4	active	AG-62MM-1	Dual	200.0 A	IGBT2 Fast	3.2 V	2.0 V	62 mm
FF150R12KS4	active	AG-62MM-1	Dual	150.0 A	IGBT2 Fast	3.2 V	2.0 V	62 mm
FF150R12KS4_B2	active	AG-62MM-1	Dual	150.0 A	IGBT2 Fast	3.2 V	2.0 V	62 mm
FF100R12KS4	active	AG-62MM-1	Dual	100.0 A	IGBT2 Fast	3.2 V	2.0 V	62 mm
IGBT2 - Fast, Fourpack								
F4-150R12KS4	active and preferred	AG-ECONO3-4	Fourpack	150.0 A	IGBT2 Fast	3.2 V	2.3 V	EconoPACK™ 3
F4-100R12KS4	active and preferred	AG-ECONO3-4	Fourpack	100.0 A	IGBT2 Fast	3.2 V	2.0 V	EconoPACK™ 3
F4-75R12KS4	active and preferred	AG-ECONO2-6	Fourpack	75.0 A	IGBT2 Fast	3.2 V	2.0 V	EconoPACK™ 2
F4-75R12KS4_B11	active and preferred	AG-ECONO2-6	Fourpack	75.0 A	IGBT2 Fast	3.2 V	2.0 V	EconoPACK™ 2
F4-50R12KS4	active and preferred	AG-ECONO2-6	Fourpack	50.0 A	IGBT2 Fast	3.2 V	2.0 V	EconoPACK™ 2
F4-50R12KS4_B11	active and preferred	AG-ECONO2-6	Fourpack	50.0 A	IGBT2 Fast	3.2 V	2.0 V	EconoPACK™ 2
IGBT2 - Fast, PIM								
FP50R12KS4C	active and preferred	AG-ECONO3-3	PIM three phase input rectifier	50.0 A	IGBT2 Fast	3.2 V	1.75 V	EconoPIM™ 3
FP25R12KS4C	active and preferred	AG-ECONO2-5	PIM three phase input rectifier	25.0 A	IGBT2 Fast	3.2 V	2.05 V	EconoPIM™ 2
FP15R12KS4C	active and preferred	AG-ECONO2-5	PIM three phase input rectifier	15.0 A	IGBT2 Fast	3.2 V	1.75 V	EconoPIM™ 2
IGBT2 - Fast, Sixpack								
FS100R12KS4	active and preferred	AG-ECONO3-1	Sixpack	100.0 A	IGBT2 Fast	3.2 V	2.0 V	EconoPACK™ 3
Diode								
DD1200S12H4	active and preferred	A-IHMB130-2	Diodes	1200.0 A	Diode	-	1.8 V	IHM B 130 mm

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# IGBT modules up to 1600V / 1700V

Product	Product status	Packages	Configuration	$I_{C(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	Housing
IGBT4 - E4, Chopper								
DF1000R17IE4	active and preferred	AG-PRIME3-1	Chopper	1000.0	IGBT4 - E4	2.0	1.85	PrimePACK™ 3
DF1000R17IE4D_B2	active and preferred	AG-PRIME3-1	Chopper	1000.0	IGBT4 - E4	2.0	1.7	PrimePACK™ 3
FD1000R17IE4	active and preferred	AG-PRIME3-1	Chopper	1000.0	IGBT4 - E4	2.0	1.85	PrimePACK™ 3
FD1000R17IE4D_B2	active	AG-PRIME3-1	Chopper	1000.0	IGBT4 - E4	2.0	1.7	PrimePACK™ 3
DF650R17IE4	active	AG-PRIME2-1	Chopper	650.0	IGBT4 - E4	2.0	1.85	PrimePACK™ 2
FD650R17IE4	active	AG-PRIME2-1	Chopper	650.0	IGBT4 - E4	2.0	1.85	PrimePACK™ 2
IGBT4 - E4, Dual								
FF1000R17IE4	active and preferred	AG-PRIME3-1	Dual	1000.0	IGBT4 - E4	2.0	1.85	PrimePACK™ 3
FF1000R17IE4D_B2	active and preferred	AG-PRIME3-1	Dual	1000.0	IGBT4 - E4	2.0	1.7	PrimePACK™ 3
FF650R17IE4	active and preferred	AG-PRIME2-1	Dual	650.0	IGBT4 - E4	2.0	1.85	PrimePACK™ 2
FF650R17IE4V	active and preferred	AG-PRIME2-1	Dual	650.0	IGBT4 - E4	2.0	1.85	PrimePACK™ 2
FF650R17IE4D_B2	active and preferred	AG-PRIME2-1	Dual	650.0	IGBT4 - E4	2.0	1.7	PrimePACK™ 2
FF600R17ME4	active	AG-ECONOD-3	Dual	600.0	IGBT4 - E4	1.95	1.8	EconoDUAL™ 3
FF600R17ME4_B11	active and preferred	AG-ECONOD-3	Dual	600.0	IGBT4 - E4	1.95	1.8	EconoDUAL™ 3
FF450R17IE4	active and preferred	AG-PRIME2-1	Dual	450.0	IGBT4 - E4	2.0	1.85	PrimePACK™ 2
FF450R17ME4	active	AG-ECONOD-3	Dual	450.0	IGBT4 - E4	1.95	1.8	EconoDUAL™ 3
FF450R17ME4_B11	active and preferred	AG-ECONOD-3	Dual	450.0	IGBT4 - E4	1.95	1.8	EconoDUAL™ 3
FF300R17ME4	active	AG-ECONOD-3	Dual	300.0	IGBT4 - E4	1.95	1.8	EconoDUAL™ 3
FF300R17ME4_B11	active and preferred	AG-ECONOD-3	Dual	300.0	IGBT4 - E4	1.95	1.8	EconoDUAL™ 3
FF300R17KE4	active and preferred	AG-62MM-1	Dual	300.0	IGBT4 - E4	1.95	1.8	62 mm
FF225R17ME4	active	AG-ECONOD-3	Dual	225.0	IGBT4 - E4	1.95	1.8	EconoDUAL™ 3
FF225R17ME4_B11	active and preferred	AG-ECONOD-3	Dual	225.0	IGBT4 - E4	1.95	1.8	EconoDUAL™ 3
FF200R17KE4	active and preferred	AG-62MM-1	Dual	200.0	IGBT4 - E4	1.95	1.8	62 mm
FF150R17KE4	active and preferred	AG-62MM-1	Dual	150.0	IGBT4 - E4	1.95	1.65	62 mm
IGBT4 - E4, Single switch								
FZ3600R17HE4	active and preferred	AG-IHMB190-2	Single switch	3600.0	IGBT4 - E4	1.95	1.8	IHM B 190 mm
FZ2400R17HE4_B9	active and preferred	AG-IHMB190-2	Single switch	2400.0	IGBT4 - E4	1.95	1.8	IHM B 190 mm
FZ1800R17HE4_B9	active and preferred	AG-IHMB190-2	Single switch	1800.0	IGBT4 - E4	1.95	1.8	IHM B 190 mm
FZ1200R17HE4	active and preferred	A-IHMB130-2	Single switch	1200.0	IGBT4 - E4	1.95	1.8	IHM B 130 mm
FZ600R17KE4	active and preferred	AG-62MM-2	Single switch	600.0	IGBT4 - E4	1.95	1.8	62 mm
FZ400R17KE4	active and preferred	AG-62MM-2	Single switch	400.0	IGBT4 - E4	1.95	1.8	62 mm

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Product	Product status	Packages	Configuration	$I_{C(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	Housing
IGBT4 - E4, Sixpack								
FS500R170E4D	active and preferred	AG-ECONOPP-2	Sixpack	500.0	IGBT4 - E4	1.95	1.7	EconoPACK™ + D
FS450R170E4	active and preferred	AG-ECONOPP-2	Sixpack	450.0	IGBT4 - E4	1.95	1.8	EconoPACK™ + D
FS300R170E4	active and preferred	AG-ECONOPP-2	Sixpack	300.0	IGBT4 - E4	1.95	1.8	EconoPACK™ + D
FS225R170E4	active and preferred	AG-ECONOPP-2	Sixpack	225.0	IGBT4 - E4	1.95	1.8	EconoPACK™ + D
FS150R17PE4	active and preferred	AG-ECONO4-1	Sixpack	150.0	IGBT4 - E4	1.95	1.8	EconoPACK™ 4
FS150R17N3E4	active and preferred	AG-ECONO3-4	Sixpack	150.0	IGBT4 - E4	1.95	1.8	EconoPACK™ 3
FS150R17N3E4_B11	active and preferred	AG-ECONO3-4	Sixpack	150.0	IGBT4 - E4	1.95	1.8	EconoPACK™ 3
FS100R17PE4	active and preferred	AG-ECONO4-1	Sixpack	100.0	IGBT4 - E4	1.95	1.8	EconoPACK™ 4
FS100R17N3E4	active and preferred	AG-ECONO3-4	Sixpack	100.0	IGBT4 - E4	1.95	1.8	EconoPACK™ 3
FS100R17N3E4_B11	active and preferred	AG-ECONO3-4	Sixpack	100.0	IGBT4 - E4	1.95	1.8	EconoPACK™ 3
IGBT4 - P4, Chopper								
FD1600/1200R17HP4-K_B2	active and preferred	AG-IHMB190-1	Chopper	1600.0	IGBT4 - P4	1.9	1.65	IHM B 190 mm
FD1600/1200R17HP4_B2	active and preferred	AG-IHMB190-1	Chopper	1600.0	IGBT4 - P4	1.9	1.65	IHM B 190 mm
FD1200R17HP4-K_B2	active and preferred	AG-IHMB130-1	Chopper	1200.0	IGBT4 - P4	1.9	1.65	IHM B 130 mm
FD800R17HP4-K_B2	active and preferred	AG-IHMB130-1	Chopper	800.0	IGBT4 - P4	1.9	1.65	IHM B 130 mm
IGBT4 - P4, Dual								
FF1400R17IP4	active and preferred	AG-PRIME3-1	Dual	1400.0	IGBT4 - P4	1.75	1.75	PrimePACK™ 3
FF1200R17KP4_B2	active and preferred	A-IHM130-1	Dual	1200.0	IGBT4 - P4	1.9	1.65	IHM 130 mm
FF800R17KP4_B2	active and preferred	A-IHM130-1	Dual	800.0	IGBT4 - P4	1.9	1.55	IHM 130 mm
IGBT4 - P4, Single switch								
FZ3600R17HP4	active and preferred	AG-IHMB190-2	Single switch	3600.0	IGBT4 - P4	1.9	1.8	IHM B 190 mm
FZ3600R17HP4_B2	active and preferred	AG-IHMB190-1	Single switch	3600.0	IGBT4 - P4	1.9	1.65	IHM B 190 mm
FZ2400R17HP4_B9	active and preferred	AG-IHMB190-2	Single switch	2400.0	IGBT4 - P4	1.9	1.8	IHM B 190 mm
FZ2400R17HP4_B28	active and preferred	AG-IHMB190-1	Single switch	2400.0	IGBT4 - P4	1.9	1.8	IHM B 190 mm
FZ2400R17HP4_B29	active and preferred	AG-IHMB190-1	Single switch	2400.0	IGBT4 - P4	1.9	1.65	IHM B 190 mm
FZ2400R17HP4	active and preferred	A-IHMB130-2	Single switch	2400.0	IGBT4 - P4	1.9	1.8	IHM B 130 mm
FZ2400R17HP4_B2	active and preferred	AG-IHMB130-1	single switch	2400.0	IGBT4 - P4	1.9	1.65	IHM B 130 mm
FZ1800R17HP4_B9	active and preferred	AG-IHMB190-2	Single switch	1800.0	IGBT4 - P4	1.9	1.8	IHM B 190 mm
FZ1800R17HP4_B29	active and preferred	AG-IHMB190-1	Single switch	1800.0	IGBT4 - P4	1.9	1.65	IHM B 190 mm
FZ1600R17HP4	active and preferred	A-IHMB130-2	Single switch	1600.0	IGBT4 - P4	1.9	1.8	IHM B 130 mm
FZ1600R17HP4_B2	active and preferred	AG-IHMB130-1	Single switch	1600.0	IGBT4 - P4	1.9	1.65	IHM B 130 mm
FZ1600R17HP4_B21	active and preferred	AG-IHMB130-1	Single switch	1600.0	IGBT4 - P4	1.9	1.8	IHM B 130 mm
FZ1200R17HP4	active and preferred	A-IHMB130-2	Single switch	1200.0	IGBT4 - P4	1.9	1.8	IHM B 130 mm
FZ1200R17HP4_B2	active and preferred	AG-IHMB130-1	Single switch	1200.0	IGBT4 - P4	1.9	1.65	IHM B 130 mm

Further information about additional modules especially those with pre-applied TIM, PrimePACK™ with IGBT5 and .XT as well as our new XHP™ platform can be found on our website: [www.infineon.com/igbtmodules](http://www.infineon.com/igbtmodules)

# IGBT modules up to 1600V / 1700V

Product	Product status	Packages	Configuration	$I_{C(nom)}/I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	Housing
<b>IGBT3 - E3, Chopper</b>								
FD1200R17KE3-K	active	A-IHM130-2	Chopper	1200.0	IGBT3 - E3	2.0	1.8	IHM 130 mm
FD1200R17KE3-K_B2	active	A-IHM130-1	Chopper	1200.0	IGBT3 - E3	2.0	1.8	IHM 130 mm
FD800R17KE3_B2	active	A-IHM130-1	Chopper	800.0	IGBT3 - E3	2.0	1.55	IHM 130 mm
<b>IGBT3 - E3, Chopper</b>								
FD600R17KE3_B2	active	A-IHM130-1	Chopper	600.0	IGBT3 - E3	2.0	1.6	IHM 130 mm
FD600R17KE3-K_B5	active and preferred	A-IHV130-6	Chopper	600.0	IGBT3 - E3	2.0	1.6	IHM 130 mm
<b>IGBT3 - E3, Dual</b>								
FF1200R17KE3	active	A-IHM130-2	Dual	1200.0	IGBT3 - E3	2.0	1.8	IHM 130 mm
FF1200R17KE3_B2	active	A-IHM130-1	Dual	1200.0	IGBT3 - E3	2.0	1.8	IHM 130 mm
FF800R17KE3	active	A-IHM130-2	Dual	800.0	IGBT3 - E3	2.0	1.8	IHM 130 mm
FF800R17KE3_B2	active	A-IHM130-1	Dual	800.0	IGBT3 - E3	2.0	1.55	IHM 130 mm
FF600R17KE3	active	A-IHM130-2	Dual	600.0	IGBT3 - E3	2.0	1.8	IHM 130 mm
FF600R17KE3_B2	active	A-IHM130-1	Dual	600.0	IGBT3 - E3	2.0	1.6	IHM 130 mm
FF300R17KE3	active	AG-62MM-1	Dual	300.0	IGBT3 - E3	2.0	1.8	62 mm
FF200R17KE3	active	AG-62MM-1	Dual	200.0	IGBT3 - E3	2.0	1.8	62 mm
<b>IGBT3 - E3, Single switch</b>								
FZ3600R17KE3_B2	active	A-IHM190-1	Single switch	3600.0	IGBT3 - E3	2.0	1.8	IHM 190 mm
FZ2400R17KE3	active	A-IHM130-2	Single switch	2400.0	IGBT3 - E3	2.0	1.8	IHM 130 mm
FZ1800R17KE3_B2	active	A-IHM190-1	Single switch	1800.0	IGBT3 - E3	2.0	1.6	IHM 190 mm
FZ1600R17KE3	active	A-IHM130-2	Single switch	1600.0	IGBT3 - E3	2.0	1.8	IHM 130 mm
FZ1600R17KE3_B2	active	A-IHM130-1	Single switch	1600.0	IGBT3 - E3	2.0	1.55	IHM 130 mm
FZ1200R17KE3_B2	active	A-IHM130-1	Single switch	1200.0	IGBT3 - E3	2.0	1.6	IHM 130 mm
FZ600R17KE3	active	AG-62MM-2	Single switch	600.0	IGBT3 - E3	2.0	1.8	62 mm
FZ600R17KE3_S4	active	AG-62MM-2	Single switch	600.0	IGBT3 - E3	2.0	1.8	62 mm
FZ400R17KE3	active	AG-62MM-2	Single switch	400.0	IGBT3 - E3	2.0	1.8	62 mm
<b>IGBT3 - E3, Sixpack</b>								
FS100R17KE3	active and preferred	AG-ECONO3-4	Sixpack	100.0	IGBT3 - E3	2.0	1.8	EconoPACK™ 3
FS75R17KE3	active and preferred	AG-ECONO3-4	Sixpack	75.0	IGBT3 - E3	2.0	1.8	EconoPACK™ 3
FS50R17KE3_B17	active and preferred	AG-ECONO2-6	Sixpack	50.0	IGBT3 - E3	2.0	1.8	EconoPACK™ 2
<b>Diode</b>								
DD1200S17H4_B2	active and preferred	AG-IHMB130-1	Diodes	1200.0	Diode	-	1.8	IHM B 130 mm
DD800S17H4_B2	active and preferred	AG-IHMB130-1	Diodes	800.0	Diode	-	1.8	IHM B 130 mm
DZ800S17K3	active	AG-62MM-2	Diodes	800.0	Diode	-	1.8	62 mm

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Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## IGBT modules up to 3300 V

Product	Product status	Packages	Configuration	$I_{C(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	Housing
<b>PIM Three Phase Input Rectifier</b>								
FD1000R33HL3-K	active and preferred	AG-IHVB190-3	Chopper	1000.0	IGBT3 - L3	2.4	2.25	IHV B 190 mm
<b>IGBT3 - L3, Single switch</b>								
FZ1000R33HL3	active and preferred	AG-IHVB130-3	Single switch	1000.0	IGBT3 - L3	2.4	2.25	IHV B 130 mm
<b>IGBT3 - E3, Chopper</b>								
FD1000R33HE3-K	active and preferred	AG-IHVB190-3	Chopper	1000.0	IGBT3 - E3	2.55	3.1	IHV B 190 mm
<b>IGBT3 - E3, Single switch</b>								
FZ1500R33HE3	active and preferred	AG-IHVB190-3	Single switch	1500.0	IGBT3 - E3	2.55	3.1	IHV B 190 mm
FZ1200R33HE3	active and preferred	AG-IHVB190-3	Single switch	1200.0	IGBT3 - E3	2.7	3.25	IHV B 190 mm
FZ1000R33HE3	active and preferred	AG-IHVB130-3	Single switch	1000.0	IGBT3 - E3	2.55	3.1	IHV B 130 mm
<b>IGBT2 - Low Loss, Single switch</b>								
FZ400R33KL2C_B5	active	A-IHV73-6	Single switch	400.0	IGBT2 Low Loss	3.0	2.6	IHV 73 mm
<b>IGBT2 - Standard, Chopper</b>								
FD800R33KF2C	active	A-IHV190-3	Chopper	800.0	IGBT2	3.4	2.8	IHV 190 mm
FD800R33KF2C-K	active	A-IHV190-3	Chopper	800.0	IGBT2	3.4	2.8	IHV 190 mm
FD400R33KF2C	active	A-IHV130-3	Chopper	400.0	IGBT2	3.4	2.8	IHV 130 mm
FD400R33KF2C-K	active	A-IHV130-3	Chopper	400.0	IGBT2	3.4	2.8	IHV 130 mm
<b>IGBT2 - Standard, Dual</b>								
FF400R33KF2C	active	A-IHV130-3	Dual	400.0	IGBT2	3.4	2.8	IHV 130 mm
FF200R33KF2C	active	A-IHV73-3	Dual	200.0	IGBT2	3.4	2.8	IHV 73 mm
<b>IGBT2 - Standard, Single switch</b>								
FZ1200R33KF2C	active	A-IHV190-3	Single switch	1200.0	IGBT2	3.4	2.8	IHV 190 mm
FZ800R33KF2C	active and preferred	A-IHV130-3	Single switch	800.0	IGBT2	3.4	2.8	IHV 130 mm
<b>Diode</b>								
DD1200S33KL2C_B5	active	A-IHV130-6	Diodes	1200.0	Diode	-	2.6	IHV 130 mm
DD1200S33K2C	active	A-IHV130-3	Diodes	1200.0	Diode	-	2.8	IHV 130 mm
DD1000S33HE3	active and preferred	AG-IHVB130-3	Diodes	1000.0	Diode	-	3.1	IHV B 130 mm
DD800S33K2C	active	A-IHV130-3	Diodes	800.0	Diode	-	2.8	IHV 130 mm
DD500S33HE3	active and preferred	AG-IHVB130-3	Diodes	500.0	Diode	-	3.1	IHV B 130 mm
DD400S33KL2C	active	A-IHV73-3	Diodes	400.0	Diode	-	2.6	IHV 73 mm
DD400S33K2C	active	A-IHV130-3	Diodes	400.0	Diode	-	2.8	IHV 130 mm
DD200S33K2C	active	A-IHV73-3	Diodes	200.0	Diode	-	2.8	IHV 73 mm

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# IGBT modules up to 4500 V / 6500 V

Product	Product status	Packages	Configuration	$I_{C(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C typ}$ ) [V]	Housing
4.5kV, IGBT3 - L3, Chopper								
FD800R45KL3-K_B5	active and preferred	A-IHV190-4	Chopper	800.0	IGBT3 - L3	2.5	2.5	IHV 190 mm
4.5kV, IGBT3 - L3, Single switch								
FZ1200R45HL3	active and preferred	AG-IHVB190-4	Single switch	1200.0	IGBT3 - L3	2.35	2.5	IHM B 190 mm
FZ1200R45KL3_B5	active and preferred	A-IHV190-4	Single switch	1200.0	IGBT3 - L3	2.5	2.5	IHV 190 mm
FZ800R45KL3_B5	active and preferred	A-IHV130-4	Single switch	800.0	IGBT3 - L3	2.5	2.5	IHV 130 mm
4.5kV, Diode								
DD1200S45KL3_B5	active and preferred	A-IHV130-4	Diodes	1200.0	Diode	-	2.5	IHV 130 mm
DD400S45KL3_B5	active and preferred	A-IHV130-4	Diodes	400.0	Diode	-	2.5	IHV 130 mm
6.5kV, IGBT3 - E3, Chopper								
FD500R65KE3-K	active and preferred	A-IHV190-6	Chopper	500.0	IGBT3 - E3	3.0	3.0	IHV 190 mm
FD250R65KE3-K	active and preferred	A-IHV130-6	Chopper	250.0	IGBT3 - E3	3.0	3.0	IHV 130 mm
6.5kV, IGBT3 - E3, Single switch								
FZ750R65KE3	active and preferred	A-IHV190-6	Single switch	750.0	IGBT3 - E3	3.0	3.0	IHV 190 mm
FZ600R65KE3	active and preferred	A-IHV190-6	Single switch	600.0	IGBT3 - E3	3.0	3.0	IHV 190 mm
FZ500R65KE3	active and preferred	A-IHV130-6	Single switch	500.0	IGBT3 - E3	3.0	3.0	IHV 130 mm
FZ400R65KE3	active and preferred	A-IHV130-6	Single switch	400.0	IGBT3 - E3	3.0	3.0	IHV 130 mm
FZ250R65KE3	active and preferred	A-IHV73-6	Single switch	250.0	IGBT3 - E3	3.0	3.0	IHV 73 mm
6.5kV, Diode								
DD750S65K3	active and preferred	A-IHV130-6	Diodes	750.0	Diode	-	3.0	IHV 130 mm
DD600S65K3	active and preferred	A-IHV130-6	Diodes	600.0	Diode	-	3.0	IHV 130 mm
DD500S65K3	active and preferred	A-IHV130-6	Diodes	500.0	Diode	-	3.0	IHV 130 mm
DD250S65K3	active and preferred	A-IHV130-6	Diodes	250.0	Diode	-	3.0	IHV 130 mm

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Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays



## IPMs

# Intelligent Power Modules

Intelligent Modules designed by Infineon represent a functional product family that is dedicated to useful integration of electronics into power modules. Depending on the level of power to be handled, Infineon offers a wide variety of semiconductors in different

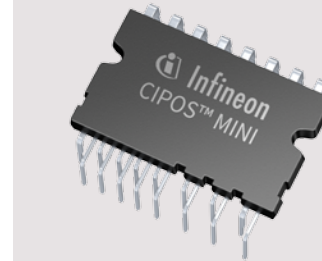
packages and different voltage- and current classes. These Semiconductor products are separated in IRAM,  $\mu$ IPM, CIPOS™ and MIPAQ™ module families.

## Highlights



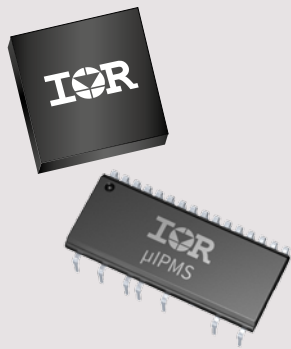
### MIPAQ™ Pro

MIPAQ™ Pro intelligent power module (IPM) is a fully qualified and tested IPM integrating IGBTs, gate drivers, a heat sink, sensors, digital control electronics as well as digital bus communication. It comes in a half-bridge configuration with blocking voltages of 1200V and 1700V.  
[www.infineon.com/mipaq-pro](http://www.infineon.com/mipaq-pro)



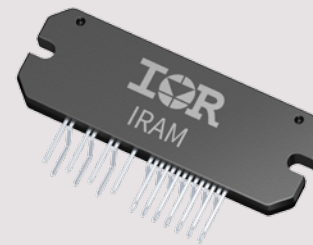
### CIPOS™ IPMs

The energy-efficient CIPOS™ intelligent power module family with its latest Updates integrates various power and control components. Its design increases reliability, and can optimize PCB sizes and system costs. This simplifies the power design and reduces significantly the time to market.  
[www.infineon.com/cipos](http://www.infineon.com/cipos)



### IPMs™

Ultra compact, surface mount intelligent power modules designed for low power motor drive applications. The modules offer a combination of Infineon's FREDFET MOSFET or Trench IGBT technology and the industry benchmark high voltage, rugged driver in an ultra-compact packages. Available as 3 Phase Bridge or Half-bridge variation.  
[www.infineon.com/uIPM](http://www.infineon.com/uIPM)



### IRAM – High Voltage 3 Phase Driver with IGBTs

The IRAM family of System-in-Package (SIP) shrinks and simplifies the design of appliance motor drive applications from 400 W up to 10kW. IRAM products integrate the inverter drive and protection circuitry in a single package utilizing IR advanced IGBT, ultra soft recovery diodes and rugged gate driver HVIC.  
[www.infineon.com/iram](http://www.infineon.com/iram)

# Intelligent high power modules

Product	Product status	Configuration	$I_{C(nom)} / I_{F(nom)}$ [A]	Technology	$V_{CE(sat)}$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	$V_F$ ( $T_{vj}=25^{\circ}\text{C}$ typ) [V]	Housing
IGBT4 - T4, sixpack serve							
IFS200V12PT4	active	Sixpack	200.0	IGBT4 - T4	1.75	1.7	EconoPACK™ 4
IFS150V12PT4	not for new design	Sixpack	150.0	IGBT4 - T4	1.75	1.7	EconoPACK™ 4
IFS100V12PT4	active	Sixpack	100.0	IGBT4 - T4	1.75	1.7	EconoPACK™ 4
IGBT4 - E4, sixpack base							
IFS150B12N3E4_B31	active and preferred	Sixpack	150.0	IGBT4 - E4	1.75	1.7	EconoPACK™ 3
IFS100B12N3E4_B31	active and preferred	Sixpack	100.0	IGBT4 - E4	1.75	1.7	EconoPACK™ 3
IFS75B12N3E4_B31	active and preferred	Sixpack	75.0	IGBT4 - E4	1.85	1.7	EconoPACK™ 3
IFS75B12N3E4_B32	active and preferred	Sixpack	75.0	IGBT4 - E4	1.85	1.7	EconoPACK™ 3

Bare dies

Discrete

IGBT  
modules

IPMs

Stacks &  
boardsDriver &  
controller

SiC

Presspacks

SCR/diode  
modulesSolid state  
relays

# Intelligent power modules

Product	Package	Voltage class [V]	Pmot [W] @10kHz	$R_{DS(ON)}$ (max) [ $\Omega$ ] @25°C	Configuration	Built-in NTC	Family
IRSM005-800MH	PQFN 7x8	40	165	0.005	Motor half-bridge	no	$\mu$ IPM™
IRSM005-301MH	PQFN 7x8	100	165	0.02	Motor half-bridge	no	$\mu$ IPM™
IRSM808-204MH	PQFN 8x9	250	205	0.15	Motor half-bridge	no	$\mu$ IPM™
IRSM807-045MH	PQFN 8x9	500	130	1.7	Motor half-bridge	no	$\mu$ IPM™
IRSM807-105MH	PQFN 8x9	500	205	0.8	Motor half-bridge	no	$\mu$ IPM™
IRSM808-105MH	PQFN 8x9	500	205	0.8	Motor half-bridge	no	$\mu$ IPM™

Product	Package	Voltage class [V]	Pmot [W] @10kHz	Rated current [A] @rms	Configuration	Built-in NTC	Family
3 phase common emitter							
IGCM04G60GA	Mini	600	600	4	Motor 3 Phase Common Emitter	yes	CIPOS™
IGCM04G60HA	Mini	600	600	4	Motor 3 Phase Common Emitter	no	CIPOS™
IGCM06G60GA	Mini	600	800	6	Motor 3 Phase Common Emitter	yes	CIPOS™
IGCM06G60HA	Mini	600	800	6	Motor 3 Phase Common Emitter	no	CIPOS™

Product	Package	Voltage class [V]	Pmot [W] @10kHz	Rated current [A] @rms	Configuration	Built-in NTC	Family
IGCM04B60GA	Mini	600	600	4	Motor 3 Phase common emitter with input rectifier	yes	CIPOS™
IGCM04B60HA	Mini	600	600	4	Motor 3 Phase common emitter with input rectifier	no	CIPOS™
IGCM06B60GA	Mini	600	600	6	Motor 3 Phase common emitter with input rectifier	yes	CIPOS™
IGCM06B60HA	Mini	600	600	6	Motor 3 Phase common emitter with input rectifier	no	CIPOS™
IKCM10B60GA	Mini	600	800	10	Motor 3 Phase common emitter with input rectifier	yes	CIPOS™
IKCM10B60HA	Mini	600	800	10	Motor 3 Phase common emitter with input rectifier	no	CIPOS™

Product	Package	Voltage class [V]	Pmot [W] @10kHz	$R_{DS(ON)}$ (max) [ $\Omega$ ] @25°C	Configuration	Built-in NTC	Family
IRSM836-035MB	PQFN 12x12	500	70	2.2	Motor 3 Phase Common Source	no	$\mu$ IPM™

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

# Intelligent power modules

Product	Package	Voltage class [V]	P <sub>mot</sub> [W] @10kHz	Rated current [A] @rms	Configuration	Built-in NTC	Family
IRSM506-076DA	DIP23	600	105	4	Motor 3 phase open emitter	yes	μIPM™
IRSM506-076PA	SOP23	600	105	4	Motor 3 phase open emitter	yes	μIPM™
IRSM516-076DA	DIP23	600	105	4	Motor 3 phase open emitter	no	μIPM™
IRSM516-076PA	SOP23	600	105	4	Motor 3 phase open emitter	no	μIPM™
IGCM04F60GA	Mini	600	600	4	Motor 3 phase open emitter	yes	CIPOS™
IGCM04F60HA	Mini	600	600	4	Motor 3 phase open emitter	no	CIPOS™
IRAM538-0865A	L- Frame	600	800	8	Motor 3 phase open emitter	yes	IRAM
IGCM06F60GA	Mini	600	800	6	Motor 3 phase open emitter	yes	CIPOS™
IGCM06F60HA	Mini	600	800	6	Motor 3 phase open emitter	no	CIPOS™
IRAM538-1065A	L- Frame	600	1000	10	Motor 3 phase open emitter	yes	IRAM
IGCM10F60GA	Mini	600	1000	10	Motor 3 phase open emitter	yes	CIPOS™
IGCM10F60HA	Mini	600	1000	10	Motor 3 phase open emitter	no	CIPOS™
IKCM10H60GA	Mini	600	1000	10	Motor 3 phase open emitter	yes	CIPOS™
IKCM10H60HA	Mini	600	1000	10	Motor 3 phase open emitter	no	CIPOS™
IRAM256-1067A	SIP1A Gen2	600	1200	10	Motor 3 phase open emitter	yes	IRAM
IGCM15F60GA	Mini	600	1200	15	Motor 3 phase open emitter	yes	CIPOS™
IGCM15F60HA	Mini	600	1200	15	Motor 3 phase open emitter	no	CIPOS™
IKCM10L60GA	Mini	600	1200	10	Motor 3 phase open emitter	yes	CIPOS™
IKCM10L60HA	Mini	600	1200	10	Motor 3 phase open emitter	no	CIPOS™
IKCM15H60GA	Mini	600	1200	15	Motor 3 phase open emitter	yes	CIPOS™
IKCM15H60HA	Mini	600	1200	15	Motor 3 phase open emitter	no	CIPOS™
IRAM538-1565A	L- Frame	600	1400	15	Motor 3 phase open emitter	yes	IRAM
IRAM256-1567A	SIP1A Gen2	600	1400	15	Motor 3 phase open emitter	yes	IRAM
IGCM20F60GA	Mini	600	1600	20	Motor 3 phase open emitter	yes	CIPOS™
IGCM20F60HA	Mini	600	1600	20	Motor 3 phase open emitter	no	CIPOS™
IKCM15F60GA	Mini	600	1600	15	Motor 3 phase open emitter	yes	CIPOS™
IKCM15F60HA	Mini	600	1600	15	Motor 3 phase open emitter	no	CIPOS™
IKCM15L60GA	Mini	600	1600	15	Motor 3 phase open emitter	yes	CIPOS™
IKCM15L60HA	Mini	600	1600	15	Motor 3 phase open emitter	no	CIPOS™
IRAM256-2067A	SIP1A Gen2	600	1800	20	Motor 3 phase open emitter	yes	IRAM
IKCM20L60GA	Mini	600	1800	20	Motor 3 phase open emitter	yes	CIPOS™
IKCM20L60HA	Mini	600	1800	20	Motor 3 phase open emitter	no	CIPOS™
IKCM30F60GA	Mini	600	2000	30	Motor 3 phase open emitter	yes	CIPOS™
IKCM30F60HA	Mini	600	2000	30	Motor 3 phase open emitter	no	CIPOS™
IKCM15L60GD	Mini-DCB	600	2200	15	Motor 3 phase open emitter	yes	CIPOS™
IKCM15L60HD	Mini-DCB	600	2200	15	Motor 3 phase open emitter	no	CIPOS™

# Intelligent power modules

Product	Package	Voltage class [V]	P <sub>mot</sub> [W] @10kHz	Rated current [A] @rms	Configuration	Built-in NTC	Family
IKCM20L60GD	Mini-DCB	600	2400	20	Motor 3 phase open emitter	yes	CIPOS™
IKCM20L60HD	Mini-DCB	600	2400	20	Motor 3 phase open emitter	no	CIPOS™
IKCM30F60GD	Mini-DCB	600	2600	30	Motor 3 phase open emitter	yes	CIPOS™
IKCM30F60HD	Mini-DCB	600	2600	30	Motor 3 phase open emitter	no	CIPOS™

Bare dies

Discrete

IGBT  
modules

IPMs

Stacks &  
boardsDriver &  
controller

SiC

Presspacks

SCR / diode  
modulesSolid state  
relays

# Intelligent power modules

Product	Package	Voltage class [V]	Pmot [W] @10kHz	R <sub>DS(ON)</sub> (max) [Ω] @25°C	Configuration	Built-in NTC	Family
IRSM505-024DA	DIP23	250	40	2.2	3 Phase Open Source	yes	μIPM™
IRSM505-024PA	SOP23	250	40	2.2	3 Phase Open Source	yes	μIPM™
IRSM515-024DA	DIP23	250	40	2.2	3 Phase Open Source	no	μIPM™
IRSM515-024PA	SOP23	250	40	2.2	3 Phase Open Source	no	μIPM™
IRSM836-024MA	PQFN 12x12	250	40	2.2	3 Phase Open Source	no	μIPM™
IRSM836-044MA	PQFN 12x12	250	60	1.05	3 Phase Open Source	no	μIPM™
IRSM505-044DA	DIP23	250	65	1.05	3 Phase Open Source	yes	μIPM™
IRSM505-044PA	SOP23	250	65	1.05	3 Phase Open Source	yes	μIPM™
IRSM515-044DA	DIP23	250	65	1.05	3 Phase Open Source	no	μIPM™
IRSM515-044PA	SOP23	250	65	1.05	3 Phase Open Source	no	μIPM™
IRSM836-084MA	PQFN 12x12	250	85	0.45	Motor 3 Phase Open Source	no	μIPM™
IRSM505-084DA	DIP23	250	95	0.45	3 Phase Open Source	yes	μIPM™
IRSM505-084PA	SOP23	250	95	0.45	3 Phase Open Source	yes	μIPM™
IRSM515-084DA	DIP23	250	95	0.45	3 Phase Open Source	no	μIPM™
IRSM515-084PA	SOP23	250	95	0.45	3 Phase Open Source	no	μIPM™
IRSM505-015DA	DIP23	500	50	6	3 Phase Open Source	yes	μIPM™
IRSM505-015PA	SOP23	500	50	6	3 Phase Open Source	yes	μIPM™
IRSM515-015DA	DIP23	500	50	6	3 Phase Open Source	no	μIPM™
IRSM515-015PA	SOP23	500	50	6	3 Phase Open Source	no	μIPM™
IRSM836-015MA	PQFN 12x12	500	50	6	3 Phase Open Source	no	μIPM™
IRSM836-025MA	PQFN 12x12	500	55	4	3 Phase Open Source	no	μIPM™
IRSM505-025DA	DIP23	500	60	4	3 Phase Open Source	yes	μIPM™
IRSM505-025PA	SOP23	500	60	4	3 Phase Open Source	yes	μIPM™
IRSM515-025DA	DIP23	500	60	4	3 Phase Open Source	no	μIPM™
IRSM515-025PA	SOP23	500	60	4	3 Phase Open Source	no	μIPM™
IRSM836-035MA	PQFN 12x12	500	70	2.2	Motor 3 Phase Common Source	no	μIPM™
IRSM505-035DA	DIP23	500	75	2.2	3 Phase Open Source	yes	μIPM™
IRSM505-035PA	SOP23	500	75	2.2	3 Phase Open Source	yes	μIPM™
IRSM515-035DA	DIP23	500	75	2.2	3 Phase Open Source	no	μIPM™
IRSM515-035PA	SOP23	500	75	2.2	3 Phase Open Source	no	μIPM™
IRSM836-045MA	PQFN 12x12	500	80	1.7	Motor 3 Phase Open Source	no	μIPM™
IRSM505-055DA	DIP23	500	85	1.7	3 Phase Open Source	yes	μIPM™
IRSM505-055PA	SOP23	500	85	1.7	3 Phase Open Source	yes	μIPM™
IRSM505-065DA	DIP23	500	85	1.3	3 Phase Open Source	yes	μIPM™
IRSM505-065PA	SOP23	500	85	1.3	3 Phase Open Source	yes	μIPM™
IRSM515-055DA	DIP23	500	85	1.7	3 Phase Open Source	no	μIPM™



# Intelligent power modules

Product	Package	Voltage class [V]	Pmot [W] @10kHz	$R_{DS(ON)}$ (max) [ $\Omega$ ] @25°C	Configuration	Built-in NTC	Family
IRSM515-055PA	SOP23	500	85	1.7	3 Phase Open Source	no	$\mu$ IPM™
IRSM515-065DA	DIP23	500	85	1.3	3 Phase Open Source	no	$\mu$ IPM™
IRSM515-065PA	SOP23	500	85	1.3	3 Phase Open Source	no	$\mu$ IPM™

Product	Package	Voltage class [V]	Pmot [W] @10kHz	Rated current [A] @DC	Configuration	Built-in NTC	Family
IRAM722-1568F	SIP2A Gen2	600	1400	15	3 Phase open emitter with PFC	yes	IRAM

Product	Package	Voltageclass [V]	Rated current [A] @rms	Configuration	Built-in NTC	Family
IKCM15R60GD	Mini-DCB	600	15	2 phase asymmetric Inverter for SRM	yes	CIPOS™
IKCM20R60GD	Mini-DCB	600	20	2 phase asymmetric Inverter for SRM	yes	CIPOS™

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays



## Stacks &amp; boards

# IGBT Stacks and evaluation boards

Our reliable and highest quality stacks and assemblies offer optimized thermal management. These advanced systems provide design support and help to optimize system costs.

Set up laboratory experiments or a first prototype with Evaluation boards and Kits designed in several configurations to drive IGBT modules, discrete IGBTs and MOSFETs. Please find optimized solutions with tailor-made transformers or high voltage gate driver ICs with either integrated coreless transformer or even SOI level shift technology.

## Highlights



### MIPAQ™ Pro

MIPAQ™ Pro intelligent power module (IPM) is a fully qualified and tested IPM integrating IGBTs, gate drivers, a heat sink, sensors, digital control electronics as well as digital bus communication. It comes in a half-bridge configuration with blocking voltages of 1200 V and 1700 V.

[www.infineon.com/mipaq-pro](http://www.infineon.com/mipaq-pro)



### EiceDRIVER™ – Gate Driver ICs and boards

Highly reliable solutions for driving MOSFETs, IGBTs and IGBT modules which enable our customers to build reliable and efficient applications.

[www.infineon.com/eicedriver](http://www.infineon.com/eicedriver)

## IGBT Stacks &amp; IGBT assemblies

Product	Product status	Rated AC current ( $A_{RMS}$ )	Rated AC voltage ( $V_{RMS}$ )	Rated $f_{sw}$ (kHz)	Configuration	Cooling	Housing	Features	Implemented IGBT Modules
IGBT4 1700V - ModSTACK™ C									
2LS20017E42W36702	active and preferred	1520.0	690.0	2.0	2-pack	Liquid cooled	ModSTACK™ C	-	FF1000R17IE4
IGBT4 1700V - ModSTACK™ HD									
6MS10017E41W36460	active and preferred	60.00.0	690.0	3.0	6-pack	Liquid cooled	ModSTACK™ HD 1	incl. Capacitors	FF1000R17IE4
6MS20017E43W37032	active and preferred	120.00.0	690.0	3.0	6-pack	Liquid cooled	ModSTACK™ HD 3	incl. Capacitors	FF1000R17IE4
6MS20017E43W38170	active and preferred	120.00.0	690.0	3.0	6-pack	Liquid cooled	ModSTACK™ HD 3	incl. Capacitors	FF1000R17IE4
6MS30017E43W38169	active and preferred	180.00.0	690.0	3.0	6-pack	Liquid cooled	ModSTACK™ HD 3	incl. Capacitors	FF1000R17IE4
6MS30017E43W40372	active and preferred	180.00.0	690.0	3.0	6-pack	Liquid cooled	ModSTACK™ HD 3	incl. Capacitors	FF1000R17IE4
6MS30017E43W34404	active and preferred	20.050.0	690.0	3.0	6-pack	Liquid cooled	ModSTACK™ HD 3	incl. Capacitors	FF1000R17IE4
IGBT4 1700V - PrimeSTACK™									
2PS12017E44G35911	active and preferred	460.0	690.0	3.0	2-pack	Air cooled	PrimeSTACK™ C4	incl. Capacitors	FF300R17KE4
IGBT4 1200V - PrimeSTACK™									
6PS04512E43G37986	active and preferred	265	40.00.0	5.0	6-pack	Air cooled	PrimeSTACK™ C3	incl. Capacitors	FF450R12KE4
6PS04512E43W39693	active and preferred	30.00.0	50.00.0	2.5	6-pack	Liquid cooled	PrimeSTACK™ C3	-	FF450R12KE4
6PS04012E4DG36022	active	30.06	40.00.0	5.0	6-pack	Air cooled	PrimeSTACK™ CD	incl. Capacitors	FF200R12KE4
2PS18012E44G38553	active and preferred	770.0	40.00.0	3.0	2-pack	Air cooled	PrimeSTACK™ C4	incl. Capacitors	FF450R12KE4
6PS18012E4FG35689	active and preferred	729	40.00.0	5.0	6-pack	Air cooled	PrimeSTACK™ CF / 3 x C4	incl. Capacitors	FF450R12KE4
2PS18012E44G40113	active and preferred	770.0	40.00.0	3.0	2-pack	Air cooled	PrimeSTACK™ C4	-	FF450R12KE4
6PS18012E4FG38393	active and preferred	80.00.0	40.00.0	3.0	6-pack	Air cooled	PrimeSTACK™ CF / 3 x C4	incl. Capacitors	FF450R12KE4
2PS13512E43W39689	active and preferred	90.00.0	40.00.0	5.0	2-pack	Liquid cooled	PrimeSTACK™ C3	-	FF450R12KE4
2PS13512E43W35222	active and preferred	90.00.0	40.00.0	5.0	2-pack	Liquid cooled	PrimeSTACK™ C3	-	FF450R12KE4
IGBT3 1700V - ModSTACK™ 3									
6MS24017E33W32859	active and preferred	80.00.0	40.00.0	2.5	6-pack	Air cooled	ModSTACK™ 3	incl. Capacitors	FF1200R17KE3_B2
6MS24017E33W32860	active and preferred	80.00.0	40.00.0	2.5	6-pack	Air cooled	ModSTACK™ 3	incl. Capacitors	FF1200R17KE3_B2
IGBT3 1700V - PrimeSTACK™									
2PS06017E32G28213	active	325	690.0	2.0	2-pack	Air cooled	PrimeSTACK™ C2	-	FF300R17KE3
2PS12017E34W32132	active	10.070.0	690.0	2.0	2-pack	Liquid cooled	PrimeSTACK™ C4	-	FF300R17KE3
IGBT4 1700V - ModSTACK™ 3									
6MS16017P43W40383	active and preferred	880.0	690.0	3.0	6-pack	Liquid cooled	ModSTACK™ 3	incl. Capacitors	FF800R17KP4_B2
6MS16017P43W40382	active and preferred	880.0	690.0	3.0	6-pack	Liquid cooled	ModSTACK™ 3	incl. Capacitors	FF800R17KP4_B2
6MS24017P43W39872	active and preferred	10.050.0	690.0	3.0	6-pack	Liquid cooled	ModSTACK™ 3	incl. Capacitors	FF1200R17KP4_B2
6MS24017P43W39873	active and preferred	10.050.0	690.0	3.0	6-pack	Liquid cooled	ModSTACK™ 3	incl. Capacitors	FF1200R17KP4_B2
IGBT3 1200V - PrimeSTACK™									
6PS03012E33G34160	active	234	30.00.0	5.0	6-pack	Air cooled	PrimeSTACK™ C3	incl. Capacitors	FF300R12KE3

# Evaluation boards

Product	Product status	Promotion of	Description
<b>Evaluation boards for industrial IGBT modules</b>			
2ED100E12-F2	on request	EconoDUAL™ 3	Evaluation Board for EconoDUAL™3 Modules (1200V)
2ED250E12-F	on request	PrimePACK™	Evaluation Driver Board for PrimePACK™ Modules (1200V)
6ED100E12-F2	on request	EconoPACK™+	Evaluation Board for EconoPACK™+ Modules (1200V)
7ED020E12-FI-U1	on request	SmartPIM 1	Evaluation Board for SmartPIM 1 Modules (1200V)
7ED020E12-FI-W2	on request	EasyPIM™ 2B	Evaluation Board for EasyPIM™ 2B PressFIT Modules (1200V)
F3L020E07-F-P	on request	EconoPACK™ 4 3-level	Evaluation Driver Board for EconoPACK™ 4 3-Level Modules in NPC1-Topology (650V)
F3L030E07-F-W2	on request	EasyPACK 2B 3-level	Evaluation Board for EasyPACK 2B 3-level in NPC-Topology (650V)
F3L2020E07-F-P	on request	EconoPACK™ 4 3-level	Evaluation Driver Board for EconoPACK™ 4 3-Level Modules in NPC2-Topology (650V)
F3L2020E12-F-P_EVAL	on request	EconoPACK™ 4 3-level	Evaluation Driver Board for EconoPACK™ 4 3-Level Modules in NPC2-Topology (1200V)
MA040E12	on request	MIPAQ™ serve	Isolated gate driver power supply and logic interface for MIPAQ™ serve (1200V)
MA070E12	on request	62mm Modules	Evaluation Adapter Board for 62mm Modules (1200V)
MA070E17	on request	62mm Modules	Evaluation Adapter Board for 62mm Modules (1700V)
MA200E17	on request	EconoDUAL™ 3	Evaluation Adapter Board for EconoDUAL™3 Modules (1700V)
MA300E12	on request	PrimePACK™	Evaluation Adapter Board for PrimePACK™ Modules (1200V)
MA3AE12	on request	MIPAQ™ base	Isolating amplifier for current measurement with MIPAQ™ base (1200V)
MA200E12	on request	EconoDUAL™ 3	Evaluation Adapter Board for EconoDUAL™3 Modules (1200V)
MA300E17	on request	PrimePACK™	Evaluation Adapter Board for PrimePACK™ Modules (1700V)
MA3L080E07	on request	EconoPACK™ 4 3-level	Evaluation Adapter Board for EconoPACK™ 4 3-Level Modules in NPC1-Topology (650V)
MA3L120E07	on request	EconoPACK™ 4 3-level	Evaluation Adapter Board for EconoPACK™ 4 3-Level Modules in NPC2-Topology (650V)
MA3L120E12_EVAL	on request	EconoPACK™ 4 3-level	Evaluation Board for EconoPACK™ 4 3-Level Modules in NPC2-Topology (1200V)
MA400E12	on request	IHM (130mm x 140mm)	Evaluation Adapter Board for IHM IGBT Modules (1200V)
MA400E17	on request	IHM (130mm x 140mm)	Evaluation Adapter Board for IHM IGBT Modules (1700V)
MA401E12	on request	IHM (140mm x 190mm)	Evaluation Adapter Board for IHM IGBT Modules (1200V)
MA401E17	on request	IHM (140mm x 190mm)	Evaluation Adapter Board for IHM IGBT Modules (1700V)
<b>Evaluation boards for industrial Driver ICs and Boards (EiceDRIVER™)</b>			
2ED300E17-SFO	on request	EiceDRIVER™ Safe	Evaluation Board for 2ED300C17-S EiceDRIVER™ Safe Driver Boards (1700V)
EVAL-1ED020I12-B2	active and preferred	EiceDRIVER™ Enhanced	Evaluation Board for 1ED020I12-B2 EiceDRIVER™ Enhanced Driver ICs (1200V)
EVAL-1ED020I12-BT	active and preferred	EiceDRIVER™ Enhanced	Evaluation Board for 1ED020I12-BT EiceDRIVER™ Enhanced Driver ICs (1200V)
EVAL-2ED020I12-F2	active and preferred	EiceDRIVER™ Enhanced	Evaluation Board for 2ED020I12-F2 EiceDRIVER™ Enhanced Driver ICs (600V/1200V)
EVAL-1EDI60I12AF	active and preferred	EiceDRIVER™ Compact	Evaluation Board for 1EDI60I12AF EiceDRIVER™ Compact Driver ICs (1200V)
EVAL-2EDL23N06PJ	active and preferred	EiceDRIVER™ Compact	Evaluation Board for 2EDL23N06PJ EiceDRIVER™ Compact Driver ICs (600V)
EVAL-2EDL23I06PJ	active and preferred	EiceDRIVER™ Compact	Evaluation Board for 2EDL23I06PJ EiceDRIVER™ Compact Driver ICs (600V)
EVAL-2EDL05I06PF	active and preferred	EiceDRIVER™ Compact	Evaluation Board for 2EDL05I06PF EiceDRIVER™ Compact Driver ICs (600V)
EVAL-6EDL04N02PR	active and preferred	EiceDRIVER™ Compact	Evaluation Board for 6EDL04N02PR EiceDRIVER™ Compact Driver ICs (200V)
EVAL-6EDL04I06PT	active and preferred	EiceDRIVER™ Compact	Evaluation Board for 6EDL04I06PT EiceDRIVER™ Compact Driver ICs (600V)

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

# Evaluation boards

Product	Product status	Promotion of	Description
Reference board for IPMs (uIPM)			
IRMD808	active	uIPM IRSM808 Series	Motor Drive for low power applications featuring IRSM808
IRMD836	active	uIPM IRSM836 Series	Motor Drive for low power applications featuring IRSM836
Reference design Kit for IPMs (iMotion™)			
IRMCS1173-1-7	active	iMotion™ IRMCF171 + IRAM256 Series	Sensorless Motor Drive Reference Design Kit
IRMCS1173-1-D	active	iMotion™ IRMCF171 + IRSM505 Series	Sensorless Motor Drive Reference Design Kit
IRMCS1183-1-D	active	iMotion™ IRMCF183 + IRSM505 Series	Sensorless Motor Drive Reference Design Kit
IRMCS1088-1-8	active	iMotion™ IRMCF188 + IRAM722 Series	Sensorless Motor Drive Reference Design Kit
IRMCS1243-1-8	active	iMotion™ IRMCF143 + IRAM722 Series	Servo Motor Drive Reference Design Kit
Control board for IPMs (iMotion™)			
IRMC099	active	iMotion™ IRMCK099	iMotion™ IRMCK099 Control Board
Evaluation boards for Discrete IGBTs			
EVAL-IGBT-650V-TO247-4	active	TRENCHSTOP™ 5 in TO-247 4pin	The EVAL-IGBT-650V-TO-247-4 board enables the evaluation of IGBT performance during switching events, as for instance double pulse test, and in particular a fair comparison between TO-247 3pin and TO-247 4pin packages.
Reference design Kit for Discrete IGBTs			
IRMDKG6-300W	active	IRGR4610D	DPAK IGBT Motor drive
IRMDG62-1-D2	active	IRGS4610D	D2PAK IGBT Motor Drive
iMotion™ 100 series tool			
MCETOOLV1	active	iMotion™ 100 Series	iMotion™MCE tool to program FLASH/OTP Memory of IRMCx100 and IRMCx300 Series

Bare dies

Discrete

IGBT modules

IPMs

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Driver &amp; controller

SiC

Presspacks

SCR/diode modules

Solid state relays

Solid state  
relays

SCR / diode  
modules

Presspacks

SiC

Driver &  
controller

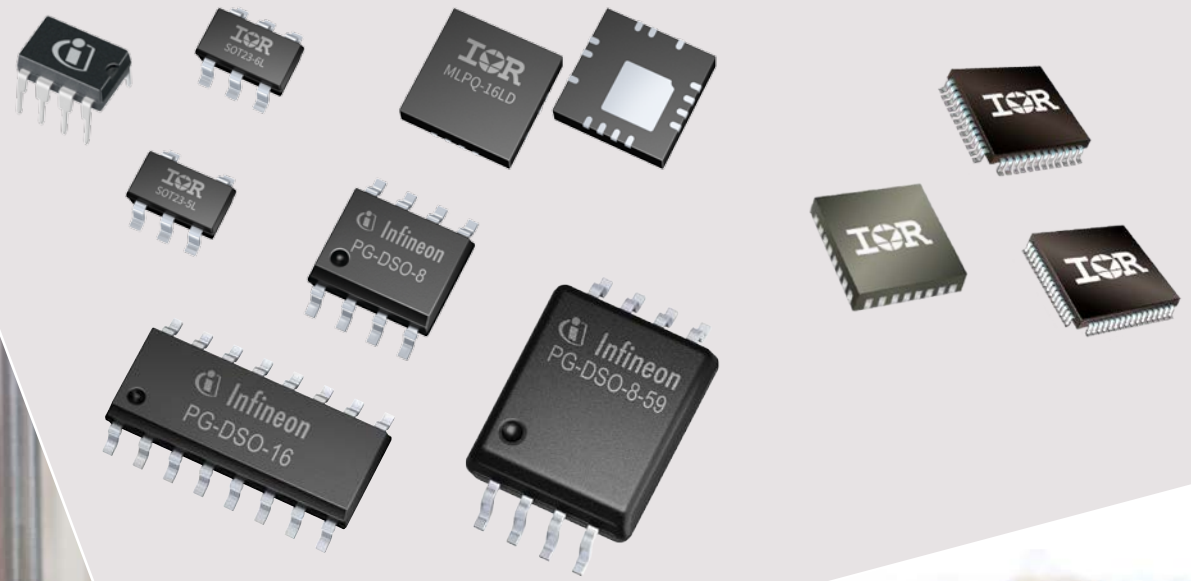
Stacks &  
boards

IPMs

IGBT  
modules

Discrete

Bare dies





## Driver &amp; controller

# Gate Driver IC and Digital Motor Controller

Our MOSFET gate and IGBT gate driver ICs are the simplest, smallest and lowest cost solution to drive MOSFETs or IGBTs up to 1200V in applications up to 12 kW. These MOSFET and IGBT drivers provide full driver capability with extremely fast switching speeds, designed-in ruggedness and low power dissipation. They generate the current and voltage necessary to turn MOSFETs or IGBTs on and off from the logic output of a DSP, microcontroller or other logic device and can save 30% in part count and up to half

the board space of discrete optocoupler or transformer-based solutions. Input is typically a 3.3V logic-level signal and output currents are up to 4A. Our iMOTION™ Integrated Design Platform delivers everything needed to design a complete variable speed motor controller subsystem. From the front panel and power entry to the motor terminals, iMOTION brings powerful digital, analog and power silicon together with algorithms, development software and design tools.

## Highlights



### 1EDI Compact 300mil Single High Side Driver

The 1EDI EiceDRIVER™ Compact single-channel high-voltage driver IC now comes in a DSO-8 300 mil package for increased creepage distance needs, optimized pin-out for low-impedance power supply, and improved thermal behavior. The high-speed versions 1EDI60H12AH and 1EDI20H12AH are an excellent match for SiC switches in applications such as SMPS, PFC, and photovoltaic inverters. [www.infineon.com/300mil](http://www.infineon.com/300mil)



### 2EDL 600V Compact Half Bridge Driver

Tailored for consumer electronics and home appliance applications. The 2EDL EiceDRIVER™ Compact family realizes an efficient and compact design with monolithic integrate low-ohmic and ultrafast bootstrap diode, comprehensive protection features, and designed-in ruggedness. [www.infineon.com/eicedriver-compact](http://www.infineon.com/eicedriver-compact)



### IR7xxxS – 700V Half Bridge Drivers

Optimized for 700V and 650V IGBTs or MOSFETS, these devices offer a higher breakdown voltage for enhanced reliability and performance in application such as major home appliances, servo drives and micro inverter drives. Three options in 8-Lead SOIC are now available. [www.infineon.com/700vhvic](http://www.infineon.com/700vhvic)



### IRMCK099 Sensorless Motor Control IC

IRMCK099 new sensorless motor control IC offers a high performance permanent magnet motor control for Home Appliance, Drone, Fan and Pump applications. It requires no external OP amp and direct interface to single shunt current sensing resistor. It comes in the small QFN32 pin package. [www.infineon.com/imotion](http://www.infineon.com/imotion)

## Driver

Product	Package	Topology	Channel	Voltage class [V]	Source current [A] (typ)	Sink current [A] (typ)	Propagation delay on [ns] (typ)	Propagation delay off [ns] (typ)	Shutdown, enable or reset	Tj [°C] (max)	Isolation
<b>μHVIC™ Current sense IC</b>											
IR25750	5 Lead SOT23	Current sense	1	600	0	0	0	0	-	150	Functional levelshift
<b>μHVIC™ Single high side</b>											
IRS25752	6 Lead SOT23	Single high side	1	600	0.16	0.24	140	215	-	150	Functional levelshift
IRS20752	6 Lead SOT23	Single high side	1	200	0.16	0.24	140	215	-	150	Functional levelshift
IRS10752	6 Lead SOT23	Single high side	1	100	0.16	0.24	140	215	-	150	Functional levelshift
<b>μHVIC™ Start up IC</b>											
IRS25751	5 Lead SOT23	Start up	1	480	0	0	0	0	EN	150	Functional levelshift
<b>μHVIC™ Single low side</b>											
IRS44273	5 Lead SOT23	Single low side	1	25	1.50	1.50	50	50	-	150	-
IR44273	5 Lead SOT23	Single low side	1	20	1.70	1.50	50	50	-	150	-
IR44272	5 Lead SOT23	Single low side	1	20	1.70	1.50	50	50	EN	150	-
IR44252	5 Lead SOT23	Single low side	1	20	0.30	0.55	50	50	-	150	-

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

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SCR/diode modules

Solid state relays

## Driver

Product	Package	Channels	Voltage class [V]	Source current [A] (typ)	Sink current [A] (typ)	Propagation delay on [ns] (typ)	Propagation delay off [ns] (typ)	UVLO on [V] (typ)	UVLO off [V] (typ)	Shut-down, enable or reset	Fault reporting	Soft overcurrent shutdown	Desaturation detection	Separate logic GND	Single input	Over current protection	Tj [°C] (max)	Isolation
Single high side																		
1ED020I12-B2	PG-DSO-16	1	1200	2	2	170	165	12	11	/RST	X		X	X			150	Basic galvanic
1ED020I12-BT	PG-DSO-16	1	1200	2	2	1750	1750	12	11	/RST	X		X	X			150	Basic galvanic
1ED020I12-F2	PG-DSO-16	1	1200	2	2	170	165	12	11	/RST	X		X	X			150	Functional galvanic
1ED020I12-FT	PG-DSO-16	1	1200	2	2	0	0	12.6	0	/RST			X	X			150	Functional galvanic
1EDI05I12AF	PG-DSO-8	1	1200	1.3	0.9	301	300	12.7	12					X			125	Functional galvanic
1EDI10I12MF	PG-DSO-8	1	1200	2.2	2.3	300	300	12.7	12					X			125	Functional galvanic
1EDI20I12AF	PG-DSO-8	1	1200	4	3.5	300	300	12.7	12					X			125	Functional galvanic
1EDI20I12MF	PG-DSO-8	1	1200	4	3.5	300	300	12.7	12					X			125	Functional galvanic
1EDI20N12AF	PG-DSO-8	1	1200	4	3.5	115	120	9.1	8.5					X			125	Functional galvanic
1EDI30I12MF	PG-DSO-8	1	1200	5.9	6.2	300	300	12.7	12					X			125	Functional galvanic
1EDI30J12CP	PG-DSO-19	1	1200	4	4	0	0	-17.4	0	EN							150	Functional galvanic
1EDI40I12AF	PG-DSO-8	1	1200	7.5	6.8	300	300	12.7	12					X			125	Functional galvanic
1EDI60I12AF	PG-DSO-8	1	1200	10	9.4	300	300	12.7	12					X			125	Functional galvanic
1EDI60N12AF	PG-DSO-8	1	1200	10	9.4	120	125	10	0					X			125	Functional galvanic
IR2117	8 Lead PDIP	1	600	0.25	0.5	125	105	8.6	8.2						X		150	Functional levelshift
	8 Lead SOIC	1	600	0.25	0.5	125	105	8.6	8.2						X		150	Functional levelshift
IR2118	8 Lead PDIP	1	600	0.25	0.5	125	105	8.6	8.2						X		150	Functional levelshift
	8 Lead SOIC	1	600	0.25	0.5	125	105	8.6	8.2						X		150	Functional levelshift
IR2125	8 Lead PDIP	1	500	1.6	3.3	170	200	9.2	8.3	ERR(SD)	X				X	X	150	Functional levelshift
	16 Lead SOICWB	1	500	1.6	3.3	170	200	9.2	8.3	ERR(SD)	X				X	X	150	Functional levelshift
IR2127	8 Lead PDIP	1	600	0.25	0.5	200	150	10.3	9		X				X	X	150	Functional levelshift
	8 Lead SOIC	1	600	0.25	0.5	200	150	10.3	9		X				X	X	150	Functional levelshift
IR21271	8 Lead PDIP	1	600	0.25	0.5	200	150	7.2	6.8		X		X		X	X	150	Functional levelshift
	8 Lead SOIC	1	600	0.25	0.5	200	150	7.2	6.8		X		X		X	X	150	Functional levelshift
IR2128	8 Lead PDIP	1	600	0.25	0.5	200	150	10.3	9		X		X		X	X	150	Functional levelshift
	8 Lead SOIC	1	600	0.25	0.5	200	150	10.3	9		X		X		X	X	150	Functional levelshift
IRS2117	8 Lead PDIP	1	600	0.29	0.6	125	105	8.6	8.2						X		150	Functional levelshift
	8 Lead SOIC	1	600	0.29	0.6	125	105	8.6	8.2						X		150	Functional levelshift
IRS21171	8 Lead SOIC	1	600	0.29	0.6	160	160	8.6	8.2						X		150	Functional levelshift
IRS2118	8 Lead PDIP	1	600	0.29	0.6	125	105	8.6	8.2						X		150	Functional levelshift
	8 Lead SOIC	1	600	0.29	0.6	125	105	8.6	8.2						X		150	Functional levelshift
IRS2123	8 Lead SOIC	1	600	0.5	0.5	140	140	8.6	8	RST					X		150	Functional levelshift
IRS2124	8 Lead SOIC	1	600	0.5	0.5	140	140	8.6	8						X		150	Functional levelshift

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## Driver

Product	Package	Channels	Voltage class [V]	Source current [A] (typ)	Sink current [A] (typ)	Propagation delay on [ns] (typ)	Propagation delay off [ns] (typ)	UVLO on [V] (typ)	UVLO off [V] (typ)	Shut-down, enable or reset	Fault reporting	Soft overcurrent shutdown	Desaturation detection	Separate logic GND	Single input	Over current protection	Tj [°C] (max)	Isolation
Single high side																		
IRS2127	8 Lead PDIP	1	600	0.29	0.6	150	150	10.3	9		X				X	X	150	Functional levelshift
	8 Lead SOIC	1	600	0.29	0.6	150	150	10.3	9		X				X	X	150	Functional levelshift
IRS21271	8 Lead PDIP	1	600	0.29	0.6	150	150	7.2	6.8		X		X		X	X	150	Functional levelshift
	8 Lead SOIC	1	600	0.29	0.6	150	150	7.2	6.8		X		X		X	X	150	Functional levelshift
IRS2128	8 Lead PDIP	1	600	0.29	0.6	150	150	10.3	9		X		X		X	X	150	Functional levelshift
	8 Lead SOIC	1	600	0.29	0.6	150	150	10.3	9		X		X		X	X	150	Functional levelshift
IRS21281	8 Lead PDIP	1	600	0.29	0.6	150	150	7.2	6.8		X		X		X	X	150	Functional levelshift
	8 Lead SOIC	1	600	0.29	0.6	150	150	7.2	6.8		X		X		X	X	150	Functional levelshift
IRS21850	8 Lead SOIC	1	600	4	4	160	160	8.9	8.2						X		150	Functional levelshift
IRS21858	16 Lead SOIC	2	600	0.29	0.6	160	160	8.9	8.2								150	Functional levelshift
Single low side																		
IR2121	8 Lead PDIP	1	5	1.6	3.3	150	200	8.9	8	ERR(SD)	X				X	X	150	Functional levelshift

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR/diode modules

Solid state relays

## Driver

Product	Package	Channels	Voltage class [V]	Source current [A] (typ)	Sink current [A] (typ)	Propagation delay on [ns] (typ)	Propagation delay off [ns] (typ)	UVLO on [V] (typ)	UVLO off [V] (typ)	Enable	Tj [°C] (max)
Dual low side											
IR25600	8 Lead PDIP	2	25	2.3	3.3	85	65				150
	8 Lead SOIC	2	25	2.3	3.3	85	65				150
IR4426	8 Lead PDIP	2	25	2.3	3.3	85	65				150
	8 Lead SOIC	2	25	2.3	3.3	85	65				150
IR4427	8 Lead PDIP	2	25	2.3	3.3	85	65				150
	8 Lead SOIC	2	25	2.3	3.3	85	65				150
IRS44262	8 Lead SOIC	2	25	2.3	3.3	50	50	10.2	9.2		150
IRS4426	8 Lead SOIC	2	25	2.3	3.3	50	50				150
IRS4427	8 Lead PDIP	2	25	2.3	3.3	50	50				150
	8 Lead SOIC	2	25	2.3	3.3	50	50				150
IRS4428	8 Lead SOIC	2	25	2.3	3.3	50	50				150
2EDN7524F	PG-DSO-8	2	20	5	5	19	19	4.2	3.9	EN	150
2EDN7523F	PG-DSO-8	2	20	5	5	19	19	4.2	3.9	EN	150
2EDN8524F	PG-DSO-8	2	20	5	5	19	19	8	7	EN	150
2EDN8523F	PG-DSO-8	2	20	5	5	19	19	8	7	EN	150
2EDN7524R	PG-TSSOP-8	2	20	5	5	19	19	4.2	3.9	EN	150
2EDN7523R	PG-TSSOP-8	2	20	5	5	19	19	4.2	3.9	EN	150
2EDN8524R	PG-TSSOP-8	2	20	5	5	19	19	8	7	EN	150
2EDN8523R	PG-TSSOP-8	2	20	5	5	19	19	8	7	EN	150

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

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SiC

Presspacks

SCR / diode modules

Solid state relays

## Driver

Product	Package	Channels	Voltage class [V]	Source current [A] (typ)	Sink current [A] (typ)	Propagation delay on [ns] (typ)	Propagation delay off [ns] (typ)	UVLO on [V] (typ)	UVLO off [V] (typ)	Fault reporting	Reset	Desaturation detection	Separate logic GND	Tj [°C] (max)	Isolation
Dual high side															
2ED020112-F2	PG-DSO-36	2	1200	2	2	170	165	12	11	1	/RST	1	1	150	Functional galvanic
IRS21853	16 Lead SOIC	2	600	2	2	170	170	8.9	8.2	0	-	0	-	150	Functional levelshift
IRS21962	16 Lead SOIC	2	600	0.5	0.5	90	90	8.6	8.2	0	-	0	1	150	Functional levelshift

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

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Presspacks

SCR/diode modules

Solid state relays

# Driver

Product	Package	Channels	Voltage class [V]	Source current [A] (typ)	Sink current [A] (typ)	Propagation delay on [ns] (typ)	Propagation delay off [ns] (typ)	UVLO on [V] (typ)	UVLO off [V] (typ)	Separate logic GND	T <sub>j</sub> [°C] (max)	Isolation
Half bridge and single low side												
IRS21952	16 Lead SOIC	3	600	0.5	0.5	330	330	8.6	8.2	1	150	Functional levelshift
IRS21953	16 Lead SOIC	3	600	0.5	0.5	380	380	8.6	8.2	1	150	Functional levelshift
IRS21956	20 Lead SOICWB	2	600	0.5	0.5	300	280	8.7	8	1	150	Functional levelshift

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

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SiC

Presspacks

SCR / diode modules

Solid state relays

## Driver

Product	Package	Channels	Voltage class [V]	Source current [A] (typ)	Sink current [A] (typ)	Propagation delay on [ns] (typ)	Propagation delay off [ns] (typ)	UVLO on [V] (typ)	UVLO off [V] (typ)	Shutdown	Separate logic GND	Tj [°C] (max)	Isolation
High and low side													
IR2213	14 Lead PDIP	2	1200	2	2.5	280	225	10.2	9.3	SD	X	125	Functional Levelshift
	16 Lead SOICWB	2	1200	2	2.5	280	225	10.2	9.3	SD	X	125	Functional Levelshift
IR7106	8 Lead SOIC	2	700	0.22	0.35	220	200	8.9	8.2			150	Functional Levelshift
IR2101	8 Lead PDIP	2	600	0.21	0.36	160	150	8.9	8.2			150	Functional Levelshift
	8 Lead SOIC	2	600	0.21	0.36	160	150	8.9	8.2			150	Functional Levelshift
IR2102	8 Lead PDIP	2	600	0.21	0.36	160	150	8.9	8.2			150	Functional Levelshift
	8 Lead SOIC	2	600	0.21	0.36	160	150	8.9	8.2			150	Functional Levelshift
IR21064	14 Lead PDIP	2	600	0.2	0.35	220	200	8.9	8.2		X	150	Functional Levelshift
	14 Lead SOIC	2	600	0.2	0.35	220	200	8.9	8.2		X	150	Functional Levelshift
IR2106	8 Lead PDIP	2	600	0.2	0.35	220	200	8.9	8.2			150	Functional Levelshift
	8 Lead SOIC	2	600	0.2	0.35	220	200	8.9	8.2			150	Functional Levelshift
IR2112	14 Lead PDIP	2	600	0.25	0.5	125	105	8.6	8.2	SD		150	Functional Levelshift
	16 Lead SOICWB	2	600	0.25	0.5	125	105	8.6	8.2	SD		150	Functional Levelshift
IR2113	14 Lead PDIP	2	600	2.5	2.5	120	94	8.6	8.2	SD	X	150	Functional Levelshift
	16 Lead SOICWB	2	600	2.5	2.5	120	94	8.6	8.2	SD	X	150	Functional Levelshift
IR21814	14 Lead PDIP	2	600	1.9	2.3	180	220	8.9	8.2		X	150	Functional Levelshift
	14 Lead SOIC	2	600	1.9	2.3	180	220	8.9	8.2		X	150	Functional Levelshift
IR2181	8 Lead PDIP	2	600	1.9	2.3	180	220	8.9	8.2			150	Functional Levelshift
	8 Lead SOIC	2	600	1.9	2.3	180	220	8.9	8.2			150	Functional Levelshift
IR2301	8 Lead PDIP	2	600	0.2	0.35	220	200	4.1	3.8			150	Functional Levelshift
	8 Lead SOIC	2	600	0.2	0.35	220	200	4.1	3.8			150	Functional Levelshift
IR25604	8 Lead SOIC	2	600	0.2	0.35	220	200	8.9	8.2			150	Functional Levelshift
IR25607	16 Lead SOICWB	2	600	2.5	2.5	120	94	8.6	8.2	SD	X	150	Functional Levelshift
IRS2101	8 Lead PDIP	2	600	0.29	0.6	160	150	8.9	8.2			150	Functional Levelshift
	8 Lead SOIC	2	600	0.29	0.6	160	150	8.9	8.2			150	Functional Levelshift
IRS210614	14 Lead SOIC	2	600	0.29	0.6	165	165	8.9	8.2		X	150	Functional Levelshift
IRS21064	14 Lead PDIP	2	600	0.29	0.6	220	200	8.9	8.2		X	150	Functional Levelshift
	14 Lead SOIC	2	600	0.29	0.6	220	200	8.9	8.2		X	150	Functional Levelshift
IRS2106	8 Lead PDIP	2	600	0.29	0.6	220	200	8.9	8.2			150	Functional Levelshift
	8 Lead SOIC	2	600	0.29	0.6	220	200	8.9	8.2			150	Functional Levelshift
IRS2112	14 Lead PDIP	2	600	0.29	0.6	135	130	8.6	8.2	SD	X	150	Functional Levelshift
	16 Lead SOICWB	2	600	0.29	0.6	135	130	8.6	8.2	SD	X	150	Functional Levelshift
IRS2113	MLPQ 4X4 14L	2	600	2.5	2.5	130	120	8.5	8.2	SD	X	150	Functional Levelshift
	14 Lead PDIP	2	600	2.5	2.5	130	120	8.5	8.2	SD	X	150	Functional Levelshift
	16 Lead SOICWB	2	600	2.5	2.5	130	120	8.5	8.2	SD	X	150	Functional Levelshift



## Driver

Product	Package	Channels	Voltage class [V]	Source current [A] (typ)	Sink current [A] (typ)	Propagation delay on [ns] (typ)	Propagation delay off [ns] (typ)	UVLO on [V] (typ)	UVLO off [V] (typ)	Shutdown	Separate logic GND	Tj [°C] (max)	Isolation
High and low side													
IRS21814	14 Lead PDIP	2	600	1.9	2.3	180	220	8.9	8.2		X	150	Functional Levelshift
	14 Lead SOIC	2	600	1.9	2.3	180	220	8.9	8.2		X	150	Functional Levelshift
IRS2181	8 Lead PDIP	2	600	1.9	2.3	180	220	8.9	8.2			150	Functional Levelshift
	8 Lead SOIC	2	600	1.9	2.3	180	220	8.9	8.2			150	Functional Levelshift
	MLPQ 4x4 14L	2	600	1.9	2.3	180	220	8.9	8.2			150	Functional Levelshift
IRS21856	14 Lead SOIC	2	600	0.5	0.5	150	160	9	8.3			150	Functional Levelshift
IRS21864	14 Lead PDIP	2	600	4	4	170	170	8.9	8.2		X	150	Functional Levelshift
	14 Lead SOIC	2	600	4	4	170	170	8.9	8.2		X	150	Functional Levelshift
IRS21867	8 Lead SOIC	2	600	4	4	170	170	6	5.5			150	Functional Levelshift
IRS2186	8 Lead PDIP	2	600	4	4	170	170	8.9	8.2			150	Functional Levelshift
	8 Lead SOIC	2	600	4	4	170	170	8.9	8.2			150	Functional Levelshift
2EDL05I06BF	PG-DSO-8	2	600	0.36	0.7	420	400	12.5	11.6			150	Functional levelshift
IRS2301	8 Lead SOIC	2	600	0.2	0.35	220	200	4.1	3.8			150	Functional Levelshift
IRS26072D	8 Lead SOIC	2	600	0.2	0.35	200	200	8.9	7.7			150	Functional Levelshift
IRS2607D	8 Lead SOIC	2	600	0.2	0.35	515	500	8.9	7.7			150	Functional Levelshift
IR2110	14 Lead PDIP	2	500	2.5	2.5	120	94	8.6	8.2	SD	X	150	Functional Levelshift
	16 Lead SOICWB	2	500	2.5	2.5	120	94	8.6	8.2	SD	X	150	Functional Levelshift
IRS2110	14 Lead PDIP	2	500	2.5	2.5	130	120	8.5	8.2	SD	X	150	Functional Levelshift
	16 Lead SOICWB	2	500	2.5	2.5	130	120	8.5	8.2	SD	X	150	Functional Levelshift
IR2010	14 Lead PDIP	2	200	3	3	95	65	8.6	8.2	SD	X	150	Functional Levelshift
	16 Lead SOICWB	2	200	3	3	95	65	8.6	8.2	SD	X	150	Functional Levelshift
IR2011	8 Lead PDIP	2	200	1	1	80	75	9	8.2			150	Functional Levelshift
	8 Lead SOIC	2	200	1	1	80	75	9	8.2			150	Functional Levelshift
IRS2011	8 Lead PDIP	2	200	1	1	60	60	9	8.2			150	Functional Levelshift
	8 Lead SOIC	2	200	1	1	60	60	9	8.2			150	Functional Levelshift
IRS2005	8 Lead SOIC	2	200	0.29	0.6	160	150	8.9	8.2			150	Functional Levelshift
	MLPQ 4x4 14L	2	200	0.29	0.6	160	150	8.9	8.2			150	Functional Levelshift

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## Driver

Product	Package	Channels	Voltage class [V]	Source current [A] (typ)	Sink current [A] (typ)	Propagation delay on [ns] (typ)	Propagation delay off [ns] (typ)	Dead-time [ns] (min)	Programmable deadtime	UVLO on [V] (typ)	UVLO off [V] (typ)	Shutdown, enable or reset	Interlock	Integrated bootstrap diode	Fault reporting	Soft overcurrent shutdown	Desaturation detection	Separate logic GND	Single input	Over current protection	Tj [°C] (max)	Isolation
Half bridge																						
2ED020I12-FI	PG-DSO-18	2	1200	1.5	2.5	85	85	0		12.2	11.2	/SD	X								150	Functional galvanic
IR2214	24 Lead SSOP	2	1200	2	3	440	440	0		10.2	9.3		X		X	X	X	X			150	Functional levelshift
IR7184	8 Lead SOIC	2	700	1.9	2.3	680	270	280		8.9	8.2	/SD	X						X		150	Functional levelshift
IR7304	8 Lead SOIC	2	700	0.078	0.169	220	220	0		8.9	8.2		X								150	Functional levelshift
2ED020I06-FI	PG-DSO-18	2	650	1.5	2.5	85	85	0		12.2	11.2	/SD	X								150	Functional galvanic
2EDL05I06PF	PG-DSO-8	2	600	0.36	0.7	420	400	260		12.5	11.6	-	X	X							150	Functional levelshift
2EDL05I06PJ	PG-DSO-14	2	600	0.36	0.7	420	400	260		12.5	11.6	-	X	X							150	Functional levelshift
2EDL05N06PF	PG-DSO-8	2	600	0.36	0.7	310	300	30		9.1	8.3	-	X	X							150	Functional levelshift
2EDL05N06PJ	PG-DSO-14	2	600	0.36	0.7	310	300	30		9.1	8.3	-	X	X							150	Functional levelshift
2EDL23I06PJ	PG-DSO-14	2	600	2.3	2.8	420	400	380		12.5	11.6	EN	X	X	X			X		X	150	Functional levelshift
2EDL23N06PJ	PG-DSO-14	2	600	2.3	2.8	310	300	75		9.1	8.3	EN	X	X	X			X		X	150	Functional levelshift
IR2103	8 Lead PDIP	2	600	0.21	0.36	680	150	400		8.9	8.2		X								150	Functional levelshift
	8 Lead SOIC	2	600	0.21	0.36	680	150	400		8.9	8.2		X								150	Functional levelshift
IR2104	8 Lead PDIP	2	600	0.21	0.36	680	150	400		8.9	8.2	/SD	X							X	150	Functional levelshift
	8 Lead SOIC	2	600	0.21	0.36	680	150	400		8.9	8.2	/SD	X							X	150	Functional levelshift
IR21084	14 Lead PDIP	2	600	0.2	0.35	220	200	400	X	8.9	8.2		X					X			150	Functional levelshift
	14 Lead SOIC	2	600	0.2	0.35	220	200	400	X	8.9	8.2		X					X			150	Functional levelshift
IR2108	8 Lead PDIP	2	600	0.2	0.35	220	200	400		8.9	8.2		X								150	Functional levelshift
	8 Lead SOIC	2	600	0.2	0.35	220	200	400		8.9	8.2		X								150	Functional levelshift
IR21091	8 Lead PDIP	2	600	0.2	0.35	750	200	400	X	8.9	8.2	SD	X							X	150	Functional levelshift
	8 Lead SOIC	2	600	0.2	0.35	750	200	400	X	8.9	8.2	SD	X							X	150	Functional levelshift
IR21094	14 Lead PDIP	2	600	0.2	0.35	750	200	400	X	8.9	8.2	/SD	X					X	X		150	Functional levelshift
	14 Lead SOIC	2	600	0.2	0.35	750	200	400	X	8.9	8.2	/SD	X					X	X		150	Functional levelshift
IR2109	8 Lead PDIP	2	600	0.2	0.35	750	200	400		8.9	8.2	/SD	X							X	150	Functional levelshift
	8 Lead SOIC	2	600	0.2	0.35	750	200	400		8.9	8.2	/SD	X							X	150	Functional levelshift
IR2111	8 Lead PDIP	2	600	0.25	0.5	750	150	480		8.6	8.2		X							X	150	Functional levelshift
	8 Lead SOIC	2	600	0.25	0.5	750	150	480		8.6	8.2		X							X	150	Functional levelshift
IR2114	24 Lead SSOP	2	600	2	3	440	440	0		10.2	9.3		X		X	X	X	X			150	Functional levelshift
IR21531D	8 Lead PDIP	2	600	0.18	0.26	0	0	350		9	8	CT(SD)	X	X							150	Functional levelshift
IR21531	8 Lead PDIP	2	600	0.18	0.26	0	0	350		9	8	CT(SD)	X								150	Functional levelshift
	8 Lead SOIC	2	600	0.18	0.26	0	0	350		9	8	CT(SD)	X								150	Functional levelshift
IR21834	14 Lead PDIP	2	600	1.9	2.3	180	220	280	X	8.9	8.2		X						X		150	Functional levelshift
	14 Lead SOIC	2	600	1.9	2.3	180	220	280	X	8.9	8.2		X						X		150	Functional levelshift

## Driver

Product	Package	Channels	Voltage class [V]	Source current [A] (typ)	Sink current [A] (typ)	Propagation delay on [ns] (typ)	Propagation delay off [ns] (typ)	Dead-time [ns] (min)	Programmable deadtime	UVLO on [V] (typ)	UVLO off [V] (typ)	Shutdown, enable or reset	Interlock	Integrated bootstrap diode	Fault reporting	Soft overcurrent shutdown	Desaturation detection	Separate logic GND	Single input	Over current protection	Tj [°C] (max)	Isolation
Half bridge																						
IR2183	8 Lead PDIP	2	600	1.9	2.3	180	220	280		8.9	8.2		X								150	Functional levelshift
	8 Lead SOIC	2	600	1.9	2.3	180	220	280		8.9	8.2		X								150	Functional levelshift
IR21844	14 Lead PDIP	2	600	1.9	2.3	680	270	280	X	8.9	8.2	/SD	X					X	X		150	Functional levelshift
	14 Lead SOIC	2	600	1.9	2.3	680	270	280	X	8.9	8.2	/SD	X					X	X		150	Functional levelshift
IR2184	8 Lead PDIP	2	600	1.9	2.3	680	270	280		8.9	8.2	/SD	X						X		150	Functional levelshift
	8 Lead SOIC	2	600	1.9	2.3	680	270	280		8.9	8.2	/SD	X						X		150	Functional levelshift
IR2302	8 Lead PDIP	2	600	0.2	0.35	750	200	400		4.1	3.8	/SD	X						X		150	Functional levelshift
	8 Lead SOIC	2	600	0.2	0.35	750	200	400		4.1	3.8	/SD	X						X		150	Functional levelshift
IR2304	8 Lead PDIP	2	600	0.29	0.6	220	220	80		8.9	8.2		X								150	Functional levelshift
	8 Lead SOIC	2	600	0.29	0.6	220	220	80		8.9	8.2		X								150	Functional levelshift
IR2308	8 Lead PDIP	2	600	0.2	0.35	220	200	400		8.9	8.2		X								150	Functional levelshift
	8 Lead SOIC	2	600	0.2	0.35	220	200	400		8.9	8.2		X								150	Functional levelshift
IR25601	8 Lead SOIC	2	600	0.078	0.169	220	220	80		8.9	8.2		X								150	Functional levelshift
IR25602	8 Lead SOIC	2	600	0.21	0.36	680	150	400		8.9	8.2	/SD	X						X		150	Functional levelshift
IR25603	8 Lead PDIP	2	600	0.18	0.26	0	0	750		9	8	CT(SD)	X								150	Functional levelshift
	8 Lead SOIC	2	600	0.18	0.26	0	0	750		9	8	CT(SD)	X								150	Functional levelshift
IR25606	8 Lead SOIC	2	600	0.2	0.35	220	200	400		8.9	8.2		X								150	Functional levelshift
IRS2103	8 Lead PDIP	2	600	0.29	0.6	680	150	400		8.9	8.2		X								150	Functional levelshift
	8 Lead SOIC	2	600	0.29	0.6	680	150	400		8.9	8.2		X								150	Functional levelshift
IRS2104	8 Lead PDIP	2	600	0.29	0.6	680	150	400		8.9	8.2	/SD	X						X		150	Functional levelshift
	8 Lead SOIC	2	600	0.29	0.6	680	150	400		8.9	8.2	/SD	X						X		150	Functional levelshift
IRS21084	14 Lead PDIP	2	600	0.29	0.6	220	200	400	X	8.9	8.2		X					X			150	Functional levelshift
	14 Lead SOIC	2	600	0.29	0.6	220	200	400	X	8.9	8.2		X					X			150	Functional levelshift
IRS2108	8 Lead PDIP	2	600	0.29	0.6	220	200	400		8.9	8.2		X								150	Functional levelshift
	8 Lead SOIC	2	600	0.29	0.6	220	200	400		8.9	8.2		X								150	Functional levelshift
IRS21091	8 Lead PDIP	2	600	0.29	0.6	750	200	400	X	8.9	8.2	DT(SD)	X						X		150	Functional levelshift
	8 Lead SOIC	2	600	0.29	0.6	750	200	400	X	8.9	8.2	DT(SD)	X						X		150	Functional levelshift
IRS21094	14 Lead PDIP	2	600	0.29	0.6	750	200	400	X	8.9	8.2	/SD	X					X	X		150	Functional levelshift
	14 Lead SOIC	2	600	0.29	0.6	750	200	400	X	8.9	8.2	/SD	X					X	X		150	Functional levelshift
IRS2109	8 Lead PDIP	2	600	0.29	0.6	750	200	400		8.9	8.2	/SD	X						X		150	Functional levelshift
	8 Lead SOIC	2	600	0.29	0.6	750	200	400		8.9	8.2	/SD	X						X		150	Functional levelshift
IRS2111	8 Lead PDIP	2	600	0.29	0.6	750	150	480		8.6	8.2		X						X		150	Functional levelshift
	8 Lead SOIC	2	600	0.29	0.6	750	150	480		8.6	8.2		X						X		150	Functional levelshift

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## Driver

Product	Package	Channels	Voltage class [V]	Source current [A] (typ)	Sink current [A] (typ)	Propagation delay on [ns] (typ)	Propagation delay off [ns] (typ)	Dead-time [ns] (min)	Programmable deadtime	UVLO on [V] (typ)	UVLO off [V] (typ)	Shutdown, enable or reset	Interlock	Integrated bootstrap diode	Fault reporting	Soft overcurrent shutdown	Desaturation detection	Separate logic GND	Single input	Over current protection	Tj [°C] (max)	Isolation
Half bridge																						
IRS21531D	8 Lead PDIP	2	600	0.18	0.26	0	0	350		11	9	CT(SD)	X	X							150	Functional levelshift
	8 Lead SOIC	2	600	0.18	0.26	0	0	350		11	9	CT(SD)	X	X							150	Functional levelshift
IRS2153D	8 Lead PDIP	2	600	0.18	0.26	0	0	650		11	9	CT(SD)	X	X							150	Functional levelshift
	8 Lead SOIC	2	600	0.18	0.26	0	0	650		11	9	CT(SD)	X	X							150	Functional levelshift
IR21531S	8-lead SOIC	2	600	0.18	0.26	0	0	350		9	8	CT(SD)	X								150	Functional levelshift
IRS21834	14 Lead PDIP	2	600	1.9	2.3	180	220	280	X	8.9	8.2		X					X			150	Functional levelshift
	14 Lead SOIC	2	600	1.9	2.3	180	220	280	X	8.9	8.2		X					X			150	Functional levelshift
IRS2183	8 Lead PDIP	2	600	1.9	2.3	180	220	280		8.9	8.2		X								150	Functional levelshift
	8 Lead SOIC	2	600	1.9	2.3	180	220	280		8.9	8.2		X								150	Functional levelshift
IRS21844	MLPQ 4X4 14L	2	600	1.9	2.3	680	270	280	X	8.9	8.2	/SD	X					X	X		150	Functional levelshift
	14 Lead PDIP	2	600	1.9	2.3	680	270	280	X	8.9	8.2	/SD	X					X	X		150	Functional levelshift
	14 Lead SOIC	2	600	1.9	2.3	680	270	280	X	8.9	8.2	/SD	X					X	X		150	Functional levelshift
IRS2184	8 Lead PDIP	2	600	1.9	2.3	680	270	280		8.9	8.2	/SD	X						X		150	Functional levelshift
	8 Lead SOIC	2	600	1.9	2.3	680	270	280		8.9	8.2	/SD	X						X		150	Functional levelshift
IRS2302	8 Lead SOIC	2	600	0.2	0.35	650	200	300		4.1	3.8	/SD	X						X		150	Functional levelshift
IRS2304	8 Lead PDIP	2	600	0.29	0.6	150	150	80		8.9	8.2		X								150	Functional levelshift
	8 Lead SOIC	2	600	0.29	0.6	150	150	80		8.9	8.2		X								150	Functional levelshift
IRS2308	8 Lead PDIP	2	600	0.29	0.6	220	200	400		8.9	8.2		X								150	Functional levelshift
	8 Lead SOIC	2	600	0.29	0.6	220	200	400		8.9	8.2		X								150	Functional levelshift
IRS25091	8 Lead SOIC	2	600	0.2	0.35	750	250	350	X	8.9	8.2	DT(SD)	X						X		150	Functional levelshift
IRS2509	8 Lead SOIC	2	600	0.2	0.35	750	250	350		8.9	8.2	/SD	X						X		150	Functional levelshift
IRS2608D	8 Lead SOIC	2	600	0.2	0.35	250	250	350		8.9	8.2		X	X							150	Functional levelshift
IRS2609D	8 Lead SOIC	2	600	0.2	0.35	750	250	350		8.9	8.2	/SD	X	X					X		150	Functional levelshift
IRS2003	8 Lead PDIP	2	200	0.29	0.6	680	150	400		8.9	8.2		X						-		150	Functional levelshift
	8 Lead SOIC	2	200	0.29	0.6	680	150	400		8.9	8.2		X						-		150	Functional levelshift
IRS2004	8 Lead PDIP	2	200	0.29	0.6	680	150	400		8.9	8.2	/SD	X						X		150	Functional levelshift
	8 Lead SOIC	2	200	0.29	0.6	680	150	400		8.9	8.2	/SD	X						X		150	Functional levelshift

## Driver

Product	Package	Channels	Voltage class [V]	Source current [A] (typ)	Sink current [A] (typ)	Propagation delay on [ns] (typ)	Propagation delay off [ns] (typ)	Deadtime [ns] (min)	UVLO on [V] (typ)	UVLO off [V] (typ)	Shutdown/enable	Interlock	Integrated bootstrap diode	Fault reporting	Current amplifier output	Brake	Separate logic GND	Over current protection	Tj [°C] (max)	Isolation
Three phase																				
IR2233	44 Lead PLCC	6	1200	0.25	0.5	750	700	100	8.6	8.2	SD	X		X	X		X	X	125	Functional levelshift
	28 Lead PDIP	6	1200	0.25	0.5	750	700	100	8.6	8.2	SD	X		X	X		X	X	125	Functional levelshift
	28 Lead SOICWB	6	1200	0.25	0.5	750	700	100	8.6	8.2	SD	X		X	X		X	X	125	Functional levelshift
	28 Lead SOIC	6	1200	0.25	0.5	750	700	100	8.6	8.2	SD	X		X	X		X	X	125	Functional levelshift
IR2235	44 Lead PLCC	6	1200	0.25	0.5	750	700	100	10.4	9.4	SD	X		X	X		X	X	125	Functional levelshift
	28 Lead PDIP	6	1200	0.25	0.5	750	700	100	10.4	9.4	SD	X		X	X		X	X	125	Functional levelshift
	28 Lead SOICWB	6	1200	0.25	0.5	750	700	100	10.4	9.4	SD	X		X	X		X	X	125	Functional levelshift
6ED003L06-F2	PG-DSO-28	6	600	0.165	0.375	530	490	150	11.7	9.8	EN	X		X			X	X	125	Functional levelshift
6EDL04I06NT	PG-DSO-28	6	600	0.165	0.375	530	490	150	11.7	9.8	EN	X	X	X			X	X	125	Functional levelshift
6EDL04I06PT	PG-DSO-28	6	600	0.165	0.375	530	490	150	11.7	9.8	EN	X	X	X			X	X	125	Functional levelshift
6EDL04N06PT	PG-DSO-28	6	600	0.165	0.375	530	530	150	9	8.1	EN	X	X	X			X	X	125	Functional levelshift
IR2130	44 Lead PLCC	6	600	0.25	0.5	675	425	1300	9	8.7		X		X	X		X	X	150	Functional levelshift
	28 Lead PDIP	6	600	0.25	0.5	675	425	1300	9	8.7		X		X	X		X	X	150	Functional levelshift
	28 Lead SOICWB	6	600	0.25	0.5	675	425	1300	9	8.7		X		X	X		X	X	150	Functional levelshift
IR2131	44 Lead PLCC	6	600	0.25	0.5	1300	600	400	8.7	8.3	SD	X		X			X	X	150	Functional levelshift
	28 Lead PDIP	6	600	0.25	0.5	1300	600	400	8.7	8.3	SD	X		X			X	X	150	Functional levelshift
	28 Lead SOICWB	6	600	0.25	0.5	1300	600	400	8.7	8.3	SD	X		X			X	X	150	Functional levelshift
IR2132	44 Lead PLCC	6	600	0.25	0.5	675	425	400	9	8.7		X		X	X		X	X	150	Functional levelshift
	28 Lead PDIP	6	600	0.25	0.5	675	425	400	9	8.7		X		X	X		X	X	150	Functional levelshift
	28 Lead SOICWB	6	600	0.25	0.5	675	425	400	9	8.7		X		X	X		X	X	150	Functional levelshift
IR2133	44 Lead PLCC	6	600	0.25	0.5	750	700	100	8.6	8.2	SD	X		X	X		X	X	125	Functional levelshift
	28 Lead PDIP	6	600	0.25	0.5	750	700	100	8.6	8.2	SD	X		X	X		X	X	125	Functional levelshift
	28 Lead SOICWB	6	600	0.25	0.5	750	700	100	8.6	8.2	SD	X		X	X		X	X	125	Functional levelshift
IR2135	44 Lead PLCC	6	600	0.25	0.5	750	700	100	10.4	9.4	SD	X		X	X		X	X	125	Functional levelshift
	28 Lead SOICWB	6	600	0.25	0.5	750	700	100	10.4	9.4	SD	X		X	X		X	X	125	Functional levelshift
IR2136	44 Lead PLCC	6	600	0.2	0.35	425	400	220	8.9	8.2	EN	X		X			X	X	150	Functional levelshift
	28 Lead PDIP	6	600	0.2	0.35	425	400	220	8.9	8.2	EN	X		X			X	X	150	Functional levelshift
	28 Lead SOICWB	6	600	0.2	0.35	425	400	220	8.9	8.2	EN	X		X			X	X	150	Functional levelshift
IR21363	44 Lead PLCC	6	600	0.2	0.35	425	400	220	11.1	10.9	EN	X		X			X	X	150	Functional levelshift
	28 Lead SOICWB	6	600	0.2	0.35	425	400	220	11.1	10.9	EN	X		X			X	X	150	Functional levelshift
IR21364	28 Lead SOICWB	6	600	0.2	0.35	500	530	220	10.4	9.4	EN	X		X			X	X	150	Functional levelshift
IR21365	28 Lead SOICWB	6	600	0.2	0.35	425	400	220	11.1	10.9	EN	X		X			X	X	150	Functional levelshift
IR21368	28 Lead SOICWB	6	600	0.2	0.35	425	400	220	8.9	8.2	EN	X		X			X	X	150	Functional levelshift

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## Driver

Product	Package	Channels	Voltage class [V]	Source current [A] (typ)	Sink current [A] (typ)	Propagation delay on [ns] (typ)	Propagation delay off [ns] (typ)	Deadtime [ns] (min)	UVLO on [V] (typ)	UVLO off [V] (typ)	Shutdown/enable	Interlock	Integrated bootstrap diode	Fault reporting	Current amplifier output	Brake	Separate logic GND	Over current protection	Tj [°C] (max)	Isolation
Three phase																				
IRS2330	44 Lead PLCC	6	600	0.25	0.5	500	500	1300	9	8.7		X		X	X		X	X	150	Functional levelshift
	28 Lead SOICWB	6	600	0.25	0.5	500	500	1300	9	8.7		X		X	X		X	X	150	Functional levelshift
IRS2332	44 Lead PLCC	6	600	0.25	0.5	500	500	500	9	8.7		X		X	X		X	X	150	Functional levelshift
	28 Lead SOICWB	6	600	0.25	0.5	500	500	500	9	8.7		X		X	X		X	X	150	Functional levelshift
IRS2334	64 Lead MQFP	6	600	0.2	0.35	530	530	190	11.1	10.9		X							150	Functional levelshift
	20 Lead SOICWB	6	600	0.2	0.35	530	530	190	11.1	10.9		X							150	Functional levelshift
IRS2336	44 Lead PLCC	6	600	0.2	0.35	530	530	190	8.9	8.2	EN	X		X					150	Functional levelshift
	28 Lead SOICWB	6	600	0.2	0.35	530	530	190	8.9	8.2	EN	X		X					150	Functional levelshift
6ED003L02-F2	PG-TSSOP-28	6	200	0.165	0.375	530	490	150	11.7	9.8	EN	X		X			X	X	125	Functional levelshift
6EDL04N02PR	PG-TSSOP-28	6	200	0.165	0.375	530	530	150	9	8.1	EN	X	X	X			X	X	125	Functional levelshift
IR2238	64 Lead MQFP	7	1200	0.35	0.54	550	550	76	11.2	10.2	SD	X		X		X			125	Functional levelshift

# Driver

Product	Package	Topology	Channels	Voltage class [V]	Separate logic GND	Propagation delay OC [ $\mu$ s] (min)	T <sub>j</sub> [°C] (max)	Isolation
Current sense								
IR2277	16 Lead SOICWB	Current sense	1	1200	X	2.7	125	Functional levelshift
IR22771	16 Lead SOICWB	Current sense	1	1200	X	2.7	125	Functional levelshift
IR2175	8 Lead PDIP	Current sense	1	600		1	150	Functional levelshift
	8 Lead SOIC	Current sense	1	600		1	150	Functional levelshift
IR2177	16 Lead SOICWB	Current sense	1	600	X	2.7	125	Functional levelshift
IR21771	16 Lead SOICWB	Current sense	1	600	X	2.7	125	Functional levelshift

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

# Digital motor controller (iMOTION™)

Product	Product status	Packages	Description	Moisture sensitivity level	Package	Processor type	Technology
IRMCF183M	active active	MLPQ 5X5 32L MLPQ 5X5 32L	High Performance Sensorless Motor Control IC	2	QFN32	MCE	DCIC
IRMCF171	active active	MLPQ 7X7 48L MLPQ 7X7 48L	High Performance Appliance Motor Control IC	-	LQFP48	MCE	DCIC
IRMCF143	active active	MQFP 10X10 64L MQFP 10X10 64L	High Performance Position Servo Control IC	-	LQFP64	MCE	DCIC
IRMCF188	active active	LQFP 10X10 64L LQFP 10X10 64L	High Performance Sensorless Motor Control IC	3	LQFP64	MCE	DCIC
IRMCK182M	active active	MLPQ 5X5 32L MLPQ 5X5 32L	Sensorless Motor Control IC for Appliance	-	QFN32	MCE	DCIC
IRMCK171	active active	MQFP 7X7 48L MQFP 7X7 48L	Sensorless Motor Control IC for Appliances	-	QFP48	MCE	DCIC
IRMCK172M	active	MLPQ 7X7 48L	High Performance Sensorless Motor Control IC	3	QFP48	MCE	DCIC
IRMCK099M	active active	MLPQ 5X5 32L MLPQ 5X5 32L	High Performance Sensorless Motor Control IC	2	QFN32	MCE	DCIC
IRMCF588Q	active active	LQFP 14X14 100L LQFP 14X14 100L	Dual Motor High Performance Sensorless Control IC	2	QFP100	MCE	DCIC

Bare dies

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Solid state  
relays

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Bare dies



SiC

# Silicon Carbide

Silicon Carbide (SiC) devices belong to the so-called wide band gap semiconductor group, which offers a number of attractive characteristics for high voltage power semiconductors when compared to commonly used silicon (Si). In particular, the much

higher breakdown field strength and thermal conductivity of SiC allow creating devices which outperform by far the corresponding Si ones, and enable reaching otherwise unattainable efficiency levels.

## Highlights

### CoolSiC™ 1200V SiC JFET

CoolSiC™ 1200V SiC JFET The revolutionary CoolSiC™ 1200V SiC JFET family, in combination with the proposed Direct Drive Technology, represents Infineon's leading edge solution to bring actual designs towards new and so far unattainable efficiency levels. The new SiC JFET consistently reduces the switching losses with respect to the available IGBT based silicon devices and even the conduction losses when its ohmic characteristics are fully exploited.

[www.infineon.com/coolbic](http://www.infineon.com/coolbic)



### 1200V CoolSiC™ Schottky Diode Generation 5

1200V SiC diode combined with a Si HighSpeed 3 IGBT enables simpler 2-level topologies due to its zero reverse recovery losses. It also delivers 40% lower Si IGBT turn-on losses and reduced EMI. Moreover, an improved thermal performance reduces now the junction temperature by 15% compared to a silicon based solution – increasing system reliability as well the possibility to increase output power in a given form factor.

[www.infineon.com/sic-gen5-1200v](http://www.infineon.com/sic-gen5-1200v)



### 650V CoolSiC™ Schottky Diode Generation 5

With CoolSiC™ Generation 5 Infineon presents a new leading edge technology for SiC Schottky Barrier diodes, delivering market leading efficiency at attractive cost point. Infineon's proprietary diffusion soldering process, already introduced with Generation 3, is now combined with a new, more compact design as well as latest advancements in thin wafer technology.

[www.infineon.com/sic-gen5-650v](http://www.infineon.com/sic-gen5-650v)



Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## CoolSiC™ Schottky diodes

Product	Product status	Technology	V <sub>DC</sub> min [V]	I <sub>F</sub> max [A]	V <sub>F</sub> [V]	Q <sub>C</sub> [nC]	Package	I <sub>(FSM)</sub> max [A]	I <sub>R</sub> [uA]	C <sub>T</sub> [pF]	P <sub>tot</sub> max [W]	R <sub>thJC</sub> [K/W]
D2PAK real 2pin												
IDK02G65C5	active and preferred	CoolSiC™ 5G	650.0 V	2.0 A	1.5 V	4.0 nC	D2PAK (TO-263-2)	23.0 A	0.1 uA	70.0 pF	36.0 W	2.6 K/W
IDK03G65C5	active and preferred	CoolSiC™ 5G	650.0 V	3.0 A	1.5 V	5.0 nC	D2PAK (TO-263-2)	31.0 A	0.15 uA	100.0 pF	42.0 W	2.2 K/W
IDK04G65C5	active and preferred	CoolSiC™ 5G	650.0 V	4.0 A	1.5 V	7.0 nC	D2PAK (TO-263-2)	38.0 A	0.2 uA	130.0 pF	48.0 W	1.9 K/W
IDK05G65C5	active and preferred	CoolSiC™ 5G	650.0 V	5.0 A	1.5 V	8.0 nC	D2PAK (TO-263-2)	46.0 A	0.25 uA	160.0 pF	55.0 W	1.7 K/W
IDK06G65C5	active and preferred	CoolSiC™ 5G	650.0 V	6.0 A	1.5 V	10.0 nC	D2PAK (TO-263-2)	54.0 A	0.3 uA	190.0 pF	62.0 W	1.5 K/W
IDK08G65C5	active and preferred	CoolSiC™ 5G	650.0 V	8.0 A	1.5 V	13.0 nC	D2PAK (TO-263-2)	68.0 A	0.4 uA	250.0 pF	76.0 W	1.2 K/W
IDK09G65C5	active and preferred	CoolSiC™ 5G	650.0 V	9.0 A	1.5 V	14.0 nC	D2PAK (TO-263-2)	75.0 A	0.45 uA	270.0 pF	82.0 W	1.1 K/W
IDK10G65C5	active and preferred	CoolSiC™ 5G	650.0 V	10.0 A	1.5 V	15.0 nC	D2PAK (TO-263-2)	82.0 A	0.5 uA	300.0 pF	89.0 W	1.0 K/W
IDK12G65C5	active and preferred	CoolSiC™ 5G	650.0 V	12.0 A	1.5 V	18.0 nC	D2PAK (TO-263-2)	97.0 A	0.65 uA	360.0 pF	104.0 W	0.9 K/W
DPAK (TO-252)												
IDD03SG60C	active	CoolSiC™ 3G	600.0 V	3.0 A	2.1 V	3.2 nC	DPAK (TO-252)	11.5 A	0.23 uA	60.0 pF	38.0 W	-
IDD04SG60C	active	CoolSiC™ 3G	600.0 V	4.0 A	2.1 V	4.5 nC	DPAK (TO-252)	18.0 A	0.3 uA	80.0 pF	43.0 W	-
IDD05SG60C	active	CoolSiC™ 3G	600.0 V	5.0 A	2.1 V	6.0 nC	DPAK (TO-252)	26.0 A	0.4 uA	110.0 pF	56.0 W	-
IDD06SG60C	active	CoolSiC™ 3G	600.0 V	6.0 A	2.1 V	8.0 nC	DPAK (TO-252)	32.0 A	0.5 uA	130.0 pF	71.0 W	-
IDD08SG60C	active	CoolSiC™ 3G	600.0 V	8.0 A	1.8 V	12.0 nC	DPAK (TO-252)	42.0 A	0.6 uA	240.0 pF	100.0 W	-
IDD09SG60C	active	CoolSiC™ 3G	600.0 V	9.0 A	1.8 V	15.0 nC	DPAK (TO-252)	49.0 A	0.7 uA	280.0 pF	115.0 W	-
IDD10SG60C	active	CoolSiC™ 3G	600.0 V	10.0 A	1.8 V	16.0 nC	DPAK (TO-252)	51.0 A	0.8 uA	290.0 pF	120.0 W	-
IDD12SG60C	active	CoolSiC™ 3G	600.0 V	12.0 A	1.8 V	19.0 nC	DPAK (TO-252)	59.0 A	1.0 uA	310.0 pF	125.0 W	-
DPAK real 2pin												
IDM10G120C5	active and preferred	CoolSiC™ 5G	1200.0 V	10.0 A	1.5 V	41.0 nC	DPAK (TO-252-2)	99.0 A	4.0 uA	525.0 pF	223.0 W	0.5 K/W
IDM08G120C5	active and preferred	CoolSiC™ 5G	1200.0 V	8.0 A	1.65 V	28.0 nC	DPAK (TO-252-2)	70.0 A	3.0 uA	365.0 pF	167.0 W	0.7 K/W
IDM05G120C5	active and preferred	CoolSiC™ 5G	1200.0 V	5.0 A	1.5 V	24.0 nC	DPAK (TO-252-2)	59.0 A	2.5 uA	301.0 pF	144.0 W	0.8 K/W
IDM02G120C5	active and preferred	CoolSiC™ 5G	1200.0 V	2.0 A	1.4 V	14.0 nC	DPAK (TO-252-2)	37.0 A	1.2 uA	182.0 pF	98.0 W	1.2 K/W
ThinPAK												
IDL02G65C5	active and preferred	CoolSiC™ 5G	650.0 V	2.0 A	1.5 V	4.0 nC	ThinPAK 8x8	21.0 A	0.1 uA	70.0 pF	46.0 W	2.1 K/W
IDL04G65C5	active and preferred	CoolSiC™ 5G	650.0 V	4.0 A	1.5 V	7.0 nC	ThinPAK 8x8	29.0 A	0.2 uA	130.0 pF	62.0 W	1.6 K/W
IDL06G65C5	active and preferred	CoolSiC™ 5G	650.0 V	6.0 A	1.5 V	10.0 nC	ThinPAK 8x8	36.0 A	0.3 uA	190.0 pF	78.0 W	1.2 K/W
IDL08G65C5	active and preferred	CoolSiC™ 5G	650.0 V	8.0 A	1.5 V	13.0 nC	ThinPAK 8x8	43.0 A	0.4 uA	250.0 pF	96.0 W	1.0 K/W
IDL10G65C5	active and preferred	CoolSiC™ 5G	650.0 V	10.0 A	1.5 V	15.0 nC	ThinPAK 8x8	50.0 A	0.5 uA	300.0 pF	113.0 W	0.8 K/W
IDL12G65C5	active and preferred	CoolSiC™ 5G	650.0 V	12.0 A	1.5 V	18.0 nC	ThinPAK 8x8	57.0 A	0.65 uA	360.0 pF	138.0 W	0.7 K/W

## CoolSiC™ Schottky diodes

Product	Product status	Technology	V <sub>DC</sub> min [V]	I <sub>F</sub> max [A]	V <sub>F</sub> [V]	Q <sub>C</sub> [nC]	Package	I <sub>(FSM)</sub> max [A]	I <sub>R</sub> [uA]	C <sub>T</sub> [pF]	P <sub>tot</sub> max [W]	R <sub>thJC</sub> [K/W]
TO-220 real 2pin												
IDH03SG60C	active	CoolSiC™ 3G	600.0 V	3.0 A	2.1 V	3.2 nC	TO-220 real 2pin	11.5 A	0.23 uA	60.0 pF	38.0 W	-
IDH04SG60C	active	CoolSiC™ 3G	600.0 V	4.0 A	2.1 V	4.5 nC	TO-220 real 2pin	18.0 A	0.3 uA	80.0 pF	43.0 W	-
IDH05SG60C	active	CoolSiC™ 3G	600.0 V	5.0 A	2.1 V	6.0 nC	TO-220 real 2pin	26.0 A	0.4 uA	110.0 pF	56.0 W	-
IDH06SG60C	active	CoolSiC™ 3G	600.0 V	6.0 A	2.1 V	8.0 nC	TO-220 real 2pin	32.0 A	0.5 uA	130.0 pF	71.0 W	-
IDH08SG60C	active	CoolSiC™ 3G	600.0 V	8.0 A	1.8 V	12.0 nC	TO-220 real 2pin	42.0 A	0.6 uA	240.0 pF	100.0 W	-
IDH09SG60C	active	CoolSiC™ 3G	600.0 V	9.0 A	1.8 V	15.0 nC	TO-220 real 2pin	49.0 A	0.7 uA	280.0 pF	115.0 W	-
IDH10SG60C	active	CoolSiC™ 3G	600.0 V	10.0 A	1.8 V	16.0 nC	TO-220 real 2pin	51.0 A	0.8 uA	290.0 pF	120.0 W	-
IDH12SG60C	active	CoolSiC™ 3G	600.0 V	12.0 A	1.8 V	19.0 nC	TO-220 real 2pin	59.0 A	1.0 uA	310.0 pF	125.0 W	-
IDH02G65C5	active and preferred	CoolSiC™ 5G	650.0 V	2.0 A	1.5 V	4.0 nC	TO-220 real 2pin	23.0 A	0.1 uA	70.0 pF	36.0 W	2.6 K/W
IDH03G65C5	active and preferred	CoolSiC™ 5G	650.0 V	3.0 A	1.5 V	5.0 nC	TO-220 real 2pin	31.0 A	0.2 uA	100.0 pF	42.0 W	2.2 K/W
IDH04G65C5	active and preferred	CoolSiC™ 5G	650.0 V	4.0 A	1.5 V	7.0 nC	TO-220 real 2pin	38.0 A	0.2 uA	130.0 pF	48.0 W	1.9 K/W
IDH05G65C5	active and preferred	CoolSiC™ 5G	650.0 V	5.0 A	1.5 V	8.0 nC	TO-220 real 2pin	46.0 A	0.3 uA	160.0 pF	55.0 W	1.7 K/W
IDH06G65C5	active and preferred	CoolSiC™ 5G	650.0 V	6.0 A	1.5 V	10.0 nC	TO-220 real 2pin	54.0 A	0.3 uA	190.0 pF	62.0 W	1.5 K/W
IDH08G65C5	active and preferred	CoolSiC™ 5G	650.0 V	8.0 A	1.5 V	13.0 nC	TO-220 real 2pin	68.0 A	0.4 uA	250.0 pF	76.0 W	1.2 K/W
IDH10G65C5	active and preferred	CoolSiC™ 5G	650.0 V	10.0 A	1.5 V	15.0 nC	TO-220 real 2pin	82.0 A	0.5 uA	300.0 pF	89.0 W	1.0 K/W
IDH12G65C5	active and preferred	CoolSiC™ 5G	650.0 V	12.0 A	1.5 V	18.0 nC	TO-220 real 2pin	97.0 A	0.65 uA	360.0 pF	104.0 W	0.9 K/W
IDH16G65C5	active and preferred	CoolSiC™ 5G	650.0 V	16.0 A	1.5 V	23.0 nC	TO-220 real 2pin	124.0 A	0.85 uA	470.0 pF	129.0 W	0.7 K/W
IDH20G65C5	active and preferred	CoolSiC™ 5G	650.0 V	20.0 A	1.5 V	29.0 nC	TO-220 real 2pin	142.0 A	1.1 uA	590.0 pF	157.0 W	0.6 K/W
IDH09G65C5	active and preferred	CoolSiC™ 5G	650.0 V	9.0 A	1.5 V	14.0 nC	TO-220 real 2pin	75.0 A	0.45 uA	270.0 pF	82.0 W	1.1 K/W
IDH10G120C5	active and preferred	CoolSiC™ 5G	1200.0 V	10.0 A	1.5 V	41.0 nC	TO-220 real 2pin	99.0 A	4.0 uA	525.0 pF	165.0 W	0.7 K/W
IDH05G120C5	active and preferred	CoolSiC™ 5G	1200.0 V	5.0 A	1.5 V	24.0 nC	TO-220 real 2pin	59.0 A	2.5 uA	301.0 pF	109.0 W	1.06 K/W
IDH08G120C5	active and preferred	CoolSiC™ 5G	1200.0 V	8.0 A	1.65 V	28.0 nC	TO-220 real 2pin	70.0 A	3.0 uA	365.0 pF	126.0 W	0.92 K/W
IDH02G120C5	active and preferred	CoolSiC™ 5G	1200.0 V	2.0 A	1.4 V	14.0 nC	TO-220 real 2pin	37.0 A	1.2 uA	182.0 pF	75.0 W	1.54 K/W
IDH20G120C5	active and preferred	CoolSiC™ 5G	1200.0 V	20.0 A	1.5 V	82.0 nC	TO-220 real 2pin	198.0 A	8.5 uA	1050.0 pF	330.0 W	0.35 K/W
IDH16G120C5	active and preferred	CoolSiC™ 5G	1200.0 V	16.0 A	1.65 V	57.0 nC	TO-220 real 2pin	140.0 A	5.5 uA	730.0 pF	250.0 W	0.46 K/W

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## CoolSiC™ Schottky diodes

Product	Product status	Technology	V <sub>DC</sub> min [V]	I <sub>F</sub> max [A]	V <sub>F</sub> [V]	Q <sub>C</sub> [nC]	Package	I <sub>(FSM)</sub> max [A]	I <sub>R</sub> [uA]	C <sub>T</sub> [pF]	P <sub>tot</sub> max [W]	R <sub>thJC</sub> [K/W]
TO-247												
IDW10G65C5	active and preferred	CoolSiC™ 5G	650.0 V	10.0 A	1.5 V	15.0 nC	TO-247	58.0 A	0.5 uA	300.0 pF	65.0 W	1.8 K/W
IDW12G65C5	active and preferred	CoolSiC™ 5G	650.0 V	12.0 A	1.5 V	18.0 nC	TO-247	71.0 A	0.6 uA	360.0 pF	76.0 W	1.5 K/W
IDW16G65C5	active and preferred	CoolSiC™ 5G	650.0 V	16.0 A	1.5 V	23.0 nC	TO-247	95.0 A	0.8 uA	470.0 pF	94.0 W	1.2 K/W
IDW20G65C5	active and preferred	CoolSiC™ 5G	650.0 V	20.0 A	1.5 V	29.0 nC	TO-247	103.0 A	1.1 uA	590.0 pF	112.0 W	1.0 K/W
IDW30G65C5	active and preferred	CoolSiC™ 5G	650.0 V	30.0 A	1.5 V	42.0 nC	TO-247	165.0 A	1.6 uA	860.0 pF	150.0 W	0.8 K/W
IDW40G65C5	active and preferred	CoolSiC™ 5G	650.0 V	40.0 A	1.5 V	55.0 nC	TO-247	182.0 A	2.2 uA	1140.0 pF	183.0 W	0.6 K/W
IDW10G120C5B	active and preferred	CoolSiC™ 5G	1200.0 V	10.0 A	1.4 V	57.0 nC	TO-247	140.0 A	6.0 uA	730.0 pF	148.0 W	0.8 K/W
IDW15G120C5B	active and preferred	CoolSiC™ 5G	1200.0 V	15.0 A	1.4 V	82.0 nC	TO-247	170.0 A	8.0 uA	1050.0 pF	200.0 W	0.6 K/W
IDW20G120C5B	active and preferred	CoolSiC™ 5G	1200.0 V	20.0 A	1.4 V	106.0 nC	TO-247	190.0 A	12.0 uA	1368.0 pF	250.0 W	0.45 K/W
IDW30G120C5B	active and preferred	CoolSiC™ 5G	1200.0 V	30.0 A	1.4 V	154.0 nC	TO-247	240.0 A	17.0 uA	1980.0 pF	332.0 W	0.35 K/W
IDW40G120C5B	active and preferred	CoolSiC™ 5G	1200.0 V	40.0 A	1.4 V	202.0 nC	TO-247	290.0 A	23.0 uA	2592.0 pF	402.0 W	0.3 K/W
IDW40G65C5B	active and preferred	CoolSiC™ 5G	650.0 V	20.0 A	1.5 V	29.0 nC	TO-247	103.0 A	1.1 uA	590.0 pF	112.0 W	1.0 K/W
IDW20G65C5B	active and preferred	CoolSiC™ 5G	650.0 V	10.0 A	1.5 V	15.0 nC	TO-247	58.0 A	0.5 uA	300.0 pF	130.0 W	1.8 K/W
IDW24G65C5B	active and preferred	CoolSiC™ 5G	650.0 V	12.0 A	1.5 V	18.0 nC	TO-247	71.0 A	0.6 uA	360.0 pF	152.0 W	1.5 K/W
IDW32G65C5B	active and preferred	CoolSiC™ 5G	650.0 V	16.0 A	1.5 V	23.0 nC	TO-247	95.0 A	0.8 uA	470.0 pF	188.0 W	1.2 K/W

## CoolSiC™ 1200 V SiC JFET &amp; direct drive technology

Product	Product status	Packages	V <sub>DS</sub> max [V]	R <sub>DS(on)</sub> (multiple)	I <sub>D</sub> max [A]	P <sub>tot</sub> max [W]	I <sub>D</sub> puls max [A]	V <sub>GS(th)</sub>	V <sub>GS(th)</sub> min [V]	Q <sub>g</sub>	R <sub>th</sub>	Operating temperature min [°C]	Mounting	Q <sub>rr</sub> [nC]	I <sub>rrm</sub> [A]	E <sub>oss(typ)</sub> [uJ]	C <sub>ol(er)</sub> [pF]	C <sub>ol(tr)</sub> [pF]
TO247																		
IJW120R100T1*	active and preferred	PG-TO247-3	1200.0	0.1	26.0	190.0	78.0	-12	-15.0	72	0.78	-55.0	THT	118.0	11.0	28.0	89.0	112.0
IJW120R070T1*	active and preferred	PG-TO247-3	1200.0	0.07	35.0	238.0	114.0	-12	-15.0	92	0.63	-55.0	THT	120.0	15.0	38.0	120.0	152.0

\* not recommended for new designs

## SiC modules

Product	Product status	Voltage [V]	Configuration	$I_{C(nom)}$ [A]	Technology	$V_{CEsat}$ [V]	$V_F$ [V]	Housing
FF600R12IS4F	active and preferred	1200	Dual	600	IGBT2 Fast	3.2	1.6	PrimePACK™ 2
DF200R12W1H3F_B11	active and preferred	1200	Chopper	200	HighSpeed 3	1.3	1.6	EasyPACK 1B
DF160R12W2H3F_B11	active and preferred	1200	Chopper	160	HighSpeed 3	1.55	1.6	EasyPACK 2B
DF80R12W2H3F_B11	active and preferred	1200	Chopper	80	HighSpeed 3	1.55	1.6	EasyPACK 2B
DF75R12W1H4F_B11	active and preferred	1200	Chopper	75	HighSpeed 2	2.1	1.6	EasyPACK 1B
F4-75R07W2H3_B51	active and preferred	650	Fourpack	75	HighSpeed 3	1.35	1.45	EasyPACK 2B
F4-50R07W2H3_B51	active and preferred	650	Fourpack	50	HighSpeed 3	1.35	1.6	EasyPACK 2B
FS3L50R07W2H3F_B11	active and preferred	650	3-level	50	HighSpeed 3	1.45	1.6	EasyPACK 2B
FS3L30R07W2H3F_B11	active and preferred	650	3-level	30	HighSpeed 3	1.5	1.6	EasyPACK 2B

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays





## Presspacks

## Thyristor / diode Presspacks

The wide portfolio consists of standard thyristors and diodes with epoxy disc case, high power thyristors and diodes with ceramic disc case. Bipolar Power Semiconductors are applied in the most varied fields of application in a power range of just a few kilowatts up to several gig watts.

All discs are assembled in high reliable, robust and hermetic sealed ceramic housings in order to avoid mechanical damages as well as almost any negative environmental influences as e.g. high humidity.

## Highlights

**Silicon controlled rectifiers for medium-voltage soft starters**

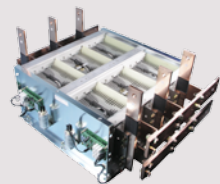
The 6.5 kV thyristor disc series consists of four robust and powerful disc device types developed and designed for the special requirements of medium-voltage soft starter applications. All devices are designed for high surge current capability.

[www.infineon.com/SCRs](http://www.infineon.com/SCRs)

**Discover our Soft Recovery Freewheeling Diodes**

Our soft recovery diode disc series consists of robust and powerful disc device types developed for the special requirements of medium-voltage IGCT inverter applications. All devices are designed for high surge current capability.

[www.infineon.com/softrecovery](http://www.infineon.com/softrecovery)

**BIP-Stacks – optimized solutions directly from Infineon Bipolar**

For high power applications we offer a stack portfolio which includes modules- and discs -Assemblies & -Stacks with up to several 10 kA and up to 40 kV. Benefit from over 40 years of experience and order your stacks directly from leading manufacturer of power semiconductors.

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## Fast rectifier diodes

Product	$V_{RRM}$ [V]	$I_{FAVM}/T_c$ [A/°C] (@180° el sin)	$I_{FSM}$ [A] (@10ms, $T_{vj\ max}$ )	$\int I_2 dt$ [A <sup>2</sup> · 10 <sup>3</sup> ] (@10ms, $T_{vj\ max}$ )	$V_F/I_F$ [V/kA] (@ $T_{vj\ max}$ )	$V_{TO}$ [V] (@ $T_{vj\ max}$ ) max	$r_T$ [mΩ] (@ $T_{vj\ max}$ ) max	$I_{RM}$ [A] (@ $I_F = I_{FAVM}$ , $di/dt = 50$ A/μs) max	$R_{thJC}$ [K/kW] (@180° el sin) max	$T_{vj}$ [°C] max	Clamping force [kn] min	Clamping force [kn] max	Housing	Configuration
Fast rectifier diodes up to 1400V														
D650S14T QR	1400.0	650/96	10100.0	510.0	2.25/2.7	1.0	0.45	122.0	48.0	150.0	6.0	14.5	Disc dia 58mm height 26mm / Ceramic	Fast rectifier diodes
D650S14T	1400.0	650/96	10100.0	510.0	2.25/2.7	1.0	0.45	122.0	48.0	150.0	6.0	14.5	Disc dia 58mm height 26mm / Ceramic	Fast rectifier diodes
D650S12T	1200.0	650/96	10100.0	510.0	2.25/2.7	1.0	0.45	122.0	48.0	150.0	6.0	14.5	Disc dia 58mm height 26mm / Ceramic	Fast rectifier diodes
D450S20T	2000.0	443/100	4600.0	106.0	2.25/1.2	1.0	0.9	160.0	57.0	150.0	3.2	7.6	Disc dia 42mm height 14mm / Ceramic	Fast rectifier diodes
D450S16T	1600.0	443/100	4600.0	106.0	2.25/1.2	1.0	0.9	160.0	57.0	150.0	3.2	7.6	Disc dia 42mm height 14mm / Ceramic	Fast rectifier diodes
D690S26T	2600.0	690/100	11500.0	661.0	2.7/3.0	1.0	0.5	230.0	39.0	150.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Fast rectifier diodes
D690S24T	2400.0	690/100	11500.0	661.0	2.7/3.0	1.0	0.5	230.0	39.0	150.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Fast rectifier diodes
D690S22T	2200.0	690/100	11500.0	661.0	2.7/3.0	1.0	0.5	230.0	39.0	150.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Fast rectifier diodes
D690S20T	2000.0	690/100	11500.0	661.0	3.7/3.0	1.0	0.5	230.0	39.0	150.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Fast rectifier diodes
D291S45T	4500.0	290/85	4500.0	100.0	4.15/1.2	1.9	1.76	500.0	40.0	125.0	9.0	13.0	Disc dia 58mm height 26mm / Ceramic	Fast rectifier diodes
D371S45T	4500.0	330/85	6000.0	180.0	3.9/1.2	2.0	1.49	500.0	18.0	125.0	10.0	16.0	Disc dia 58mm height 26mm / Ceramic	Fast rectifier diodes
GTO - freewheeling diodes														
D721S45T	4500.0	720/85	15000.0	1300.0	3.5/2.5	1.7	0.69	600.0	18.0	125.0	15.0	36.0	Disc dia 75mm height 26mm / Ceramic	GTO - freewheeling diodes
D721S35T VF	3500.0	720/85	15000.0	1300.0	3.5/2.5	1.7	0.69	600.0	18.0	125.0	15.0	36.0	Disc dia 75mm height 26mm / Ceramic	GTO - freewheeling diodes
D921S45T	4500.0	1380/85	28000.0	2650.0	2.6/2.5	1.4	0.48	800.0	12.5	140.0	27.0	45.0	Disc dia 100mm height 26mm / Ceramic	GTO - freewheeling diodes
D1251S45T	4500.0	1310/85	18000.0	1620.0	2.5/2.5	1.25	0.45	800.0	14.0	140.0	15.0	36.0	Disc dia 76mm height 14mm / Ceramic	GTO - freewheeling diodes
D1381S45T	4500.0	1380/85	28000.0	5120.0	2.6/2.5	1.4	0.48	700.0	12.5	140.0	27.0	35.0	Disc dia 100mm height 26mm / Ceramic	GTO - freewheeling diodes
D1461S45T	4500.0	1460/85	28000.0	5120.0	2.5/2.5	1.43	0.38	840.0	12.5	140.0	27.0	45.0	Disc dia 100mm height 26mm / Ceramic	GTO - freewheeling diodes

All here shown Presspacks are active and preferred.

# Rectifier diodes

Product	$V_{RRM}$ [V]	$I_{FVM}/T_c$ [A/°C] (@180° el sin)	$I_{FSM}$ [A] (@10ms, $T_{vj\ max}$ )	$\int I^2 dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj\ max}$ )	$V^2/I^2$ [V/kA] (@ $T_{vj\ max}$ )	$V_{TO}$ [V] (@ $T_{vj\ max}$ )	$r_f$ [mΩ] (@ $T_{vj\ max}$ )	$R_{thJC}$ [K/kW] (@180° el sin) max	$T_{vj}$ [°C] max	Clamping force [kn] min	Clamping force [kn] max	Housing	Configuration
Ceramic discs up to 800V													
D650N08T	800.0	651/100	510.0	130.0	1.44/1.35	0.7	0.51	81.0	180.0	2.6	4.6	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D650N06T	600.0	651/100	510.0	130.0	1.44/1.35	0.7	0.51	81.0	180.0	2.6	4.6	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D650N04T	400.0	651/100	510.0	130.0	1.44/1.35	0.7	0.51	81.0	180.0	2.6	4.6	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D650N02T	200.0	651/100	510.0	130.0	1.44/1.35	0.7	0.51	81.0	180.0	2.6	4.6	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D970N08T	800.0	972/100	8800.0	387.0	1.45/2.3	0.7	0.31	57.0	180.0	3.9	7.6	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D970N06T	600.0	972/100	8800.0	387.0	1.45/2.3	0.7	0.31	57.0	180.0	3.9	7.6	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D970N04T	400.0	972/100	8800.0	387.0	1.45/2.3	0.7	0.31	57.0	180.0	3.9	7.6	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D970N02T	200.0	972/100	8800.0	387.0	1.45/2.3	0.7	0.31	57.0	180.0	3.9	7.6	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D2450N07T	700.0	2452/100	4000.0	4061.0	1.5/7.7	0.7	0.1	25.3	180.0	12.0	24.0	Disc dia 58mm height 14mm / Ceramic	Rectifier diodes
D2450N06T	600.0	2452/100	4000.0	4061.0	1.5/7.7	0.7	0.1	25.3	180.0	12.0	24.0	Disc dia 58mm height 14mm / Ceramic	Rectifier diodes
D2450N04T	400.0	2452/100	4000.0	4061.0	1.5/7.7	0.7	0.1	25.3	180.0	12.0	24.0	Disc dia 58mm height 14mm / Ceramic	Rectifier diodes
D2450N02T	200.0	2452/100	4000.0	4061.0	1.5/7.7	0.7	0.1	25.3	180.0	12.0	24.0	Disc dia 58mm height 14mm / Ceramic	Rectifier diodes
D5810N06T VF	600.0	5800/58	70000.0	24500.0	1.47/18.0	0.7	0.04	17.0	180.0	30.0	60.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D5810N04T VF	400.0	5800/58	70000.0	24500.0	1.47/18.0	0.7	0.04	17.0	180.0	30.0	60.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D5810N02T VF	200.0	5800/58	70000.0	24500.0	1.47/18.0	0.7	0.04	17.0	180.0	30.0	60.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D8320N06T VF	600.0	8320/56	95000.0	45000.0	0.94/10.0	0.7	0.02	12.5	180.0	40.0	80.0	Disc dia 100mm height 26mm / Ceramic	Rectifier diodes
D8320N04T VF	400.0	8320/56	95000.0	45000.0	0.94/10.0	0.7	0.02	12.5	180.0	40.0	80.0	Disc dia 100mm height 26mm / Ceramic	Rectifier diodes
D8320N02T VF	200.0	8320/56	95000.0	45000.0	0.94/10.0	0.7	0.02	12.5	180.0	40.0	80.0	Disc dia 100mm height 26mm / Ceramic	Rectifier diodes
Ceramic discs up to 1800V													
D1050N18T	1800.0	1050/130	18500.0	1710.0	1.76/5.0	0.81	0.17	38.0	180.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D1050N16T	1600.0	1050/130	18500.0	1710.0	1.76/5.0	0.81	0.17	38.0	180.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D1050N14T	1400.0	1050/130	18500.0	1710.0	1.76/5.0	0.81	0.17	38.0	180.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D1050N12T	1200.0	1050/130	18500.0	1710.0	1.76/5.0	0.81	0.17	38.0	180.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D1230N18T	1800.0	1234/100	11800.0	696.0	1.77/3.2	0.81	0.28	39.0	180.0	6.0	15.0	Disc dia 48mm height 14mm / Ceramic	Rectifier diodes
D1230N16T	1600.0	1234/100	11800.0	696.0	1.77/3.2	0.81	0.28	39.0	180.0	6.0	15.0	Disc dia 48mm height 14mm / Ceramic	Rectifier diodes
D1230N14T	1400.0	1234/100	11800.0	696.0	1.77/3.2	0.81	0.28	39.0	180.0	6.0	15.0	Disc dia 48mm height 14mm / Ceramic	Rectifier diodes
D1230N12T	1200.0	1234/100	11800.0	696.0	1.77/3.2	0.81	0.28	39.0	180.0	6.0	15.0	Disc dia 48mm height 14mm / Ceramic	Rectifier diodes

All here shown Presspacks are active and preferred.

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## Rectifier diodes

Product	$V_{RRM}$ [V]	$I_{FVM}/T_c$ [A/°C] (@180° el sin)	$I_{FSM}$ [A] (@10ms, $T_{vj max}$ )	$\int I^2 dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj max}$ )	$V_f/I_f$ [V/kA] (@ $T_{vj max}$ )	$V_{TO}$ [V] (@ $T_{vj max}$ )	$r_f$ [mΩ] (@ $T_{vj max}$ )	$R_{thJC}$ [K/kW] (@180° el sin) max	$T_{vj}$ [°C] max	Clamping force [kn] min	Clamping force [kn] max	Housing	Configuration
Ceramic discs up to 3000V													
D770N20T	2000.0	767/100	6000.0	180.0	1.76/1.6	0.81	0.54	57.0	180.0	3.2	7.6	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D770N18T	1800.0	767/100	6000.0	180.0	1.76/1.6	0.81	0.54	57.0	180.0	3.2	7.6	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D770N16T	1600.0	767/100	6000.0	180.0	1.76/1.6	0.81	0.54	57.0	180.0	3.2	7.6	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D770N14T	1400.0	767/100	6000.0	180.0	1.76/1.6	0.81	0.54	57.0	180.0	3.2	7.6	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D770N12T	1200.0	767/100	6000.0	180.0	1.76/1.6	0.81	0.54	57.0	180.0	3.2	7.6	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D950N22T	2200.0	950/100	10250.0	525.0	2.1/2.8	0.7	0.5	45.0	180.0	6.0	12.0	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D950N18T	1800.0	950/100	10250.0	525.0	2.1/2.8	0.7	0.5	45.0	180.0	6.0	12.0	Disc dia 42mm height 14mm / Ceramic	Rectifier diodes
D820N28T	2800.0	818/100	9000.0	405.0	2.15/2.4	0.83	0.52	39.0	160.0	6.0	15.0	Disc dia 48mm height 14mm / Ceramic	Rectifier diodes
D820N26T	2600.0	818/100	9000.0	405.0	2.15/2.4	0.83	0.52	39.0	160.0	6.0	15.0	Disc dia 48mm height 14mm / Ceramic	Rectifier diodes
D820N24T	2400.0	818/100	9000.0	405.0	2.15/2.4	0.83	0.52	39.0	160.0	6.0	15.0	Disc dia 48mm height 14mm / Ceramic	Rectifier diodes
D820N22T	2200.0	818/100	9000.0	405.0	2.15/2.4	0.83	0.52	39.0	160.0	6.0	15.0	Disc dia 48mm height 14mm / Ceramic	Rectifier diodes
D820N20T	2000.0	818/100	9000.0	405.0	2.15/2.4	0.83	0.52	39.0	160.0	6.0	15.0	Disc dia 48mm height 14mm / Ceramic	Rectifier diodes
D1030N26T	2600.0	1030/100	14500.0	1051.0	2.05/4.0	0.82	0.28	38.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D1030N24T	2400.0	1030/100	14500.0	1051.0	2.05/4.0	0.82	0.28	38.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D1030N22T	2200.0	1030/100	14500.0	1051.0	2.05/4.0	0.82	0.28	38.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D2200N24T VF	2400.0	2200/100	35000.0	6125.0	1.17/2.5	0.83	0.15	17.0	160.0	24.0	60.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D2200N22T VF	2200.0	2200/100	35000.0	6125.0	1.17/2.5	0.83	0.15	17.0	160.0	24.0	60.0	Disc dia 74mm height 26mm / Ceramic	Rectifier diodes
D2200N20T VF	2000.0	2200/100	35000.0	6125.0	1.17/2.5	0.83	0.15	17.0	160.0	24.0	60.0	Disc dia 74mm height 26mm / Ceramic	Rectifier diodes
D2520N22T VF	2200.0	2520/100	35000.0	6125.0	1.57/10.2	0.73	0.1	22.0	175.0	15.0	24.0	Disc dia 76mm height 26mm / Ceramic	Rectifier diodes
D2650N24T VF	2400.0	3520 / 100	41000.0	5611.0	2.25/9.0	0.82	0.15	16.9	180.0	24.0	60.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D4201N22T	2200.0	4830/100	73500.0	27000.0	0.94/4.0	0.67	0.08	9.2	160.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Rectifier diodes
D4201N20T	2000.0	4830/100	73500.0	27000.0	0.94/4.0	0.67	0.08	9.2	160.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Rectifier diodes
D4810N28T VF	2800.0	4810/100	60000.0	18000.0	1.45/10.0	0.83	0.06	8.0	160.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Rectifier diodes
D4810N24T VF	2400.0	4810/100	60000.0	18000.0	1.45/10.0	0.83	0.06	8.0	160.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Rectifier diodes
D4810N22T VF	2200.0	4810/100	60000.0	18000.0	1.45/10.0	0.83	0.06	8.0	160.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Rectifier diodes
D4810N20T VF	2000.0	4810/100	60000.0	18000.0	1.45/10.0	0.83	0.06	8.0	160.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Rectifier diodes

All here shown Presspacks are active and preferred.

# Rectifier diodes

Product	$V_{RRM}$ [V]	$I_{FARM}/T_c$ [A/°C] (@180° el sin)	$I_{FSM}$ [A] (@10ms, $T_{vj max}$ )	$\int I^2 dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj max}$ )	$V^2/I^2$ [V/kA] (@ $T_{vj max}$ )	$V_{TO}$ [V] (@ $T_{vj max}$ )	$r_f$ [mΩ] (@ $T_{vj max}$ )	$R_{thJC}$ [K/kW] (@180° el sin) max	$T_{vj}$ [°C] max	Clamping force [kn] min	Clamping force [kn] max	Housing	Configuration
Ceramic discs up to 5000V													
D270N36T	3600.0	270/100	4000.0	80.0	2.6/1.05	0.86	1.54	98.0	150.0	3.2	7.6	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D740N48T	4800.0	750/100	11000.0	605.0	2.94/3.0	0.85	0.65	39.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D740N46T	4600.0	750/100	11000.0	605.0	2.94/3.0	0.85	0.65	39.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D740N44T	4400.0	750/100	11000.0	605.0	2.94/3.0	0.85	0.65	39.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D740N42T	4200.0	750/100	11000.0	605.0	2.94/3.0	0.85	0.65	39.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D740N40T	4000.0	750/100	11000.0	605.0	2.94/3.0	0.85	0.65	39.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D740N36T	3600.0	750/100	11000.0	605.0	2.94/3.0	0.85	0.65	39.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D850N40T	4000.0	850/100	12800.0	819.0	2.62/3.5	0.84	0.49	38.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D850N36T	3600.0	850/100	12800.0	819.0	2.62/3.5	0.84	0.49	38.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D850N34T	3400.0	850/100	12800.0	819.0	2.62/3.5	0.84	0.49	38.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D850N32T	3200.0	850/100	12800.0	819.0	2.62/3.5	0.84	0.49	38.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D850N30T	3000.0	850/100	12800.0	819.0	2.62/3.5	0.84	0.49	38.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D850N28T	2800.0	850/100	12800.0	819.0	2.62/3.5	0.84	0.49	38.0	160.0	10.0	24.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D1800N48T VF	4800.0	1800/100	27500.0	3781.0	2.82/7.4	0.85	0.25	16.9	160.0	24.0	60.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D1800N46T VF	4600.0	1800/100	27500.0	3781.0	2.82/7.4	0.85	0.25	16.9	160.0	24.0	60.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D1800N44T VF	4400.0	1800/100	27500.0	3781.0	2.82/7.4	0.85	0.25	16.9	160.0	24.0	60.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D1800N43T VF	4300.0	1800/100	27500.0	3781.0	2.82/7.4	0.85	0.25	16.9	160.0	24.0	60.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D1800N42T VF	4200.0	1800/100	27500.0	3781.0	2.82/7.4	0.85	0.25	16.9	160.0	24.0	60.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D1800N40T VF	4000.0	1800/100	27500.0	3781.0	2.82/7.4	0.85	0.25	16.9	160.0	24.0	60.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D1800N36T VF	3600.0	1800/100	27500.0	3781.0	2.82/7.4	0.85	0.25	16.9	160.0	24.0	60.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D2201N45T	4500.0	2320/100	38000.0	7220.0	1.17/2.5	0.69	0.206	11.2	140.0	27.0	45.0	Disc dia 100mm height 26mm / Ceramic	Rectifier diodes
D3501N42T	4200.0	3690/100	56000.0	15700.0	1.2/4.0	0.73	0.13	9.2	160.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Rectifier diodes
D3501N40T PR	4000.0	3690/100	56000.0	15700.0	1.2/4.0	0.73	0.13	9.2	160.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Rectifier diodes
D3501N36T	3600.0	3690/100	56000.0	15700.0	1.2/4.0	0.73	0.13	9.2	160.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Rectifier diodes
D6001N50T	5000.0	6070/100	110000.0	60500.0	1.15/6.0	0.8	0.09	4.6	160.0	63.0	91.0	Disc dia 150mm height 26mm / Ceramic	Rectifier diodes

All here shown Presspacks are active and preferred.

- Bare dies
- Discrete
- IGBT modules
- IPMs
- Stacks & boards
- Driver & controller
- SiC
- Presspacks
- SCR / diode modules
- Solid state relays

## Rectifier diodes

Product	$V_{RRM}$ [V]	$I_{FARM}/T_c$ [A/°C] (@180° el sin)	$I_{FSM}$ [A] (@10ms, $T_{vj max}$ )	$\int I^2 dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj max}$ )	$V^2/I^2$ [V/kA] (@ $T_{vj max}$ )	$V_{TO}$ [V] (@ $T_{vj max}$ )	$r_f$ [mΩ] (@ $T_{vj max}$ )	$R_{thJC}$ [K/kW] (@180° el sin) max	$T_{vj}$ [°C] max	Clamping force [kn] min	Clamping force [kn] max	Housing	Configuration
Ceramic discs up to 10000V													
D471N90T	9000.0	565/100	10000.0	500.0	3.0/1.2	1.04	1.78	31.5	160.0	10.0	16.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D471N85T	8500.0	565/100	10000.0	500.0	3.0/1.2	1.04	1.78	31.5	160.0	10.0	16.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D471N80T	8000.0	565/100	10000.0	500.0	3.0/1.2	1.04	1.78	31.5	160.0	10.0	16.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D711N68T	6800.0	790/100	10500.0	550.0	1.77/1.2	0.84	0.87	31.5	160.0	10.0	16.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D711N65T	6500.0	790/100	10500.0	550.0	1.77/1.2	0.84	0.87	31.5	160.0	10.0	16.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D711N60T	6000.0	790/100	10500.0	550.0	1.77/1.2	0.84	0.87	31.5	160.0	10.0	16.0	Disc dia 58mm height 26mm / Ceramic	Rectifier diodes
D1481N68T VF	6800.0	1650/100	24500.0	3000.0	1.8/2.5	0.75	0.42	15.8	160.0	15.0	36.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D1481N65T	6500.0	1650/100	24500.0	3000.0	1.8/2.5	0.75	0.42	15.8	160.0	15.0	36.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D1481N62T	6200.0	1650/100	24500.0	3000.0	1.8/2.5	0.75	0.42	15.8	160.0	15.0	36.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D1481N60T	6000.0	1650/100	24500.0	3000.0	1.8/2.5	0.75	0.42	15.8	160.0	15.0	36.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D1481N58T	5800.0	1650/100	24500.0	3000.0	1.8/2.5	0.75	0.42	15.8	160.0	15.0	36.0	Disc dia 75mm height 26mm / Ceramic	Rectifier diodes
D3001N68T	6800.0	2900/100	53000.0	14040.0	1.8/4.0	0.84	0.22	9.2	160.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Rectifier diodes
D3001N65T	6500.0	2900/100	53000.0	14040.0	1.8/4.0	0.84	0.22	9.2	160.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Rectifier diodes
D3001N60T PR	6000.0	2900/100	53000.0	14040.0	1.8/4.0	0.84	0.22	9.2	160.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Rectifier diodes
D3001N58T	5800.0	2900/100	53000.0	14040.0	1.8/4.0	0.84	0.22	9.2	160.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Rectifier diodes
D3041N68T	6800.0	3040/100	53000.0	14040.0	1.7/4.0	0.84	0.22	8.55	160.0	36.0	52.0	Disc dia 120mm height 26mm / Ceramic	Rectifier diodes
D3041N65T	6500.0	3040/100	53000.0	14040.0	1.7/4.0	0.84	0.22	8.55	160.0	36.0	52.0	Disc dia 120mm height 26mm / Ceramic	Rectifier diodes
D3041N58T	5800.0	3040/100	53000.0	14040.0	1.7/4.0	0.84	0.22	8.55	160.0	36.0	52.0	Disc dia 120mm height 26mm / Ceramic	Rectifier diodes
D2601N90T	9000.0	2240/100	50000.0	12500.0	2.6/4.0	0.94	0.41	8.55	160.0	36.0	52.0	Disc dia 120mm height 26mm / Ceramic	Rectifier diodes
D2601N85T	8500.0	2240/100	50000.0	12500.0	2.6/4.0	0.94	0.41	8.55	160.0	36.0	52.0	Disc dia 120mm height 26mm / Ceramic	Rectifier diodes
D2601NH90T	9000.0	1440/85	22000.0	12500.0	2.6/4.0	0.94	0.41	8.55	160.0	36.0	52.0	Disc dia 120mm height 26mm / Ceramic	Pulse Power Diode

All here shown Presspacks are active and preferred.

# IGCT/IGBT – freewheeling diodes

Product	$V_{RRM}$ [V]	$V_R(D)$ [kV] (@TC = 25°)	$I_{FAVM}/T_C$ [A/°C] (@180° el sin)	$I_{FSM}$ [A] (@10ms, $T_{vj\ max}$ )	$\int I^2 dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj\ max}$ )	$V_F/I_F$ [V/kA] (@ $T_{vj\ max}$ )	$V_{TO}$ [V] (@ $T_{vj\ max}$ )	$r_T$ [mΩ] (@ $T_{vj\ max}$ )	$Q_r$ [mAs] (@di/dt = 1000 A/μs, $I_{FM} = 2.5$ kA, $T_{vj\ max}$ ) max	$I_{RM}$ [A] (@di/dt = 1000 A/μs, IFM = 2.5 kA, $T_{vj\ max}$ ) max	$R_{thJC}$ [K/kW] (@DC) max	$T_{vj}$ [°C] max	Clamping force [kn] min	Clamping force [kn] max	Configuration	Housing
D931SH65T	6500.0	3.2	940/85	16000.0	1280.0	5.6/2.5	1.99	1.44	3.5	1300.0	11.1	140.0	27.0	45.0	IGCT/IGBT - freewheeling diodes	Disc Dia 100mm height 26mm / Ceramic
D1031SH45T	4500.0	2.8	1120/85	23000.0	2645.0	4.2/2.5	1.78	0.968	3.5	1500.0	10.0	140.0	27.0	45.0	IGCT/IGBT - freewheeling diodes	Disc Dia 100mm height 26mm / Ceramic
D1131SH65T	6500.0	3.2	1100/85	22000.0	-	4.2/2.5	2.19	1.364	3.5	1200.0	7.5	140.0	36.0	52.0	IGCT/IGBT - freewheeling diodes	Disc Dia 120mm height 26mm / Ceramic
D1331SH45T	4500.0	2.8	1310/85	28000.0	1530.0	5.6/2.5	1.83	0.948	3.5	1500.0	7.5	140.0	36.0	52.0	IGCT/IGBT - freewheeling diodes	Disc Dia 120mm height 26mm / Ceramic
D1951SH65T	6500.0	3.2	1920/85	44000.0	9680.0	4.0/2.5	1.77	0.892	5.0	1800.0	6.4	140.0	63.0	91.0	IGCT/IGBT - freewheeling diodes	Disc Dia 120mm height 26mm / Ceramic
D1961SH45T	4500.0	2.8	1830/85	40000.0	8000.0	2.5/2.5	1.25	0.5	12.0	2250.0	7.5	140.0	36.0	52.0	IGCT/IGBT - freewheeling diodes	Disc Dia 120mm height 26mm / Ceramic

All here shown Presspacks are active and preferred.

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

# Thyristor Presspacks

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{TAVM}/T_c$ [A/°C] (@180° el sin)	$I_{TSM}$ [A] (@10ms, $T_{vj\ max}$ )	$\int I^2 dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj\ max}$ )	$V_T/I_T$ [V/kA] (@ $T_{vj\ max}$ )	$V_{TO}$ [V] (@ $T_{vj\ max}$ ) max	$r_T$ [mΩ] (@ $T_{vj\ max}$ ) max	$t_q$ [μs]	$R_{thJC}$ [K/kW] (@180° el sin) max	$T_{vj}$ [°C] max	Clamping force [kn] min	Clamping force [kn] max	Housing	Configuration
Ceramic discs up to 800V														
T580N06TOF	600.0	568/85	5500.0	151.0	1.63/1.5	1.0	0.4	200.0	62.0	140.0	3.0	6.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T580N04TOF	400.0	568/85	5500.0	151.0	1.63/1.5	1.0	0.4	200.0	62.0	140.0	3.0	6.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T580N02TOF	200.0	568/85	5500.0	151.0	1.63/1.5	1.0	0.4	200.0	62.0	140.0	3.0	6.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T690N06TOF	600.0	694/85	6700.0	225.0	1.76/2.0	0.8	0.44	200.0	51.0	140.0	4.0	8.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T690N04TOF	400.0	694/85	6700.0	225.0	1.76/2.0	0.8	0.44	200.0	51.0	140.0	4.0	8.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T690N02TOF	200.0	694/85	6700.0	225.0	1.76/2.0	0.8	0.44	200.0	51.0	140.0	4.0	8.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T920N06TOF	600.0	925/85	12000.0	720.0	1.65/2.5	1.0	0.23	150.0	39.0	140.0	5.5	8.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T920N04TOF	400.0	925/85	12000.0	720.0	1.65/2.5	1.0	0.23	150.0	39.0	140.0	5.5	8.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T920N02TOF	200.0	925/85	12000.0	720.0	1.65/2.5	1.0	0.23	150.0	39.0	140.0	5.5	8.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T1080N06TOF	600.0	1075/85	14500.0	1050.0	1.81/3.5	1.02	0.2	150.0	33.0	140.0	8.0	16.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T1080N04TOF	400.0	1075/85	14500.0	1050.0	1.81/3.5	1.02	0.2	150.0	33.0	140.0	8.0	16.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T1080N02TOF	200.0	1075/85	14500.0	1050.0	1.81/3.5	1.02	0.2	150.0	33.0	140.0	8.0	16.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T1410N06TOF	600.0	1490/85	20000.0	2000.0	1.50/4.5	1.0	0.1	200.0	27.0	140.0	12.0	24.0	Disc dia 58mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T1410N04TOF	400.0	1490/85	20000.0	2000.0	1.50/4.5	1.0	0.1	200.0	27.0	140.0	12.0	24.0	Disc dia 58mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T1410N02TOF	200.0	1490/85	20000.0	2000.0	1.50/4.5	1.0	0.1	200.0	27.0	140.0	12.0	24.0	Disc dia 58mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T2510N06TOF VT	600.0	2509/85	42000.0	8820.0	1.22/6.0	0.75	0.072	200.0	18.4	140.0	24.0	56.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2510N04TOF VT	400.0	2509/85	42000.0	8820.0	1.22/6.0	0.75	0.072	200.0	18.4	140.0	24.0	56.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2510N02TOF VT	200.0	2509/85	42000.0	8820.0	1.22/6.0	0.75	0.072	200.0	18.4	140.0	24.0	56.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T3710N06TOF VT	600.0	3710/85	60000.0	18000.0	1.50/15.0	0.75	0.048	200.0	12.5	140.0	30.0	65.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T3710N04TOF VT	400.0	3710/85	60000.0	18000.0	1.50/15.0	0.75	0.048	200.0	12.5	140.0	30.0	65.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T3710N02TOF VT	200.0	3710/85	60000.0	18000.0	1.50/15.0	0.75	0.048	200.0	12.5	140.0	30.0	65.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor

All here shown Presspacks are active and preferred.



# Thyristor Presspacks

Product	V <sub>DRM</sub> / V <sub>RRM</sub> [V]	I <sub>TAVM</sub> /T <sub>c</sub> [A/°C] (@180° el sin)	I <sub>TSM</sub> [A] (@10ms, T <sub>vj max</sub> )	∫I <sup>2</sup> dt [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, T <sub>vj max</sub> )	V <sub>T</sub> /I <sub>T</sub> [V/kA] (@T <sub>vj max</sub> )	V <sub>TO</sub> [V] (@T <sub>vj max</sub> ) max	r <sub>T</sub> [mΩ] (@T <sub>vj max</sub> ) max	t <sub>q</sub> [μs]	R <sub>thJC</sub> [K/kW] (@180° el sin) max	T <sub>vj</sub> [°C] max	Clamping force [kN] min	Clamping force [kN] max	Housing	Configuration
Ceramic discs up to 1800V														
T300N18TOF	1800.0	303/85	3400.0	58.0	2.20/0.8	0.9	1.35	200.0	69.0	125.0	2.5	5.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T300N16TOF	1600.0	303/85	3400.0	58.0	2.20/0.8	0.9	1.35	200.0	69.0	125.0	2.5	5.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T300N14TOF	1400.0	303/85	3400.0	58.0	2.20/0.8	0.9	1.35	200.0	69.0	125.0	2.5	5.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T300N12TOF	1200.0	303/85	3400.0	58.0	2.20/0.8	0.9	1.35	200.0	69.0	125.0	2.5	5.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T300N10TOF	1000.0	303/85	3400.0	58.0	2.20/0.8	0.9	1.35	200.0	69.0	125.0	2.5	5.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T390N16TOF	1600.0	381/85	4250.0	91.0	2.00/1.1	0.85	0.9	200.0	62.0	125.0	3.0	6.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T390N14TOF	1400.0	381/85	4250.0	91.0	2.00/1.1	0.85	0.9	200.0	62.0	125.0	3.0	6.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T390N12TOF	1200.0	381/85	4250.0	91.0	2.00/1.1	0.85	0.9	200.0	62.0	125.0	3.0	6.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T420N18TOF	1800.0	424/85	6400.0	205.0	2.10/1.5	0.9	0.75	220.0	56.0	125.0	5.0	10.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T420N16TOF	1600.0	424/85	6400.0	205.0	2.10/1.5	0.9	0.75	220.0	56.0	125.0	5.0	10.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T420N14TOF	1400.0	424/85	6400.0	205.0	2.10/1.5	0.9	0.75	220.0	56.0	125.0	5.0	10.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T420N12TOF	1200.0	424/85	6400.0	205.0	2.10/1.5	0.9	0.75	220.0	56.0	125.0	5.0	10.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T430N18TOF	1800.0	433/85	4600.0	106.0	2.07/1.2	0.85	0.9	250.0	51.0	125.0	4.0	8.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T430N16TOF	1600.0	433/85	4600.0	106.0	2.07/1.2	0.85	0.9	250.0	51.0	125.0	4.0	8.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T430N14TOF	1400.0	433/85	4600.0	106.0	2.07/1.2	0.85	0.9	250.0	51.0	125.0	4.0	8.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T430N12TOF	1200.0	433/85	4600.0	106.0	2.07/1.2	0.85	0.9	250.0	51.0	125.0	4.0	8.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T470N16TOF	1600.0	470/85	6350.0	202.0	1.85/1.2	0.8	0.75	250.0	51.0	125.0	4.0	8.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T470N14TOF	1400.0	470/85	6350.0	202.0	1.85/1.2	0.8	0.75	250.0	51.0	125.0	4.0	8.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T470N12TOF	1200.0	470/85	6350.0	202.0	1.85/1.2	0.8	0.75	250.0	51.0	125.0	4.0	8.0	Disc dia 42mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T560N18TOF	1800.0	559/85	6900.0	238.0	1.92/1.6	0.8	0.6	250.0	44.0	125.0	5.0	10.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T560N16TOF	1600.0	559/85	6900.0	238.0	1.92/1.6	0.8	0.6	250.0	44.0	125.0	5.0	10.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T560N14TOF	1400.0	559/85	6900.0	238.0	1.92/1.6	0.8	0.6	250.0	44.0	125.0	5.0	10.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T560N12TOF	1200.0	559/85	6900.0	238.0	1.92/1.6	0.8	0.6	250.0	44.0	125.0	5.0	10.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T590N18TOF	1800.0	588/85	8000.0	320.0	2.15/2.4	0.8	0.5	250.0	45.0	125.0	6.0	12.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T590N16TOF	1600.0	588/85	8000.0	320.0	2.15/2.4	0.8	0.5	250.0	45.0	125.0	6.0	12.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T590N14TOF	1400.0	588/85	8000.0	320.0	2.15/2.4	0.8	0.5	250.0	45.0	125.0	6.0	12.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T590N12TOF	1200.0	588/85	8000.0	320.0	2.15/2.4	0.8	0.5	250.0	45.0	125.0	6.0	12.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T640N18TOF	1800.0	644/85	8000.0	320.0	2.15/2.4	0.8	0.5	250.0	39.0	125.0	6.0	12.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T640N16TOF	1600.0	644/85	8000.0	320.0	2.15/2.4	0.8	0.5	250.0	39.0	125.0	6.0	12.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T640N14TOF	1400.0	644/85	8000.0	320.0	2.15/2.4	0.8	0.5	250.0	39.0	125.0	6.0	12.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T640N12TOF	1200.0	644/85	8000.0	320.0	2.15/2.4	0.8	0.5	250.0	39.0	125.0	6.0	12.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T680N14TOF	1400.0	681/85	9500.0	451.0	1.75/2.0	0.8	0.42	250.0	39.0	125.0	6.0	12.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T680N12TOF	1200.0	681/85	9500.0	451.0	1.75/2.0	0.8	0.42	250.0	39.0	125.0	6.0	12.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T720N18TOF	1800.0	718/85	12500.0	781.0	1.94/3.0	0.85	0.35	250.0	38.0	125.0	9.0	18.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T720N16TOF	1600.0	718/85	12500.0	781.0	1.94/3.0	0.85	0.35	250.0	38.0	125.0	9.0	18.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor

All here shown Presspacks are active and preferred.

- Bare dies
- Discrete
- IGBT modules
- IPMs
- Stacks & boards
- Driver & controller
- SiC
- Presspacks
- SCR / diode modules
- Solid state relays

# Thyristor Presspacks

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{TAVM}/T_c$ [A/°C] (@180° el sin)	$I_{TSM}$ [A] (@10ms, $T_{vj\ max}$ )	$\int I^2 dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj\ max}$ )	$V_T/I_T$ [V/kA] (@ $T_{vj\ max}$ )	$V_{TO}$ [V] (@ $T_{vj\ max}$ ) max	$r_T$ [mΩ] (@ $T_{vj\ max}$ ) max	$t_q$ [μs]	$R_{thJC}$ [K/kW] (@180° el sin) max	$T_{vj}$ [°C] max	Clamping force [kN] min	Clamping force [kN] max	Housing	Configuration
Ceramic discs up to 1800V														
T720N14TOF	1400.0	718/85	12500.0	781.0	1.94/3.0	0.85	0.35	250.0	38.0	125.0	9.0	18.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T720N12TOF	1200.0	718/85	12500.0	781.0	1.94/3.0	0.85	0.35	250.0	38.0	125.0	9.0	18.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T830N18TOF	1800.0	844/85	12500.0	781.0	1.94/3.0	0.85	0.3	250.0	30.0	125.0	9.0	18.0	Disc dia 58mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T830N16TOF	1600.0	844/85	12500.0	781.0	1.94/3.0	0.85	0.3	250.0	30.0	125.0	9.0	18.0	Disc dia 58mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T830N14TOF	1400.0	844/85	12500.0	781.0	1.94/3.0	0.85	0.3	250.0	30.0	125.0	9.0	18.0	Disc dia 58mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T830N12TOF	1200.0	844/85	12500.0	781.0	1.94/3.0	0.85	0.3	250.0	30.0	125.0	9.0	18.0	Disc dia 58mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T880N18TOF	1800.0	879/85	15500.0	1200.0	1.95/3.6	0.85	0.27	250.0	32.0	125.0	10.5	21.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T880N16TOF	1600.0	879/85	15500.0	1200.0	1.95/3.6	0.85	0.27	250.0	32.0	125.0	10.5	21.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T880N14TOF	1400.0	879/85	15500.0	1200.0	1.95/3.6	0.85	0.27	250.0	32.0	125.0	10.5	21.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T880N12TOF	1200.0	879/85	15500.0	1200.0	1.95/3.6	0.85	0.27	250.0	32.0	125.0	10.5	21.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T940N18TOF	1800.0	959/85	15500.0	1200.0	1.95/3.6	0.85	0.27	250.0	28.0	125.0	10.5	21.0	Disc dia 58mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T940N16TOF	1600.0	959/85	15500.0	1200.0	1.95/3.6	0.85	0.27	250.0	28.0	125.0	10.5	21.0	Disc dia 58mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T940N14TOF	1200.0	959/85	15500.0	1200.0	1.95/3.6	0.85	0.27	250.0	28.0	125.0	10.5	21.0	Disc dia 58mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T940N12TOF	1200.0	959/85	15500.0	1200.0	1.95/3.6	0.85	0.27	250.0	28.0	125.0	10.5	21.0	Disc dia 58mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T1190N18TOF VT	1800.0	1190/85	22500.0	2530.0	2.05/5.4	0.9	0.19	240.0	23.0	125.0	16.0	32.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1190N16TOF VT	1600.0	1190/85	22500.0	2530.0	2.05/5.4	0.9	0.19	240.0	23.0	125.0	16.0	32.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1190N14TOF VT	1400.0	1190/85	22500.0	2530.0	2.05/5.4	0.9	0.19	240.0	23.0	125.0	16.0	32.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1190N12TOF VT	1200.0	1190/85	22500.0	2530.0	2.05/5.4	0.9	0.19	240.0	23.0	125.0	16.0	32.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1500N18TOF VT	1800.0	1500/85	33500.0	5611.0	2.10/7.0	0.9	0.15	240.0	18.4	125.0	24.0	56.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1500N16TOF VT	1600.0	1500/85	33500.0	5611.0	2.10/7.0	0.9	0.15	240.0	18.4	125.0	24.0	56.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1500N14TOF VT	1400.0	1500/85	33500.0	5611.0	2.10/7.0	0.9	0.15	240.0	18.4	125.0	24.0	56.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1500N12TOF VT	1200.0	1500/85	33500.0	5611.0	2.10/7.0	0.9	0.15	240.0	18.4	125.0	24.0	56.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2180N18TOF VT	1800.0	2180/85	36000.0	6480.0	2.05/8.0	0.9	0.106	250.0	12.5	125.0	30.0	65.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2180N16TOF VT	1600.0	2180/85	36000.0	6480.0	2.05/8.0	0.9	0.106	250.0	12.5	125.0	30.0	65.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2180N14TOF VT	1400.0	2180/85	36000.0	6480.0	2.05/8.0	0.9	0.106	250.0	12.5	125.0	30.0	65.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2180N12TOF VT	1200.0	2180/85	36000.0	6480.0	2.05/8.0	0.9	0.106	250.0	12.5	125.0	30.0	65.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T3160N18TOF VT	1800.0	3160/85	57000.0	16245.0	1.37/6.0	0.85	0.082	250.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T3160N16TOF VT	1600.0	3160/85	57000.0	16245.0	1.37/6.0	0.85	0.082	250.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T3160N14TOF VT	1400.0	3160/85	57000.0	16245.0	1.37/6.0	0.85	0.082	250.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T3160N12TOF VT	1200.0	3160/85	57000.0	16245.0	1.37/6.0	0.85	0.082	250.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor

All here shown Presspacks are active and preferred.

# Thyristor Presspacks

Product	V <sub>DRM</sub> / V <sub>RRM</sub> [V]	I <sub>TAVM</sub> /T <sub>c</sub> [A/°C] (@180° el sin)	I <sub>TSM</sub> [A] (@10ms, T <sub>vj max</sub> )	∫I <sup>2</sup> dt [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, T <sub>vj max</sub> )	V <sub>T</sub> /I <sub>T</sub> [V/kA] (@T <sub>vj max</sub> )	V <sub>TO</sub> [V] (@T <sub>vj max</sub> ) max	r <sub>T</sub> [mΩ] (@T <sub>vj max</sub> ) max	t <sub>q</sub> [μs]	R <sub>thJC</sub> [K/kW] (@180° el sin) max	T <sub>vj</sub> [°C] max	Clamping force [kn] min	Clamping force [kn] max	Housing	Configuration
Ceramic discs up to 3000V														
T360N28TOF	2800.0	360/85	4500.0	101.0	2.88/1.1	1.1	1.6	350.0	44.0	125.0	5.0	10.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T360N26TOF	2600.0	360/85	4500.0	101.0	2.88/1.1	1.1	1.6	350.0	44.0	125.0	5.0	10.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T360N24TOF	2400.0	360/85	4500.0	101.0	2.88/1.1	1.1	1.6	350.0	44.0	125.0	5.0	10.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T360N22TOF	2200.0	360/85	4500.0	101.0	2.88/1.1	1.1	1.6	350.0	44.0	125.0	5.0	10.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T360N20TOF	2000.0	360/85	4500.0	101.0	2.88/1.1	1.1	1.6	350.0	44.0	125.0	5.0	10.0	Disc dia 48mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T460N26TOF	2600.0	459/85	9000.0	405.0	2.75/2.0	1.0	0.84	300.0	45.5	125.0	7.5	17.5	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T460N24TOF	2400.0	459/85	9000.0	405.0	2.75/2.0	1.0	0.84	300.0	45.5	125.0	7.5	17.5	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T460N22TOF	2200.0	459/85	9000.0	405.0	2.75/2.0	1.0	0.84	300.0	45.5	125.0	7.5	17.5	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T660N26TOF	2600.0	659/85	11500.0	660.0	2.53/2.85	1.0	0.5	300.0	33.0	125.0	10.5	21.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T660N24TOF	2400.0	659/85	11500.0	660.0	2.53/2.85	1.0	0.5	300.0	33.0	125.0	10.5	21.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T660N22TOF	2200.0	659/85	11500.0	660.0	2.53/2.85	1.0	0.5	300.0	33.0	125.0	10.5	21.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T700N22TOF	2200.0	699/85	12200.0	744.0	2.32/2.85	0.95	0.45	300.0	32.0	125.0	10.5	21.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T700N20TOF	2000.0	699/85	12200.0	744.0	2.32/2.85	0.95	0.45	300.0	32.0	125.0	10.5	21.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T700N18TOF	1800.0	699/85	12200.0	744.0	2.32/2.85	0.95	0.45	300.0	32.0	125.0	10.5	21.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T740N26TOF	2600.0	745/85	11500.0	660.0	2.53/2.85	1.0	0.5	300.0	28.0	125.0	10.5	21.0	Disc dia 58mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T740N24TOF	2400.0	745/85	11500.0	660.0	2.53/2.85	1.0	0.5	300.0	28.0	125.0	10.5	21.0	Disc dia 58mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T740N22TOF	2200.0	745/85	11500.0	660.0	2.53/2.85	1.0	0.5	300.0	28.0	125.0	10.5	21.0	Disc dia 58mm height 14mm / Ceramic	Electrical triggered phase control thyristor
T1040N22TOF VT	2200.0	1039/85	18500.0	1711.0	1.53/2.0	0.9	0.3	300.0	23.1	125.0	16.0	32.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1040N20TOF VT	2000.0	1039/85	18500.0	1711.0	1.53/2.0	0.9	0.3	300.0	23.1	125.0	16.0	32.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1220N28TOF VT	2800.0	1220/85	22500.0	2531.0	1.38/1.0	1.0	0.275	350.0	18.4	125.0	20.0	45.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1220N26TOF VT	2600.0	1220/85	22500.0	2531.0	1.38/1.0	1.0	0.275	350.0	18.4	125.0	20.0	45.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1220N24TOF VT	2400.0	1220/85	22500.0	2531.0	1.38/1.0	1.0	0.275	350.0	18.4	125.0	20.0	45.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1220N22TOF VT	2200.0	1220/85	22500.0	2531.0	1.38/1.0	1.0	0.275	350.0	18.4	125.0	20.0	45.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1220N20TOF VT	2000.0	1220/85	22500.0	2531.0	1.38/1.0	1.0	0.275	350.0	18.4	125.0	20.0	45.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1330N22TOF VT	2200.0	1329/85	23000.0	2645.0	1.13/1.0	0.9	0.234	300.0	18.4	125.0	20.0	45.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1330N20TOF VT	2000.0	1329/85	23000.0	2645.0	1.13/1.0	0.9	0.234	300.0	18.4	125.0	20.0	45.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1330N18TOF VT	1800.0	1329/85	23000.0	2645.0	1.13/1.0	0.9	0.234	300.0	18.4	125.0	20.0	45.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1590N28TOF VT	2800.0	1590/85	28000.0	3920.0	2.45/5.0	1.1	0.237	400.0	12.5	125.0	30.0	65.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1590N26TOF VT	2600.0	1590/85	28000.0	3920.0	2.45/5.0	1.1	0.237	400.0	12.5	125.0	30.0	65.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1590N24TOF VT	2400.0	1590/85	28000.0	3920.0	2.45/5.0	1.1	0.237	400.0	12.5	125.0	30.0	65.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1590N22TOF VT	2200.0	1590/85	28000.0	3920.0	2.45/5.0	1.1	0.237	400.0	12.5	125.0	30.0	65.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1960N22TOF VT	2200.0	1960/85	35000.0	6125.0	2.20/8.0	0.9	0.15	300.0	12.5	125.0	30.0	65.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1960N20TOF VT	2000.0	1960/85	35000.0	6125.0	2.20/8.0	0.9	0.15	300.0	12.5	125.0	30.0	65.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1960N18TOF VT	1800.0	1960/85	35000.0	6125.0	2.20/8.0	0.9	0.15	300.0	12.5	125.0	30.0	65.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2160N28TOF VT	2800.0	2400/85	40000.0	8000.0	2.65/8.8	1.05	0.154	400.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor

All here shown Presspacks are active and preferred.

- Bare dies
- Discrete
- IGBT modules
- IPMs
- Stacks & boards
- Driver & controller
- SiC
- Presspacks
- SCR / diode modules
- Solid state relays

# Thyristor Presspacks

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{TAVM}/T_c$ [A/°C] (@180° el sin)	$I_{TSM}$ [A] (@10ms, $T_{vjmax}$ )	$\int I^2 dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vjmax}$ )	$V_T/I_T$ [V/kA] (@ $T_{vjmax}$ )	$V_{TO}$ [V] (@ $T_{vjmax}$ ) max	$r_T$ [mΩ] (@ $T_{vjmax}$ ) max	$t_q$ [μs]	$R_{thJC}$ [K/kW] (@180° el sin) max	$T_{vj}$ [°C] max	Clamping force [kn] min	Clamping force [kn] max	Housing	Configuration
Ceramic discs up to 3000V														
T2160N26TOF VT	2600.0	2400/85	40000.0	8000.0	2.65/8.8	1.05	0.154	400.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2160N24TOF VT	2400.0	2400/85	40000.0	8000.0	2.65/8.8	1.05	0.154	400.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2160N22TOF VT	2200.0	2400/85	40000.0	8000.0	2.65/8.8	1.05	0.154	400.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2160N20TOF VT	2000.0	2400/85	40000.0	8000.0	2.65/8.8	1.05	0.154	400.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2480N28TOF VT	2800.0	2480/85	43500.0	9460.0	1.43/3.0	0.95	0.154	400.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2480N26TOF VT	2600.0	2480/85	43500.0	9460.0	1.43/3.0	0.95	0.154	400.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2480N24TOF VT	2400.0	2480/85	43500.0	9460.0	1.43/3.0	0.95	0.154	400.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2480N22TOF VT	2200.0	2480/85	43500.0	9460.0	1.43/3.0	0.95	0.154	400.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2810N22TOF VT	2200.0	2810/85	50000.0	12500.0	2.35/11.0	0.9	0.112	300.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2810N20TOF VT	2000.0	2810/85	50000.0	12500.0	2.35/11.0	0.9	0.112	300.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2810N18TOF VT	1800.0	2810/85	50000.0	12500.0	2.35/11.0	0.9	0.112	300.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2810N16TOF VT	1600.0	2810/85	50000.0	12500.0	2.35/11.0	0.9	0.112	300.0	8.5	125.0	42.0	95.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T4301N28TOF	2800.0	4030/85	100000.0	41400.0	1.20/4.0	0.77	0.107	250.0	5.4	125.0	63.0	91.0	Disc dia 150mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T4301N26TOF	2600.0	4030/85	100000.0	41400.0	1.20/4.0	0.77	0.107	250.0	5.4	125.0	63.0	91.0	Disc dia 150mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T4301N24TOF	2400.0	4030/85	100000.0	41400.0	1.20/4.0	0.77	0.107	250.0	5.4	125.0	63.0	91.0	Disc dia 150mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T4301N22TOF	2200.0	4030/85	100000.0	41400.0	1.20/4.0	0.77	0.107	250.0	5.4	125.0	63.0	91.0	Disc dia 150mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T4771N28TOF PR	2800.0	4340/85	91000.0	41400.0	1.20/4.0	0.77	0.107	250.0	4.8	125.0	63.0	91.0	Disc dia 150mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T4771N22TOF PR	2200.0	4340/85	91000.0	41400.0	1.20/4.0	0.77	0.107	250.0	4.8	125.0	63.0	91.0	Disc dia 150mm height 26mm / Ceramic	Electrical triggered phase control thyristor

All here shown Presspacks are active and preferred.

# Thyristor Presspacks

Product	V <sub>DRM</sub> / V <sub>RRM</sub> [V]	I <sub>TAVM</sub> /T <sub>c</sub> [A/°C] (@180° el sin)	I <sub>TSM</sub> [A] (@10ms, T <sub>vj max</sub> )	[I <sup>2</sup> dt [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, T <sub>vj max</sub> )	V <sub>T</sub> /I <sub>T</sub> [V/kA] (@T <sub>vj max</sub> )	V <sub>TO</sub> [V] (@T <sub>vj max</sub> ) max	r <sub>T</sub> [mΩ] (@T <sub>vj max</sub> ) max	t <sub>q</sub> [μs]	R <sub>thJC</sub> [K/kW] (@180° el sin) max	T <sub>vj</sub> [°C] max	Clamping force [kn] min	Clamping force [kn] max	Housing	Configuration
Ceramic discs up to 5500V														
T730N42TOF VT	4200.0	730/85	15800.0	1250.0	3.40/3.5	1.2	0.57	400.0	21.5	120.0	18.0	43.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T730N40TOF VT	4000.0	730/85	15800.0	1250.0	3.40/3.5	1.2	0.57	400.0	21.5	120.0	18.0	43.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T730N38TOF VT	3800.0	730/85	15800.0	1250.0	3.40/3.5	1.2	0.57	400.0	21.5	120.0	18.0	43.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T731N44TOH	4400.0	870/85	16000.0	1280.0	1.86/1.2	1.08	0.65	500.0	18.5	125.0	15.0	24.0	Disc dia 76mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T731N42TOF	4200.0	870/85	16000.0	1280.0	1.86/1.2	1.08	0.65	500.0	18.5	125.0	15.0	24.0	Disc dia 76mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T731N36TOF	3600.0	870/85	16000.0	1280.0	1.86/1.2	1.08	0.65	500.0	18.5	125.0	15.0	24.0	Disc dia 76mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T860N36TOF VT	3600.0	860/85	17000.0	1445.0	3.18/3.8	1.08	0.5	400.0	21.0	125.0	20.0	45.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T860N32TOF VT	3200.0	860/85	17000.0	1445.0	3.18/3.8	1.08	0.5	400.0	21.0	125.0	20.0	45.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T860N30TOF VT	3000.0	860/85	17000.0	1445.0	3.18/3.8	1.08	0.5	400.0	21.0	125.0	20.0	45.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T901N36TOF	3600.0	940/85	17000.0	1445.0	1.75/1.2	1.16	0.494	300.0	18.5	125.0	15.0	24.0	Disc dia 76mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T901N35TOF	3500.0	940/85	17000.0	1445.0	1.75/1.2	1.16	0.494	300.0	18.5	125.0	15.0	24.0	Disc dia 76mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T901N32TOF	3200.0	940/85	17000.0	1445.0	1.75/1.2	1.16	0.494	300.0	18.5	125.0	15.0	24.0	Disc dia 76mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T930N36TOF VT	3600.0	930/85	17500.0	1530.0	2.70/3.6	1.0	0.43	500.0	21.5	125.0	20.0	45.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T930N34TOF VT	3400.0	930/85	17500.0	1530.0	2.70/3.6	1.0	0.43	500.0	21.5	125.0	20.0	45.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T930N32TOF VT	3200.0	930/85	17500.0	1530.0	2.70/3.6	1.0	0.43	500.0	21.5	125.0	20.0	45.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1401N42TOH	4200.0	1590/85	36000.0	6480.0	1.95/2.0	1.29	0.33	350.0	9.7	125.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T1451N52TOH	5200.0	1660/85	43000.0	9250.0	1.70/2.0	0.92	0.37	450.0	9.7	125.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T1451N48TOH	4800.0	1660/85	43000.0	9250.0	1.70/2.0	0.92	0.37	450.0	9.7	125.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T1551N52TOH PR	5200.0	1770/85	43000.0	9250.0	1.70/2.0	0.92	0.37	450.0	9.0	125.0	36.0	52.0	Disc dia 120mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1551N48TOH	4800.0	1770/85	43000.0	9250.0	1.70/2.0	0.92	0.37	450.0	9.0	125.0	36.0	52.0	Disc dia 120mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1601N36TOF	3600.0	1900/85	44000.0	8400.0	1.50/2.0	1.0	0.25	300.0	9.0	125.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T1601N35TOF	3500.0	1900/85	44000.0	8400.0	1.50/2.0	1.0	0.25	300.0	9.0	125.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T1601N32TOF	3200.0	1900/85	44000.0	8400.0	1.50/2.0	1.0	0.25	300.0	9.0	125.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T1601N28TOF	2800.0	1900/85	44000.0	8400.0	1.50/2.0	1.0	0.25	300.0	9.0	125.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T1800N42TOF PR	4200.0	1800/85	41000.0	8405.0	1.65/2.0	0.85	0.4	900.0	8.5	125.0	36.0	52.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1930N38TOF VT	3800.0	2180/85	37000.0	6850.0	2.90/8.0	1.08	0.2	450.0	8.5	125.0	40.0	65.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1930N36TOF VT	3600.0	2180/85	37000.0	6850.0	2.90/8.0	1.08	0.2	450.0	8.5	125.0	40.0	65.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1930N34TOF VT	3400.0	2180/85	37000.0	6850.0	2.90/8.0	1.08	0.2	450.0	8.5	125.0	40.0	65.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1930N32TOF VT	3200.0	2180/85	37000.0	6850.0	2.90/8.0	1.08	0.2	450.0	8.5	125.0	40.0	65.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1971N44TOH	4400.0	1730/85	36000.0	6480.0	1.95/2.0	1.29	0.33	350.0	8.6	125.0	42.0	95.0	Disc dia 120mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1971N40TOH	4000.0	1730/85	36000.0	6480.0	1.95/2.0	1.29	0.33	350.0	8.6	125.0	42.0	95.0	Disc dia 120mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2001N36TOF	3600.0	2060/85	41000.0	8400.0	1.50/2.0	1.0	0.25	300.0	8.7	125.0	36.0	52.0	Disc dia 120mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2001N34TOF	3400.0	2060/85	41000.0	8400.0	1.50/2.0	1.0	0.25	300.0	8.7	125.0	36.0	52.0	Disc dia 120mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2161N52TOH	5200.0	2070/85	54000.0	14600.0	1.85/3.0	0.81	0.36	450.0	7.5	125.0	36.0	52.0	Disc dia 120mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T2351N52TOH	5200.0	2250/85	54000.0	14600.0	1.85/3.0	0.81	0.36	450.0	6.5	125.0	45.0	65.0	Disc dia 120mm height 26mm / Ceramic	Electrical triggered phase control thyristor

All here shown Presspacks are active and preferred.

Bare dies  
 Discrete  
 IGBT modules  
 IPMs  
 Stacks & boards  
 Driver & controller  
 SiC  
 Presspacks  
 SCR / diode modules  
 Solid state relays

## Thyristor Presspacks

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{TAVM}/T_c$ [A/°C] (@180° el sin)	$I_{TSM}$ [A] (@10ms, $T_{vj\ max}$ )	$\int I^2 dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj\ max}$ )	$V_T/I_T$ [V/kA] (@ $T_{vj\ max}$ )	$V_{TO}$ [V] (@ $T_{vj\ max}$ ) max	$r_T$ [mΩ] (@ $T_{vj\ max}$ ) max	$t_q$ [μs]	$R_{thJC}$ [K/kW] (@180° el sin) max	$T_{vj}$ [°C] max	Clamping force [kn] min	Clamping force [kn] max	Housing	Configuration
Ceramic discs up to 5500V														
T2351N42TOH	4200.0	2250/85	54000.0	14600.0	1.85/3.0	0.81	0.36	450.0	6.5	125.0	45.0	65.0	Disc dia 120mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2851N52TOH	5200.0	2980/85	79000.0	31000.0	1.70/4.0	0.77	0.235	600.0	5.4	125.0	63.0	91.0	Disc dia 150mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T2851N48TOH	4800.0	2980/85	79000.0	31000.0	1.70/4.0	0.77	0.235	600.0	5.4	125.0	63.0	91.0	Disc dia 150mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T2851N42TOH	4200.0	2980/85	79000.0	31000.0	1.70/4.0	0.77	0.235	600.0	5.4	125.0	63.0	91.0	Disc dia 150mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T3401N36TOF	3600.0	3560/85	91000.0	37850.0	1.40/4.0	0.82	0.145	300.0	5.4	125.0	63.0	91.0	Disc dia 150mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T3401N32TOF	3200.0	3560/85	91000.0	37850.0	1.40/4.0	0.82	0.145	300.0	5.4	125.0	63.0	91.0	Disc dia 150mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T3401N31TOF	3100.0	3560/85	91000.0	37850.0	1.40/4.0	0.82	0.145	300.0	5.4	125.0	63.0	91.0	Disc dia 150mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T3441N52TOH	5200.0	3200/85	79000.0	31000.0	1.70/4.0	0.77	0.235	600.0	4.8	125.0	63.0	91.0	Disc dia 150mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T3801N36TOF VT	3600.0	3830/85	87000.0	37850.0	1.40/4.0	0.82	0.145	300.0	4.8	125.0	63.0	91.0	Disc dia 150mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T4021N52TOH	5200.0	3880/85	100000.0	50000.0	1.80/6.0	0.93	1.45	550.0	4.5	125.0	90.0	130.0	Disc dia 172mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T4003N52TOH PR	5200.0	3400/85	100000.0	50000.0	1.80/6.0	0.93	0.145	550.0	4.8	120.0	90.0	130.0	Disc dia 172mm height 40mm / Ceramic	Light Triggered Phase Control Thyristor
T4003NH52TOH	5200.0	3400/85	100000.0	50000.0	1.80/6.0	0.93	0.145	550.0	4.8	120.0	90.0	130.0	Disc dia 172mm height 40mm / Ceramic	Light Triggered Phase Control Thyristor

All here shown Presspacks are active and preferred.

# Thyristor Presspacks

Product	V <sub>DRM</sub> / V <sub>RRM</sub> [V]	I <sub>TAVM</sub> /T <sub>c</sub> [A/°C] (@180° el sin)	I <sub>TSM</sub> [A] (@10ms, T <sub>vj max</sub> )	∫I <sup>2</sup> dt [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, T <sub>vj max</sub> )	V <sub>T</sub> /I <sub>T</sub> [V/kA] (@T <sub>vj max</sub> )	V <sub>TO</sub> [V] (@T <sub>vj max</sub> ) max	r <sub>T</sub> [mΩ] (@T <sub>vj max</sub> ) max	t <sub>q</sub> [μs]	R <sub>thJC</sub> [K/kW] (@180° el sin) max	T <sub>vj</sub> [°C] max	Clamping force [kN] min	Clamping force [kN] max	Housing	Configuration
Ceramic discs up to 10000V														
T201N70TOH PR	7000.0	245/85	4200.0	88.0	3.4/0.5	1.29	4.22	600.0	40.0	125.0	7.0	12.0	Disc dia 58mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T280N65TOF	6500.0	280/85	5800.0	115.0	2.75/0.5	1.35	2.8	1000.0	43.0	125.0	7.0	12.0	Disc dia 58mm height 27mm / Ceramic	Electrical triggered phase control thyristor
T501N70TOH	7000.0	640/85	13000.0	845.0	2.65/1.0	1.3	1.35	600.0	17.0	125.0	15.0	24.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T533N80TOH PR	8000.0	540/85	10500.0	550.0	2.75/1.0	1.26	1.47	650.0	20.0	120.0	15.0	24.0	Disc dia 76mm height 35mm / Ceramic	Light Triggered Phase Control Thyristor
T570N65TOF	6500.0	540/85	10500.0	442.0	2.75/1.0	1.35	1.4	1000.0	21.0	125.0	13.0	23.0	Disc dia 76mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T600N95TOH PR	9500.0	590/85	12800.0	820.0	2.7/1.0	1.25	1.4	900.0	19.0	125.0	15.0	24.0	Disc dia 75mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1060N65TOF PR	6500.0	1053/85	22500.0	2530.0	2.43/1.5	1.35	0.72	1000.0	11.0	125.0	27.0	45.0	Disc dia 100mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1081N70TOH	7000.0	1300/85	34000.0	5780.0	2.7/2.0	1.18	0.759	600.0	8.6	125.0	26.0	52.0	Disc dia 120mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1081N65TOH	6500.0	1300/85	34000.0	5780.0	2.7/2.0	1.18	0.759	600.0	8.6	125.0	26.0	52.0	Disc dia 120mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1081N60TOH	6000.0	1300/85	34000.0	5780.0	2.7/2.0	1.18	0.759	600.0	8.6	125.0	26.0	52.0	Disc dia 120mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1201N70TOH	7000.0	1200/85	34000.0	5780.0	2.7/2.0	1.18	0.759	600.0	9.7	125.0	26.0	52.0	Disc dia 120mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T1503N80TOH PR	8000.0	1770/85	55000.0	15125.0	3.00/4.0	1.24	0.44	550.0	6.3	120.0	63.0	91.0	Disc dia 150mm height 40mm / Ceramic	Light Triggered Phase Control Thyristor
T1503N75TOH	7500.0	1770/85	55000.0	15125.0	3.00/4.0	1.24	0.44	550.0	6.3	120.0	63.0	91.0	Disc dia 150mm height 40mm / Ceramic	Light Triggered Phase Control Thyristor
T1503NH80TOH	8000.0	1770/85	55000.0	15125.0	3.00/4.0	1.24	0.44	550.0	6.3	120.0	63.0	91.0	Disc dia 150mm height 40mm / Ceramic	Light Triggered Phase Control Thyristor
T1620N65TOF PR	6500.0	1613/85	32000.0	5120.0	3.3/4.5	1.35	0.43	1000.0	8.1	125.0	40.0	65.0	Disc dia 111mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1651N70TOH PR	7000.0	1670/85	50000.0	11500.0	2.65/3.0	1.22	0.49	600.0	7.5	125.0	45.0	65.0	Disc dia 120mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T1851N70TOH	7000.0	1830/85	48000.0	11500.0	2.65/3.0	1.22	0.49	600.0	6.5	125.0	45.0	65.0	Disc dia 120mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1851N65TOH PR	6500.0	1830/85	48000.0	11500.0	2.65/3.0	1.22	0.49	600.0	6.5	125.0	45.0	65.0	Disc dia 120mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1851N60TOH	6000.0	1830/85	48000.0	11500.0	2.65/3.0	1.22	0.49	600.0	6.5	125.0	45.0	65.0	Disc dia 120mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T1901N80TOH	8000.0	2100/85	65000.0	21100.0	3.0/4.0	1.24	0.44	550.0	5.4	125.0	63.0	91.0	Disc dia 150mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T1901N75TOH	7500.0	2100/85	65000.0	21100.0	3.0/4.0	1.24	0.44	550.0	5.4	125.0	63.0	91.0	Disc dia 150mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T1901N70TOH	7000.0	2100/85	65000.0	21100.0	3.0/4.0	1.24	0.44	550.0	5.4	125.0	63.0	91.0	Disc dia 150mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T2251N80TOH	8000.0	2260/85	65000.0	21100.0	3.0/4.0	1.24	0.44	550.0	4.8	125.0	63.0	91.0	Disc dia 150mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2251N70TOH	7000.0	2260/85	65000.0	21100.0	3.0/4.0	1.24	0.44	550.0	4.8	125.0	63.0	91.0	Disc dia 150mm height 26mm / Ceramic	Electrical triggered phase control thyristor
T2563NH75TOH	7500.0	2300/85	90000.0	40500.0	2.95/5.0	1.2	0.35	550.0	4.8	120.0	90.0	130.0	Disc dia 172mm height 40mm / Ceramic	Light Triggered Phase Control Thyristor
T2563N80TOH PR	8000.0	2300/85	90000.0	40500.0	2.95/5.0	1.2	0.35	550.0	4.8	120.0	90.0	130.0	Disc dia 172mm height 40mm / Ceramic	Light Triggered Phase Control Thyristor
T2563NH80TOH	8000.0	2300/85	90000.0	40500.0	2.95/5.0	1.2	0.35	550.0	4.8	120.0	90.0	130.0	Disc dia 172mm height 40mm / Ceramic	Light Triggered Phase Control Thyristor
T2871N80TOH	8000.0	2620/85	90000.0	40500.0	2.95/5.0	1.27	0.336	550.0	4.5	125.0	90.0	130.0	Disc dia 172mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T2871N75TOH	7500.0	2620/85	90000.0	40500.0	2.95/5.0	1.27	0.336	550.0	4.5	125.0	90.0	130.0	Disc dia 172mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T2871N70TOH PR	7000.0	2620/85	90000.0	40500.0	2.95/5.0	1.27	0.336	550.0	4.5	125.0	90.0	130.0	Disc dia 172mm height 35mm / Ceramic	Electrical triggered phase control thyristor
T3011N80TOH	8000.0	2800/85	90000.0	40500.0	2.95/5.0	1.27	0.336	550.0	4.0	125.0	90.0	130.0	Disc dia 172mm height 26mm / Ceramic	Electrical triggered phase control thyristor

All here shown Presspacks are active and preferred.

- Bare dies
- Discrete
- IGBT modules
- IPMs
- Stacks & boards
- Driver & controller
- SiC
- Presspacks
- SCR / diode modules
- Solid state relays

## Diode / Thyristor studs

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{FSM} / I_{TSM}$ [A] (@10ms, $T_{vj,max}$ )	$I_{FAVM} / T_C / I_{TAVM} / T_C$ [A/°C] (@180° el sin)	$\int I^2 dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj,max}$ )	$V_{T0}$ [V] (@ $T_{vj,max}$ ) max	$r_T$ [mΩ] (@ $T_{vj,max}$ ) max	$T_{vj}$ [°C] max	Housing	Configuration
Phase control thyristors									
T160N18BOF	1800.0	3400.0	160/85	58.0	1.08	1.53	125.0	SW27 M12	Phase Control Thyristors
T221N18BOF	1800.0	5700.0	221/85	163.0	1.1	0.75	125.0	SW41 M24	Phase Control Thyristors
T345N18EOF	1800.0	6900.0	345/85	238.0	0.8	0.7	125.0	FL54 Flansch flange	Phase Control Thyristors
Fast rectifier diodes									
D56S45C	4500.0	1350.0	56/85	9.1	1.64	8.0	125.0	SW27 M12	Fast rectifier diodes
D56U45C	4500.0	1200.0	56/73	7.2	1.64	8.0	125.0	SW27 M12	Fast rectifier diodes

All here shown Presspacks are active and preferred.



# Diode / Thyristor studs

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{FSM} / I_{TSM}$ [A] (@10ms, $T_{vj,max}$ )	$I_{FAVM} / T_C / I_{TAVM} / T_C$ [A/°C] (@180° el sin)	$\int i^2 < /sup> dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj,max}$ )	$V_{T0}$ [V] (@ $T_{vj,max}$ ) max	$r_T$ [mΩ] (@ $T_{vj,max}$ ) max	$T_{vj}$ [°C] max	Housing	Configuration
Rectifier diodes									
D121K20B	2000.0	2400.0	120/130	480.2	0.7	0.62	180.0	SW27 M12	Rectifier diodes
D121K18B	1800.0	2400.0	120/130	480.2	0.7	0.62	180.0	SW27 M12	Rectifier diodes
D255K06B	600.0	4000.0	255/75	106.0	0.65	0.85	180.0	SW27 M13	Rectifier diodes
D255K04B	400.0	4000.0	255/75	106.0	0.65	0.85	180.0	SW27 M13	Rectifier diodes
D255N06B	600.0	4600.0	255/110	106.0	0.65	0.85	180.0	SW27 M12	Rectifier diodes
D255N04B	400.0	4600.0	255/110	106.0	0.65	0.85	180.0	SW27 M12	Rectifier diodes
D255N02B	200.0	4600.0	255/110	106.0	0.65	0.85	180.0	SW27 M12	Rectifier diodes
D121N20B	2000.0	2600.0	120/130	33.8	0.72	1.9	180.0	SW27 M12	Rectifier diodes
D121N18B	1600.0	2600.0	120/130	33.8	0.72	1.9	180.0	SW27 M12	Rectifier diodes
D121N16B	1600.0	2600.0	120/130	33.8	0.72	1.9	180.0	SW27 M12	Rectifier diodes
D121N12B	1200.0	2600.0	120/130	33.8	0.72	1.9	180.0	SW27 M12	Rectifier diodes
D251K20B	2000.0	4700.0	250/102	110.5	0.8	0.85	180.0	SW27 M12	Rectifier diodes
D251K18B	1800.0	4700.0	250/102	110.5	0.8	0.85	180.0	SW27 M12	Rectifier diodes
D251K14B	1400.0	4700.0	250/102	110.5	0.8	0.85	180.0	SW27 M12	Rectifier diodes
D251K12B	1200.0	4700.0	250/102	110.5	0.8	0.85	180.0	SW27 M12	Rectifier diodes
D251N20B	2000.0	5300.0	250/130	140.5	0.8	0.85	180.0	SW27 M12	Rectifier diodes
D251N18B	1800.0	5300.0	250/130	140.5	0.8	0.85	180.0	SW27 M12	Rectifier diodes
D251N16B	1600.0	5300.0	250/130	140.5	0.8	0.85	180.0	SW27 M12	Rectifier diodes
D251N14B	1400.0	5300.0	250/130	140.5	0.8	0.85	180.0	SW27 M12	Rectifier diodes
D251N12B	1200.0	5300.0	250/130	140.5	0.8	0.85	180.0	SW27 M12	Rectifier diodes
D400K16B	1600.0	9800.0	400/130	480.2	0.7	0.62	180.0	SW41 M24	Rectifier diodes
D400N22B VF	2200.0	9800.0	400/130	480.2	0.7	0.62	180.0	SW41 M24	Rectifier diodes
D400N20B	2000.0	9800.0	400/130	480.2	0.7	0.62	180.0	SW41 M24	Rectifier diodes
D400N18B VF	1800.0	9800.0	400/130	480.2	0.7	0.62	180.0	SW41 M24	Rectifier diodes
D400N16B	1600.0	9800.0	400/130	480.2	0.7	0.62	180.0	SW41 M24	Rectifier diodes
D400N12B	1200.0	9800.0	400/130	480.2	0.7	0.62	180.0	SW41 M24	Rectifier diodes
D452N18E VF	1800.0	10800.0	450/130	583.0	0.77	0.48	180.0	FL54 Flansch flange	Rectifier diodes
D452N16E	1600.0	10800.0	450/130	583.0	0.77	0.48	180.0	FL54 Flansch flange	Rectifier diodes
D452N14E	1400.0	10800.0	450/130	583.0	0.77	0.48	180.0	FL54 Flansch flange	Rectifier diodes
D452N12E VF	1200.0	10800.0	450/130	583.0	0.77	0.48	180.0	FL54 Flansch flange	Rectifier diodes
D475N36B	3600.0	10900.0	475/100	594.0	0.77	0.61	160.0	SW41 M24	Rectifier diodes

All here shown Presspacks are active and preferred.

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

# Welding diodes

Product	$V_{RRM}$ [V]	$I_{FAVM}/T_C < [A/^\circ C]$ (@180° el sin)	$I_{FSM}$ [A] (@10ms, $T_{vj\ max}$ )	$\int i^2 dt [A^2 \cdot s \cdot 10^3]$ (@10ms, $T_{vj\ max}$ )	$V_F/I_F [V/kA]$ (@ $T_{vj\ max}$ )	$V_{TO}$ [V] (@ $T_{vj\ max}$ ) max	$r_T$ [mΩ] (@ $T_{vj\ max}$ ) max	$R_{thJC} [K/kW]$ (@180° el sin) max	$T_{vj}$ [°C] max	Clamping force [kn] min	Clamping force [kn] max	Housing	Configuration
38DN06	600.0	3885/120	32300.0	5200.0	0.99/4.5	0.66	0.06	12.4	180.0	20.0	30.0	Disc dia 38mm height 4,0mm	Rectifier diodes / Welding diodes
46DN06	600.0	5100/118	52000.0	13500.0	0.99/4.5	0.7	0.05	9.35	180.0	30.0	45.0	Disc dia 46mm height 4,0mm	Rectifier diodes / Welding diodes
56DN06B01	600.0	8400/110	70000.0	24500.0	0.99/4.5	0.66	0.04	5.8	180.0	40.0	60.0	Disc dia 56mm height 5,0mm	Rectifier diodes / Welding diodes
65DN06	600.0	8470/98	95000.0	45000.0	0.99/4.5	0.7	0.03	4.7	180.0	55.0	80.0	Disc dia 65mm height 5mm	Rectifier diodes / Welding diodes

All here shown Presspacks are active and preferred.

Bare diodes

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR/diode modules

Solid state relays

## Accessories – gateleads for discs

Product	Type	Terminal#	Terminal descr.	Connector
GATELEAD HIGH POWER	T120.26K, T120.35K, T150.26K, T150.35K, T172.26K	-	-	6.3 x 0.8/4.8 x 0.8
GATELEAD MEDIUM POWER	T42.14K0, T48.14K0, T58.14K0, T58.26K0, T75.26K0, T100.26K0, T111.26K0	-	-	4.8 x 0.5/2.8 x 0.5

## Accessories – laser diode & light fiber for LTT

Product	Product group	Type
<b>Laser diodes</b>		
LASER DIODE SPL-PL90 A	Laserdiode for LTT	T76.35L, T150.40L, T172.40L
<b>Light Fiber</b>		
LIGHT FIBER LWL R10-LR50	Light Fiber for LTT	T76.35L
LIGHT FIBER LWL R10-LR87	Light Fiber for LTT	T150.40L, T172.40L



SCR / diode modules

# Thyristor / diode Modules

The wide portfolio consists of standard thyristors and diodes combinations in modular construction. Bipolar Power Semiconductors are applied in the most varied fields of application in a power range of just a few kilowatts up to several giga watts.

We offer our customers a broad range of PowerBLOCK modules containing thyristors and diodes in voltage range of 1200V to 4400V and a current of 61A up to 1070A. The modules are designed and assembled in high reliable pressure contact and in solder

bond technology which addresses the specific requirements of cost and performance optimized applications.

Our modules are offered in several dual and single device topologies for almost all phase control or rectifier applications. Application areas for our modules are e.g. Electrical Drives, as well as low voltage soft starters and general purpose power supplies.

## Highlights



### Be BEST IN CLASS with our solder bond family

With these new 20 mm, 34 mm & 50 mm PowerBLOCK modules in solder bond technology we expand our comprehensive power module portfolio which, so far, was only using pressure contacts. Solder bond technology addresses the specific requirements of cost-effective applications.  
[www.infineon.com/solderbond](http://www.infineon.com/solderbond)



### Discover our PowerBlock modules with TIM

Thermal Interface Material (TIM) fits to all of our existing power module packages and upcoming future designs. With TIM modules a reproducible thermal performance of power electronic systems will be achieved.

[www.infineon.com/tim](http://www.infineon.com/tim)



### Easy online ordering for Bipolar PowerBLOCK modules

We offer a broad range of PowerBLOCK modules which are directly available in our webshop.

[www.ifbip-shop.com](http://www.ifbip-shop.com)

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## Thyristor / diode modules

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{FAVM} / T_C / I_{TAVM} / T_C$ [A/°C] (@180° el sin)	$I_{FSM} / I_{TSM}$ [A] (@10ms, $T_{vj\ max}$ )	$[I^2dt [A^2s \cdot 10^3]$ (@10ms, $T_{vj\ max}$ )	$V_{T0}$ [V] (@ $T_{vj\ max}$ ) max	$r_T$ [mΩ] (@ $T_{vj\ max}$ ) max	$(di_T/dt)_{cr}$ [A/μs] (@DIN IEC 747-6)	$R_{thJC}$ [K/W] (@180° el sin) max	$T_{vj}$ [°C] max	Housing	Configuration
Thyristor modules - baseplate = 20 mm - pressure contact											
TT61N16KOF	1600.0	60/85	1400.0	9.8	0.8	3.4	150.0	0.52	125.0	PowerBLOCK 20 mm	SCR / SCR Phase Control
TT61N14KOF	1400.0	60/85	1400.0	9.8	0.8	3.4	150.0	0.52	125.0	PowerBLOCK 20 mm	SCR / SCR Phase Control
TT61N12KOF	1200.0	60/85	1400.0	9.8	0.8	3.4	150.0	0.52	125.0	PowerBLOCK 20 mm	SCR / SCR Phase Control
TT92N16KOF	1600.0	92/85	1800.0	16.2	0.85	2.15	150.0	0.37	130.0	PowerBLOCK 20 mm	SCR / SCR Phase Control
TT92N14KOF	1400.0	92/85	1800.0	16.2	0.85	2.15	150.0	0.37	130.0	PowerBLOCK 20 mm	SCR / SCR Phase Control
TT92N12KOF	1200.0	92/85	1800.0	16.2	0.85	2.15	150.0	0.37	130.0	PowerBLOCK 20 mm	SCR / SCR Phase Control
TT104N14KOF	1400.0	104/85	1800.0	16.2	0.85	2.15	150.0	0.37	130.0	PowerBLOCK 20 mm	SCR / SCR Phase Control
TT104N12KOF	1200.0	104/85	1800.0	16.2	0.85	2.15	150.0	0.37	130.0	PowerBLOCK 20 mm	SCR / SCR Phase Control
Thyristor modules - baseplate = 20 mm - solder solder											
TT60N16SOF	1600.0	55/85	1200.0	7.2	1.0	4.8	140.0	0.49	130.0	PowerBLOCK 20 mm	SCR / SCR Phase Control
TT120N16SOF	1600.0	119/85	1900.0	18.05	0.9	3.35	140.0	0.2	130.0	PowerBLOCK 20 mm	SCR / SCR Phase Control
Thyristor modules - baseplate = 34 mm - pressure contact											
TT122N22KOF	2200.0	122/85	2950.0	43.5	1.0	2.15	100.0	0.2	125.0	PowerBLOCK 34 mm	SCR / SCR Phase Control
TT122N18KOF	1800.0	122/85	2950.0	43.5	1.0	2.15	100.0	0.2	125.0	PowerBLOCK 34 mm	SCR / SCR Phase Control
TT140N22KOF	2200.0	140/85	3200.0	51.2	0.9	1.75	150.0	0.19	125.0	PowerBLOCK 34 mm	SCR / SCR Phase Control
TT140N18KOF	1800.0	140/85	3200.0	51.2	0.9	1.75	150.0	0.19	125.0	PowerBLOCK 34 mm	SCR / SCR Phase Control
TT142N16KOF	1600.0	142/85	4100.0	84.0	0.9	1.1	150.0	0.22	125.0	PowerBLOCK 34 mm	SCR / SCR Phase Control
TT142N14KOF	1400.0	142/85	4100.0	84.0	0.9	1.1	150.0	0.22	125.0	PowerBLOCK 34 mm	SCR / SCR Phase Control
TT142N12KOF	1200.0	142/85	4100.0	84.0	0.9	1.1	150.0	0.22	125.0	PowerBLOCK 34 mm	SCR / SCR Phase Control
TT162N16KOF	1600.0	162/85	4400.0	97.0	0.85	0.95	150.0	0.2	125.0	PowerBLOCK 34 mm	SCR / SCR Phase Control
TT162N14KOF	1400.0	162/85	4400.0	97.0	0.85	0.95	150.0	0.2	125.0	PowerBLOCK 34 mm	SCR / SCR Phase Control
TT162N12KOF	1200.0	162/85	4400.0	97.0	0.85	0.95	150.0	0.2	125.0	PowerBLOCK 34 mm	SCR / SCR Phase Control
TT180N16KOF	1600.0	180/85	4100.0	84.0	0.85	0.9	150.0	0.2	130.0	PowerBLOCK 34 mm	SCR / SCR Phase Control
TT180N12KOF	1200.0	180/85	4100.0	84.0	0.85	0.9	150.0	0.2	130.0	PowerBLOCK 34 mm	SCR / SCR Phase Control
Thyristor modules - baseplate = 34 mm - solder bond											
TT175N16SOF	1600.0	175/85	5000.0	125.0	0.83	1.3	200.0	0.164	125.0	PowerBLOCK 34 mm	SCR / SCR Phase Control
TT140N16SOF	1600.0	140/85	4000.0	80.0	1.0	1.6	200.0	0.19	125.0	PowerBLOCK 34 mm	SCR / SCR Phase Control

All here shown modules are active and preferred.

## Thyristor / diode modules

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{FAVM} / T_C / I_{TAVM} / T_C$ [A/°C] (@180° el sin)	$I_{FSM} / I_{TSM}$ [A] (@10ms, $T_{vj\ max}$ )	$\int i_T dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj\ max}$ )	$V_{T0}$ [V] (@ $T_{vj\ max}$ ) max	$r_T$ [mΩ] (@ $T_{vj\ max}$ ) max	$(di_T/dt)_{cr}$ [A/μs] (@DIN IEC 747-6)	$R_{thJC}$ [K/W] (@180° el sin) max	$T_{vj}$ [°C] max	Housing	Configuration
Thyristor modules - baseplate = 50 mm - Pressure contact											
TT150N26KOF	2600.0	150/85	4000.0	80.0	1.2	2.3	60.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT150N22KOF	2200.0	150/85	4000.0	80.0	1.2	2.3	60.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT170N18KOF	1800.0	170/85	4600.0	106.0	0.95	1.0	150.0	0.17	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT210N18KOF	1800.0	210/85	5800.0	168.0	1.0	0.85	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT210N16KOF	1600.0	210/85	5800.0	168.0	1.0	0.85	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT210N14KOF	1400.0	210/85	5800.0	168.0	1.0	0.85	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT210N12KOF	1200.0	210/85	5800.0	168.0	1.0	0.85	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT215N22KOF	1800.0	215/85	6300.0	198.0	0.95	0.92	100.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT215N20KOF	2000.0	215/85	6300.0	198.0	0.95	0.92	100.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT215N18KOF	1800.0	215/85	6300.0	198.0	0.95	0.92	100.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT250N18KOF	1800.0	250/85	7000.0	245.0	0.8	0.7	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT250N16KOF	1600.0	250/85	7000.0	245.0	0.8	0.7	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT250N14KOF	1400.0	250/85	7000.0	245.0	0.8	0.7	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT250N12KOF	1200.0	250/85	7000.0	245.0	0.8	0.7	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT251N18KOF	1800.0	250/85	8000.0	320.0	0.8	0.7	250.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT251N16KOF	1600.0	250/85	8000.0	320.0	0.8	0.7	250.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT251N14KOF	1400.0	250/85	8000.0	320.0	0.8	0.7	250.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT251N12KOF	1200.0	250/85	8000.0	320.0	0.8	0.7	250.0	0.13	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT260N22KOF	2200.0	260/85	8000.0	320.0	0.85	0.64	250.0	0.12	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT270N16KOF	1600.0	270/92	9000.0	400.0	0.8	0.58	250.0	0.12	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT285N16KOF	1600.0	285/92	8000.0	781.0	0.8	0.5	250.0	0.112	130.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT305N16KOF	1600.0	305/85	9000.0	551.0	0.8	0.58	250.0	0.12	130.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT330N16KOF	1600.0	330/85	8000.0	500.0	0.8	0.5	250.0	0.112	130.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT330N12KOF	1200.0	330/85	8000.0	500.0	0.8	0.5	250.0	0.112	130.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT330N14KOF	1400.0	330/85	8000.0	500.0	0.8	0.5	250.0	0.112	130.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
Thyristor modules - baseplate = 50 mm - solder bond											
TT280N16SOF	1600.0	280/85	9000.0	304.0	0.9	0.82	100.0	0.11	130.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TT320N16SOF	1600.0	320/85	9500.0	335.0	0.77	0.58	100.0	0.11	130.0	PowerBLOCK 50 mm	SCR / SCR Phase Control

All here shown modules are active and preferred.

## Thyristor / diode modules

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{FAVM} / T_C / I_{TAVM} / T_C$ [A/°C] (@180° el sin)	$I_{FSM} / I_{TSM}$ [A] (@10ms, $T_{vj,max}$ )	$\int i_T dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj,max}$ )	$V_{T0}$ [V] (@ $T_{vj,max}$ ) max	$r_T$ [mΩ] (@ $T_{vj,max}$ ) max	$(di_T/dt)_{cr}$ [A/μs] (@DIN IEC 747-6)	$R_{thJC}$ [K/W] (@180° el sin) max	$T_{vj}$ [°C] max	Housing	Configuration
Thyristor modules - baseplate = 60 mm - pressure contact											
TT240N38KOF	3800.0	240/85	5500.0	151.0	1.17	1.7	100.0	0.078	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT240N36KOF	3600.0	240/85	5500.0	151.0	1.17	1.7	100.0	0.078	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT240N34KOF	3400.0	240/85	5500.0	151.0	1.17	1.7	100.0	0.078	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT240N32KOF	3200.0	240/85	5500.0	151.0	1.17	1.7	100.0	0.078	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT240N28KOF	2800.0	240/85	5500.0	151.0	1.17	1.7	100.0	0.078	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT310N26KOF	2600.0	310/85	9000.0	405.0	1.0	0.86	120.0	0.078	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT310N24KOF	2400.0	310/85	9000.0	405.0	1.0	0.86	120.0	0.078	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT310N22KOF	2200.0	310/85	9000.0	405.0	1.0	0.86	120.0	0.078	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT310N20KOF	2000.0	310/85	9000.0	405.0	1.0	0.86	120.0	0.078	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT400N26KOF	2600.0	400/85	11000.0	605.0	1.0	0.5	150.0	0.065	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT400N24KOF	2400.0	400/85	11000.0	605.0	1.0	0.5	150.0	0.065	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT425N18KOF	1800.0	425/85	12500.0	1051.0	0.9	0.35	120.0	0.065	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT425N16KOF	1600.0	425/85	12500.0	1051.0	0.9	0.35	120.0	0.065	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT425N14KOF	1400.0	425/85	12500.0	1051.0	0.9	0.35	120.0	0.065	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT425N12KOF	1200.0	425/85	12500.0	1051.0	0.9	0.35	120.0	0.065	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT430N22KOF	2200.0	430/85	12000.0	1051.0	0.95	0.45	150.0	0.065	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT500N18KOF	1800.0	500/85	14500.0	1051.0	0.85	0.35	200.0	0.058	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT500N16KOF	1600.0	500/85	14500.0	1051.0	0.85	0.35	200.0	0.058	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT500N14KOF	1400.0	500/85	14500.0	1051.0	0.85	0.35	200.0	0.058	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT500N12KOF	1200.0	500/85	14500.0	1051.0	0.85	0.35	200.0	0.058	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT570N16KOF	1600.0	570/87	14000.0	1531.0	0.8	0.23	200.0	0.058	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT520N22KOF	2200.0	520/85	18000.0	1051.0	0.85	0.35	200.0	0.058	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
TT600N16KOF	1600.0	600/85	21000.0	1531.0	0.8	0.23	200.0	0.058	125.0	PowerBLOCK 60 mm	SCR / SCR Phase Control
Thyristor/Diode Modules - Baseplate = 20 mm - pressure contact											
TD61N16KOF	1600.0	60/85	1400.0	9.8	0.8	3.4	150.0	0.52	125.0	PowerBLOCK 20 mm	SCR / Diode Phase Control
TD61N14KOF	1400.0	60/85	1400.0	9.8	0.8	3.4	150.0	0.52	125.0	PowerBLOCK 20 mm	SCR / Diode Phase Control
TD61N12KOF	1200.0	60/85	1400.0	9.8	0.8	3.4	150.0	0.52	125.0	PowerBLOCK 20 mm	SCR / Diode Phase Control
TD92N16KOF	1600.0	92/85	1800.0	16.2	0.85	2.15	150.0	0.37	130.0	PowerBLOCK 20 mm	SCR / Diode Phase Control
TD92N14KOF	1400.0	92/85	1800.0	16.2	0.85	2.15	150.0	0.37	130.0	PowerBLOCK 20 mm	SCR / Diode Phase Control
TD92N12KOF	1200.0	92/85	1800.0	16.2	0.85	2.15	150.0	0.37	130.0	PowerBLOCK 20 mm	SCR / Diode Phase Control
TD104N14KOF	1400.0	104/85	1800.0	16.2	0.85	2.15	150.0	0.37	140.0	PowerBLOCK 20 mm	SCR / Diode Phase Control
TD104N12KOF	1200.0	104/85	1800.0	16.2	0.85	2.15	150.0	0.37	140.0	PowerBLOCK 20 mm	SCR / Diode Phase Control
Thyristor/Diode Modules - Baseplate = 20 mm - solder bond											
TD120N16SOF	1600.0	119/85	1900.0	18.05	0.9	3.35	140.0	0.2	130.0	PowerBLOCK 20 mm	SCR / Diode Phase Control
TD60N16SOF	1600.0	55/85	1200.0	7.2	1.0	4.8	140.0	0.49	130.0	PowerBLOCK 20 mm	SCR / Diode Phase Control

All here shown modules are active and preferred.



# Thyristor / diode modules

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{FAVM} / T_C / I_{TAVM} / T_C$ [A/°C] (@180° el sin)	$I_{FSM} / I_{TSM}$ [A] (@10ms, $T_{vj\ max}$ )	$\int i_T dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj\ max}$ )	$V_{T0}$ [V] (@ $T_{vj\ max}$ ) max	$r_T$ [mΩ] (@ $T_{vj\ max}$ ) max	$(di_T/dt)_{cr}$ [A/μs] (@DIN IEC 747-6)	$R_{thJC}$ [K/W] (@180° el sin) max	$T_{vj}$ [°C] max	Housing	Configuration
Thyristor / diode modules - baseplate = 34 mm - pressure contact											
TD122N24KOF	2400.0	122/85	2950.0	43.5	1.0	2.15	100.0	0.2	125.0	PowerBLOCK 34 mm	SCR / Diode Phase Control
TD122N22KOF	2200.0	122/85	2950.0	43.5	1.0	2.15	100.0	0.2	125.0	PowerBLOCK 34 mm	SCR / Diode Phase Control
TD140N22KOF	2200.0	140/85	3200.0	51.2	0.9	1.75	150.0	0.19	125.0	PowerBLOCK 34 mm	SCR / Diode Phase Control
TD140N18KOF	1800.0	140/85	3200.0	51.2	0.9	1.75	150.0	0.19	125.0	PowerBLOCK 34 mm	SCR / Diode Phase Control
TD142N16KOF	1600.0	142/85	4100.0	84.0	0.9	1.1	150.0	0.22	125.0	PowerBLOCK 34 mm	SCR / Diode Phase Control
TD142N14KOF	1400.0	142/85	4100.0	84.0	0.9	1.1	150.0	0.22	125.0	PowerBLOCK 34 mm	SCR / Diode Phase Control
TD142N12KOF	1200.0	142/85	4100.0	84.0	0.9	1.1	150.0	0.22	125.0	PowerBLOCK 34 mm	SCR / Diode Phase Control
TD162N16KOF	1600.0	162/85	4400.0	97.0	0.85	0.95	150.0	0.2	125.0	PowerBLOCK 34 mm	SCR / Diode Phase Control
TD162N14KOF	1400.0	162/85	4400.0	97.0	0.85	0.95	150.0	0.2	125.0	PowerBLOCK 34 mm	SCR / Diode Phase Control
TD162N12KOF	1200.0	162/85	4400.0	97.0	0.85	0.95	150.0	0.2	125.0	PowerBLOCK 34 mm	SCR / Diode Phase Control
TD180N16KOF	1600.0	180/85	4100.0	84.0	0.85	0.9	150.0	0.2	130.0	PowerBLOCK 34 mm	SCR / Diode Phase Control
Thyristor / diode modules - baseplate = 34 mm - solder bond											
TD140N16SOF	1600.0	140/85	4000.0	80.0	1.0	1.6	200.0	0.19	125.0	PowerBLOCK 34 mm	SCR / Diode Phase Control
TD175N16SOF	1600.0	175/85	5000.0	125.0	0.83	1.3	200.0	0.164	125.0	PowerBLOCK 34 mm	SCR / Diode Phase Control

All here shown modules are active and preferred.

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## Thyristor / diode modules

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{FAVM} / T_C / I_{TAVM} / T_C$ [A/°C] (@180° el sin)	$I_{FSM} / I_{TSM}$ [A] (@10ms, $T_{vj,max}$ )	$\int i^2 dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj,max}$ )	$V_{T0}$ [V] (@ $T_{vj,max}$ ) max	$r_T$ [mΩ] (@ $T_{vj,max}$ ) max	$(di_T/dt)_{cr}$ [A/μs] (@DIN IEC 747-6)	$R_{thJC}$ [K/W] (@180° el sin) max	$T_{vj}$ [°C] max	Housing	Configuration
Thyristor / diode modules - baseplate = 50 mm - pressure contact											
TD150N26KOF	2600.0	150/85	4000.0	80.0	1.2	2.3	60.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD150N24KOF	2400.0	150/85	4000.0	80.0	1.2	2.3	60.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD170N16KOF	1600.0	170/85	4600.0	106.0	0.95	1.0	150.0	0.17	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD170N12KOF	1200.0	170/85	4600.0	106.0	0.95	1.0	150.0	0.17	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD210N18KOF	1800.0	210/85	5800.0	168.0	1.0	1.0	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD210N16KOF	1600.0	210/85	5800.0	168.0	1.0	1.0	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD210N14KOF	1400.0	210/85	5800.0	168.0	1.0	1.0	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD210N12KOF	1200.0	210/85	5800.0	168.0	1.0	1.0	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD215N22KOF	2200.0	215/85	6300.0	198.0	0.95	0.92	100.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD250N18KOF	1800.0	250/85	7000.0	245.0	0.8	0.7	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD250N18/25KOF	1800.0	250/85	7000.0	320.0	0.8	0.7	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD250N16KOF	1600.0	250/85	7000.0	245.0	0.8	0.7	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD250N16/25KOF	1600.0	250/85	7000.0	320.0	0.8	0.7	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD250N14KOF	1400.0	250/85	7000.0	245.0	0.8	0.7	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD250N14/20KOF	1400.0	250/85	7000.0	320.0	0.8	0.7	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD250N12KOF	1200.0	250/85	7000.0	245.0	0.8	0.7	150.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD251N18KOF	1800.0	250/85	8000.0	320.0	0.8	0.7	250.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD251N16KOF	1600.0	250/85	8000.0	320.0	0.8	0.7	250.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD251N14KOF	1400.0	250/85	8000.0	320.0	0.8	0.7	250.0	0.13	125.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD260N22KOF	2200.0	260/85	8000.0	320.0	0.85	0.64	250.0	0.12	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TD270N16KOF	1600.0	270/85	9000.0	400.0	0.8	0.58	250.0	0.12	125.0	PowerBLOCK 50 mm	SCR / SCR Phase Control
TD285N16KOF	1600.0	285/92	8000.0	500.0	0.8	0.5	250.0	0.056	130.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD330N16KOF	1600.0	330/85	8000.0	500.0	0.8	0.5	250.0	0.112	130.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
Thyristor / diode modules - baseplate = 50 mm - solder solder											
TD280N16SOF	1600.0	280/85	9000.0	304.0	0.9	0.82	100.0	0.11	130.0	PowerBLOCK 50 mm	SCR / Diode Phase Control
TD320N16SOF	1600.0	320/85	9500.0	335.0	0.77	0.58	100.0	0.11	130.0	PowerBLOCK 50 mm	SCR / Diode Phase Control

All here shown modules are active and preferred.

# Thyristor / diode modules

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{FAVM} / T_C / I_{TAVM} / T_C$ [A/°C] (@180° el sin)	$I_{FSM} / I_{TSM}$ [A] (@10ms, $T_{vj\ max}$ )	$\int i^2 dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj\ max}$ )	$V_{T0}$ [V] (@ $T_{vj\ max}$ ) max	$r_T$ [mΩ] (@ $T_{vj\ max}$ ) max	$(di_T/dt)_{cr}$ [A/μs] (@DIN IEC 747-6)	$R_{thJC}$ [K/W] (@180° el sin) max	$T_{vj}$ [°C] max	Housing	Configuration
Thyristor / diode modules - baseplate = 60 mm - pressure contact											
TD240N36KOF	3600.0	240/85	5500.0	151.0	1.17	1.7	100.0	0.078	125.0	PowerBLOCK 60 mm	SCR / Diode Phase Control
TD240N32KOF	3200.0	240/85	5500.0	151.0	1.17	1.7	100.0	0.078	125.0	PowerBLOCK 60 mm	SCR / Diode Phase Control
TD310N26KOF	2600.0	310/85	9000.0	405.0	1.0	0.86	120.0	0.078	125.0	PowerBLOCK 60 mm	SCR / Diode Phase Control
TD310N22KOF	2200.0	310/85	9000.0	405.0	1.0	0.86	120.0	0.078	125.0	PowerBLOCK 60 mm	SCR / Diode Phase Control
TD310N20KOF	2000.0	310/85	9000.0	405.0	1.0	0.86	120.0	0.078	125.0	PowerBLOCK 60 mm	SCR / Diode Phase Control
TD400N26KOF	2600.0	400/85	11000.0	605.0	1.0	0.5	150.0	0.065	125.0	PowerBLOCK 60 mm	SCR / Diode Phase Control
TD425N18KOF	1800.0	425/85	12500.0	781.0	0.9	0.35	120.0	0.065	125.0	PowerBLOCK 60 mm	SCR / Diode Phase Control
TD425N16KOF	1600.0	425/85	12500.0	781.0	0.9	0.35	120.0	0.065	125.0	PowerBLOCK 60 mm	SCR / Diode Phase Control
TD430N22KOF	2200.0	430/85	12000.0	720.0	0.95	0.45	150.0	0.065	125.0	PowerBLOCK 60 mm	SCR / Diode Phase Control
TD500N18KOF	1800.0	500/85	14500.0	1051.0	0.85	0.35	200.0	0.058	125.0	PowerBLOCK 60 mm	SCR / Diode Phase Control
TD500N16KOF	1600.0	500/85	14500.0	1051.0	0.85	0.35	200.0	0.058	125.0	PowerBLOCK 60 mm	SCR / Diode Phase Control
TD500N12KOF	1200.0	500/85	14500.0	1051.0	0.85	0.35	200.0	0.058	125.0	PowerBLOCK 60 mm	SCR / Diode Phase Control
TD570N16KOF	1600.0	570/87	14000.0	980.0	0.8	0.23	200.0	0.058	125.0	PowerBLOCK 60 mm	SCR / Diode Phase Control
DT430N22KOF	2200.0	430/85	12000.0	720.0	0.95	0.45	150.0	0.065	125.0	PowerBLOCK 60 mm	Diode / SCR Phase Control

All here shown modules are active and preferred.

- Bare dies
- Discrete
- IGBT modules
- IPMs
- Stacks & boards
- Driver & controller
- SiC
- Presspacks
- SCR / diode modules
- Solid state relays

## Thyristor / diode modules

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{FAVM} / T_C / I_{TAVM} / T_C$ [A/°C] (@180° el sin)	$I_{FSM} / I_{TSM}$ [A] (@10ms, $T_{vj,max}$ )	$\int i^2 dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj,max}$ )	$V_{T0}$ [V] (@ $T_{vj,max}$ ) max	$r_T$ [mΩ] (@ $T_{vj,max}$ ) max	$(di_T/dt)_{cr}$ [A/μs] (@DIN IEC 747-6)	$R_{thJC}$ [K/W] (@180° el sin) max	$T_{vj}$ [°C] max	Housing	Configuration
Single thyristor modules - baseplate = 50 mm - pressure contact											
TZ150N26KOF	2600.0	150/85	4000.0	101.0	1.2	2.3	60.0	0.13	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ240N36KOF	3600.0	240/85	5500.0	151.0	1.17	1.7	100.0	0.078	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ240N34KOF	3400.0	240/85	5500.0	151.0	1.17	1.7	100.0	0.078	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ240N32KOF	3200.0	240/85	5500.0	151.0	1.17	1.7	100.0	0.078	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ240N30KOF	3000.0	240/85	5500.0	151.0	1.17	1.7	100.0	0.078	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ310N26KOF	2600.0	310/85	8000.0	320.0	1.0	0.86	120.0	0.078	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ310N24KOF	2400.0	310/85	8000.0	320.0	1.0	0.86	120.0	0.078	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ310N22KOF	2200.0	310/85	8000.0	320.0	1.0	0.86	120.0	0.078	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ310N20KOF	2000.0	310/85	8000.0	320.0	1.0	0.86	120.0	0.078	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ400N26KOF	2600.0	400/85	11000.0	605.0	1.0	0.5	150.0	0.065	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ400N24KOF	2400.0	400/85	11000.0	605.0	1.0	0.5	150.0	0.065	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ400N20KOF	2000.0	400/85	11000.0	605.0	1.0	0.5	150.0	0.065	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ425N18KOF	1800.0	425/85	12500.0	781.0	0.9	0.3	120.0	0.078	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ425N16KOF	1600.0	425/85	12500.0	781.0	0.9	0.3	120.0	0.078	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ425N14KOF	1400.0	425/85	12500.0	781.0	0.9	0.3	120.0	0.078	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ425N12KOF	1200.0	425/85	12500.0	781.0	0.9	0.3	120.0	0.078	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ430N22KOF	2200.0	430/85	12000.0	720.0	0.95	0.45	150.0	0.065	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ430N20KOF	2000.0	430/85	12000.0	720.0	0.95	0.45	150.0	0.065	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ500N18KOF	1800.0	500/85	14500.0	1051.0	0.9	0.27	200.0	0.065	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ500N16KOF	1600.0	500/85	14500.0	1051.0	0.9	0.27	200.0	0.065	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ500N14KOF	1400.0	500/85	14500.0	1051.0	0.9	0.27	200.0	0.065	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ500N12KOF	1200.0	500/85	14500.0	1051.0	0.9	0.27	200.0	0.065	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ600N16KOF	1600.0	600/85	14000.0	980.0	0.9	0.27	200.0	0.065	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ600N14KOF	1600.0	600/85	14000.0	980.0	0.9	0.27	200.0	0.065	125.0	PowerBLOCK 50 mm	Single SCR Phase Control
TZ600N12KOF	1200.0	600/85	14000.0	980.0	0.9	0.27	200.0	0.065	125.0	PowerBLOCK 50 mm	Single SCR Phase Control

All here shown modules are active and preferred.

# Thyristor / diode modules

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{FAVM} / T_C / I_{TAVM} / T_C$ [A/°C] (@180° el sin)	$I_{FSM} / I_{TSM}$ [A] (@10ms, $T_{vj\ max}$ )	$\int i_T dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj\ max}$ )	$V_{T0}$ [V] (@ $T_{vj\ max}$ ) max	$r_T$ [mΩ] (@ $T_{vj\ max}$ ) max	$(di_T/dt)_{cr}$ [A/μs] (@DIN IEC 747-6)	$R_{thJC}$ [K/W] (@180° el sin) max	$T_{vj}$ [°C] max	Housing	Configuration
Single thyristor modules - baseplate = 70 mm - pressure contact											
TZ530N36KOF	3600.0	530/85	20000.0	2000.0	1.05	0.49	80.0	0.045	125.0	PowerBLOCK 70 mm	Single SCR Phase Control
TZ530N32KOF	3200.0	530/85	20000.0	2000.0	1.05	0.49	80.0	0.045	125.0	PowerBLOCK 70 mm	Single SCR Phase Control
TZ630N28KOF	2800.0	630/85	23000.0	2650.0	0.95	0.37	150.0	0.042	125.0	PowerBLOCK 70 mm	Single SCR Phase Control
TZ630N24KOF	2400.0	630/85	23000.0	2650.0	0.95	0.37	150.0	0.042	125.0	PowerBLOCK 70 mm	Single SCR Phase Control
TZ630N22KOF	2200.0	630/85	23000.0	2650.0	0.95	0.37	150.0	0.042	125.0	PowerBLOCK 70 mm	Single SCR Phase Control
TZ740N22KOF	2200.0	740/85	26500.0	3500.0	0.82	0.17	200.0	0.042	125.0	PowerBLOCK 70 mm	Single SCR Phase Control
TZ740N20KOF	2000.0	740/85	26500.0	3500.0	0.82	0.17	200.0	0.042	125.0	PowerBLOCK 70 mm	Single SCR Phase Control
TZ800N18KOF	1800.0	800/85	30000.0	4500.0	0.82	0.17	200.0	0.042	125.0	PowerBLOCK 70 mm	Single SCR Phase Control
TZ800N16KOF	1600.0	800/85	30000.0	4500.0	0.82	0.17	200.0	0.042	125.0	PowerBLOCK 70 mm	Single SCR Phase Control
TZ800N14KOF	1400.0	800/85	30000.0	4500.0	0.82	0.17	200.0	0.042	125.0	PowerBLOCK 70 mm	Single SCR Phase Control
TZ800N12KOF	1200.0	800/85	30000.0	4500.0	0.82	0.17	200.0	0.042	125.0	PowerBLOCK 70 mm	Single SCR Phase Control
TZ810N22KOF	2200.0	819/85	35000.0	6125.0	0.82	0.17	200.0	0.042	125.0	PowerBLOCK 70 mm	Single SCR Phase Control
TZ860N16KOF	1600.0	860/85	46000.0	8000.0	0.8	0.145	200.0	0.042	125.0	PowerBLOCK 70 mm	Single SCR Phase Control
Diode / thyristor modules - baseplate = 20 mm - pressure contact											
DT61N16KOF	1600.0	60/85	1400.0	9.8	0.8	3.4	150.0	0.52	125.0	PowerBLOCK 20 mm	Diode / SCR Phase Control
DT92N16KOF	1600.0	92/85	1800.0	16.2	0.85	2.15	150.0	0.37	130.0	PowerBLOCK 20 mm	Diode / SCR Phase Control
Diode / thyristor modules - baseplate = 34 mm - pressure contact											
DT142N12KOF	1200.0	142/85	4100.0	84.0	0.9	1.1	150.0	0.22	125.0	PowerBLOCK 34 mm	Diode / SCR Phase Control
Diode / thyristor modules - baseplate = 50 mm - pressure contact											
DT170N20/14KOF	1400.0	170/85	4600.0	245.0	0.8	0.7	150.0	0.13	125.0	PowerBLOCK 50 mm	Diode / SCR Phase Control
DT250N16KOF	1600.0	250/85	7000.0	245.0	0.8	0.7	150.0	0.13	125.0	PowerBLOCK 50 mm	Diode / SCR Phase Control

All here shown modules are active and preferred.

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## Thyristor / diode modules

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{FAVM} / T_C / I_{TAVM} / T_C$ [A/°C] (@180° el sin)	$I_{FSM} / I_{TSM}$ [A] (@10ms, $T_{vj,max}$ )	$\int i^2 dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj,max}$ )	$V_{T0}$ [V] (@ $T_{vj,max}$ ) max	$r_T$ [mΩ] (@ $T_{vj,max}$ ) max	$(di_T/dt)_{cr}$ [A/μs] (@DIN IEC 747-6)	$R_{thJC}$ [K/W] (@180° el sin) max	$T_{vj}$ [°C] max	Housing	Configuration
Rectifier diode modules - baseplate = 20 mm - pressure contact											
DD46S12K	1200.0	45/85	850.0	3.6	0.9	3.9	-	0.64	125.0	PowerBLOCK 20 mm	Fast diodes
DD61S14K	1400.0	61/100	1600.0	12.8	1.0	2.2	-	0.61	150.0	PowerBLOCK 20 mm	Fast diodes
DD81S14K	1400.0	81/100	1900.0	18.1	1.0	1.7	-	0.47	150.0	PowerBLOCK 20 mm	Fast diodes
DD82S10K	1000.0	81/100	1900.0	18.1	1.0	1.7	-	0.47	150.0	PowerBLOCK 20 mm	Fast diodes
DD89N18K	1800.0	89/100	2400.0	28.8	0.75	2.3	-	0.45	150.0	PowerBLOCK 20 mm	Rectifier diode
DD89N16K	1600.0	89/100	2400.0	28.8	0.75	2.3	-	0.45	150.0	PowerBLOCK 20 mm	Rectifier diode
DD89N14K	1400.0	89/100	2400.0	28.8	0.75	2.3	-	0.45	150.0	PowerBLOCK 20 mm	Rectifier diode
DD89N12K	1200.0	89/100	2400.0	28.8	0.75	2.3	-	0.45	150.0	PowerBLOCK 20 mm	Rectifier diode
DD98N25K	2500.0	98/100	2000.0	20.0	0.82	2.0	-	0.39	150.0	PowerBLOCK 20 mm	Rectifier diode
DD98N24K	2400.0	98/100	2000.0	20.0	0.82	2.0	-	0.39	150.0	PowerBLOCK 20 mm	Rectifier diode
DD98N22K	2200.0	98/100	2000.0	20.0	0.82	2.0	-	0.39	150.0	PowerBLOCK 20 mm	Rectifier diode
DD98N20K	2000.0	98/100	2000.0	20.0	0.82	2.0	-	0.39	150.0	PowerBLOCK 20 mm	Rectifier diode
DD104N18K	1800.0	104/100	2500.0	31.25	0.7	2.1	-	0.39	150.0	PowerBLOCK 20 mm	Rectifier diode
DD104N16K	1600.0	104/100	2500.0	31.25	0.7	2.1	-	0.39	150.0	PowerBLOCK 20 mm	Rectifier diode
DD104N14K	1400.0	104/100	2500.0	31.25	0.7	2.1	-	0.39	150.0	PowerBLOCK 20 mm	Rectifier diode
DD104N12K	1200.0	104/100	2500.0	31.25	0.7	2.1	-	0.39	150.0	PowerBLOCK 20 mm	Rectifier diode
ND89N16K	1600.0	89/100	2400.0	28.8	0.75	2.3	-	0.45	150.0	PowerBLOCK 20 mm	Single rectifier diode
ND89N12K	1200.0	89/100	2400.0	28.8	0.75	2.3	-	0.45	150.0	PowerBLOCK 20 mm	Single rectifier diode
ND104N18K	1800.0	104/100	2500.0	31.25	0.7	2.1	-	0.39	150.0	PowerBLOCK 20 mm	Single rectifier diode
ND104N16K	1600.0	104/100	2500.0	31.25	0.7	2.1	-	0.39	150.0	PowerBLOCK 20 mm	Single rectifier diode
ND104N12K	1200.0	104/100	2500.0	31.25	0.7	2.1	-	0.39	150.0	PowerBLOCK 20 mm	Single rectifier diode
Rectifier diode modules - baseplate = 20 mm - solder solder											
DD100N16S	1600.0	134/85	2000.0	20.0	0.87	2.45	-	0.2	130.0	PowerBLOCK 20 mm	Rectifier diode
Rectifier diode modules - baseplate = 34 mm - pressure contact											
DD160N22K	2200.0	160/100	4600.0	105.8	0.8	1.0	-	0.26	150.0	PowerBLOCK 34 mm	Rectifier diode
DD171N18K	1800.0	170/100	5600.0	157.0	0.75	0.8	-	0.26	150.0	PowerBLOCK 34 mm	Rectifier diode
DD171N16K	1600.0	170/100	5600.0	157.0	0.75	0.8	-	0.26	150.0	PowerBLOCK 34 mm	Rectifier diode
DD171N14K	1400.0	170/100	5600.0	157.0	0.75	0.8	-	0.26	150.0	PowerBLOCK 34 mm	Rectifier diode
DD171N12K	1200.0	170/100	5600.0	157.0	0.75	0.8	-	0.26	150.0	PowerBLOCK 34 mm	Rectifier diode
ND171N18K	1800.0	170/100	5600.0	157.0	0.75	0.8	-	0.26	150.0	PowerBLOCK 34 mm	Single rectifier diode
ND171N16K	1600.0	170/100	5600.0	157.0	0.75	0.8	-	0.26	150.0	PowerBLOCK 34 mm	Single rectifier diode
ND171N14K	1400.0	170/100	5600.0	157.0	0.75	0.8	-	0.26	150.0	PowerBLOCK 34 mm	Single rectifier diode
ND171N12K	1200.0	170/100	5600.0	157.0	0.75	0.8	-	0.26	150.0	PowerBLOCK 34 mm	Single rectifier diode

All here shown modules are active and preferred.

## Thyristor / diode modules

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{FAVM} / T_C / I_{TAVM} / T_C$ [A/°C] (@180° el sin)	$I_{FSM} / I_{TSM}$ [A] (@10ms, $T_{vj,max}$ )	$\int I_T dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj,max}$ )	$V_{T0}$ [V] (@ $T_{vj,max}$ ) max	$r_T$ [mΩ] (@ $T_{vj,max}$ ) max	$(di_T/dt)_{cr}$ [A/μs] (@DIN IEC 747-6)	$R_{th,jc}$ [K/W] (@180° el sin) max	$T_{vj}$ [°C] max	Housing	Configuration
Rectifier diode modules - baseplate = 34 mm - solder bond											
DD170N16S	1600.0	165/85	5500.0	151.25	0.75	1.05	-	0.18	135.0	PowerBLOCK 34 mm	Rectifier diode
Rectifier diode modules - baseplate = 50 mm - pressure contact											
DD230S26K	2600.0	230/100	7500.0	281.0	1.0	0.8	-	0.15	150.0	PowerBLOCK 50 mm	Fast diodes
DD241S14K	1400.0	240/100	7500.0	281.0	1.1	0.5	-	0.15	150.0	PowerBLOCK 50 mm	Fast diodes
DD242S10K	-	-	-	-	-	-	-	-	-	PowerBLOCK 50 mm	Fast diodes
ND241S14K	-	-	-	-	-	-	-	-	-	PowerBLOCK 50 mm	Fast Single Diode
ND242S10K	1000.0	240/100	7500.0	281.0	1.1	0.5	-	0.15	150.0	PowerBLOCK 50 mm	Fast Single Diode
DD175N34K	3400.0	175/100	4000.0	80.0	0.9	1.8	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD175N32K	3200.0	175/100	4000.0	80.0	0.9	1.8	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD175N30K	3000.0	175/100	4000.0	80.0	0.9	1.8	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD231N26K	2600.0	231/100	6400.0	205.0	0.8	0.84	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD231N24K	2400.0	231/100	6400.0	205.0	0.8	0.84	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD231N22K	2200.0	231/100	6400.0	205.0	0.8	0.84	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD231N20K	2000.0	231/100	6400.0	205.0	0.8	0.84	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD260N18K	1800.0	260/100	8300.0	344.0	0.7	0.68	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD260N16K	1600.0	260/100	8300.0	344.0	0.7	0.68	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD260N14K	1400.0	260/100	8300.0	344.0	0.7	0.68	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD260N12K	1200.0	260/100	8300.0	344.0	0.7	0.68	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD261N22K	2200.0	260/100	8300.0	344.0	0.7	0.68	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD261N20K	2000.0	260/100	8300.0	344.0	0.7	0.68	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD285N04K	400.0	285/100	8300.0	344.0	0.75	0.4	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD285N02K	400.0	285/100	8300.0	344.0	0.75	0.4	-	0.17	150.0	PowerBLOCK 50 mm	Rectifier diode
DD350N18K	1800.0	350/100	11000.0	605.0	0.75	0.4	-	0.13	150.0	PowerBLOCK 50 mm	Rectifier diode
DD350N16K	1600.0	350/100	11000.0	605.0	0.75	0.4	-	0.13	150.0	PowerBLOCK 50 mm	Rectifier diode
DD350N14K	1400.0	350/100	11000.0	605.0	0.75	0.4	-	0.13	150.0	PowerBLOCK 50 mm	Rectifier diode
DD350N12K	1200.0	350/100	11000.0	605.0	0.75	0.4	-	0.13	150.0	PowerBLOCK 50 mm	Rectifier diode
DD360N22K	2200.0	360/100	13000.0	550.0	0.75	0.4	-	0.125	150.0	PowerBLOCK 50 mm	Rectifier diode
DD380N16K	1600.0	380/100	11500.0	660.0	0.75	0.32	-	0.125	150.0	PowerBLOCK 50 mm	Rectifier diode
ND260N16K	1600.0	260/100	8300.0	344.0	0.7	0.68	-	0.17	150.0	PowerBLOCK 50 mm	Single rectifier diode
ND260N14K	1400.0	260/100	8300.0	344.0	0.7	0.68	-	0.17	150.0	PowerBLOCK 50 mm	Single rectifier diode
ND260N12K	1200.0	260/100	8300.0	344.0	0.7	0.68	-	0.17	150.0	PowerBLOCK 50 mm	Single rectifier diode
ND261N26K	2600.0	260/100	8300.0	344.0	0.7	0.68	-	0.17	150.0	PowerBLOCK 50 mm	Single rectifier diode
ND261N22K	2200.0	260/100	8300.0	344.0	0.7	0.68	-	0.17	150.0	PowerBLOCK 50 mm	Single rectifier diode
ND261N20K	2000.0	260/100	8300.0	344.0	0.7	0.68	-	0.17	150.0	PowerBLOCK 50 mm	Single rectifier diode

All here shown modules are active and preferred.

## Thyristor / diode modules

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{FAVM} / T_C / I_{TAVM} / T_C$ [A/°C] (@180° el sin)	$I_{FSM} / I_{TSM}$ [A] (@10ms, $T_{vj\ max}$ )	$[I^2dt]$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj\ max}$ )	$V_{T0}$ [V] (@ $T_{vj\ max}$ ) max	$r_T$ [mΩ] (@ $T_{vj\ max}$ ) max	$(di_T/dt)_{cr}$ [A/μs] (@DIN IEC 747-6)	$R_{thJC}$ [K/W] (@180° el sin) max	$T_{vj}$ [°C] max	Housing	Configuration
Rectifier diode modules - baseplate = 50 mm - pressure contact											
ND350N16K	1600.0	350/100	11000.0	605.0	0.75	0.4	-	0.13	150.0	PowerBLOCK 50 mm	Single rectifier diode
ND350N12K	1200.0	350/100	11000.0	605.0	0.75	0.4	-	0.13	150.0	PowerBLOCK 50 mm	Single rectifier diode
DZ435N40K	4000.0	435/100	12000.0	720.0	0.84	0.6	-	0.078	150.0	PowerBLOCK 50 mm	Single rectifier diode
DZ435N36K	3600.0	435/100	12000.0	720.0	0.84	0.6	-	0.078	150.0	PowerBLOCK 50 mm	Single rectifier diode
DZ540N26K	2600.0	540/100	14000.0	980.0	0.78	0.31	-	0.078	150.0	PowerBLOCK 50 mm	Single rectifier diode
DZ540N22K	2200.0	540/100	14000.0	980.0	0.78	0.31	-	0.078	150.0	PowerBLOCK 50 mm	Single rectifier diode
DZ540N20K	2000.0	540/100	14000.0	980.0	0.78	0.31	-	0.078	150.0	PowerBLOCK 50 mm	Single rectifier diode
DZ600N18K	1800.0	600/100	19000.0	1805.0	0.75	0.22	-	0.078	150.0	PowerBLOCK 50 mm	Single rectifier diode
DZ600N16K	1600.0	600/100	19000.0	1805.0	0.75	0.22	-	0.078	150.0	PowerBLOCK 50 mm	Single rectifier diode
DZ600N14K	1400.0	600/100	19000.0	1805.0	0.75	0.22	-	0.078	150.0	PowerBLOCK 50 mm	Single rectifier diode
DZ600N12K	1200.0	600/100	19000.0	1805.0	0.75	0.22	-	0.078	150.0	PowerBLOCK 50 mm	Single rectifier diode
Rectifier diode modules - baseplate = 50 mm - solder bond											
DD340N16S	1600.0	330/100	10000.0	385.0	0.81	0.3	-	0.086	130.0	PowerBLOCK 50 mm	Rectifier diode
Rectifier diode modules - baseplate = 60 mm - pressure contact											
DD435N40K	4000.0	435/100	12000.0	720.0	0.84	0.6	-	0.078	150.0	PowerBLOCK 60 mm	Rectifier diode
DD435N36K	3600.0	435/100	12000.0	720.0	0.84	0.6	-	0.078	150.0	PowerBLOCK 60 mm	Rectifier diode
DD435N34K	3400.0	435/100	12000.0	720.0	0.84	0.6	-	0.078	150.0	PowerBLOCK 60 mm	Rectifier diode
DD435N28K	2800.0	435/100	12000.0	720.0	0.84	0.6	-	0.078	150.0	PowerBLOCK 60 mm	Rectifier diode
DD540N26K	2600.0	540/100	14000.0	980.0	0.78	0.31	-	0.078	150.0	PowerBLOCK 60 mm	Rectifier diode
DD540N22K	2200.0	540/100	14000.0	980.0	0.78	0.31	-	0.078	150.0	PowerBLOCK 60 mm	Rectifier diode
DD600N18K	1800.0	600/100	19000.0	1800.0	0.75	0.215	-	0.078	150.0	PowerBLOCK 60 mm	Rectifier diode
DD600N16K	1600.0	600/100	19000.0	1800.0	0.75	0.215	-	0.078	150.0	PowerBLOCK 60 mm	Rectifier diode
DD600N14K	1400.0	600/100	19000.0	1800.0	0.75	0.215	-	0.078	150.0	PowerBLOCK 60 mm	Rectifier diode
DD600N12K	1200.0	600/100	19000.0	1800.0	0.75	0.215	-	0.078	150.0	PowerBLOCK 60 mm	Rectifier diode
DD700N22K	2200.0	700/100	21000.0	1805.0	0.78	0.19	-	0.065	150.0	PowerBLOCK 60 mm	Rectifier diode
DD710N16K	1600.0	710/100	26000.0	2420.0	0.75	0.15	-	0.065	150.0	PowerBLOCK 60 mm	Rectifier diode

All here shown modules are active and preferred.



# Thyristor / diode modules

Product	$V_{DRM} / V_{RRM}$ [V]	$I_{FAVM} / T_C / I_{TAVM} / T_C$ [A/°C] (@180° el sin)	$I_{FSM} / I_{TSM}$ [A] (@10ms, $T_{vj, max}$ )	$\int i_T dt$ [A <sup>2</sup> s · 10 <sup>3</sup> ] (@10ms, $T_{vj, max}$ )	$V_{T0}$ [V] (@ $T_{vj, max}$ ) max	$r_T$ [mΩ] (@ $T_{vj, max}$ ) max	$(di_T/dt)_{cr}$ [A/μs] (@DIN IEC 747-6)	$R_{thJC}$ [K/W] (@180° el sin) max	$T_{vj}$ [°C] max	Housing	Configuration
Rectifier diode modules - baseplate = 70 mm - pressure contact											
DZ950N44K	4400.0	950/100	29000.0	4205.0	0.85	0.28	-	0.042	150.0	PowerBLOCK 70 mm	Single rectifier diode
DZ950N36K	3600.0	950/100	29000.0	4205.0	0.85	0.28	-	0.042	150.0	PowerBLOCK 70 mm	Single rectifier diode
DZ1070N28K	2800.0	1070/100	35000.0	6125.0	0.8	0.17	-	0.045	160.0	PowerBLOCK 70 mm	Single rectifier diode
DZ1070N26K	2600.0	1070/100	35000.0	6125.0	0.8	0.17	-	0.045	160.0	PowerBLOCK 70 mm	Single rectifier diode
DZ1070N22K	2200.0	1100/100	41000.0	6125.0	0.75	0.073	-	0.045	150.0	PowerBLOCK 70 mm	Single rectifier diode
DZ1070N18K	1800.0	1100/100	41000.0	6125.0	0.75	0.073	-	0.045	150.0	PowerBLOCK 70 mm	Single rectifier diode
DZ1100N22K	2200.0	1100/100	48000.0	8000.0	0.75	0.073	-	0.048	150.0	PowerBLOCK 70 mm	Single rectifier diode

All here shown modules are active and preferred.

## Accessories – gateleads for modules

Product	Type	Terminal#	Terminal descr.	Connector
GATELEAD PB20 G1K1	PB20	5/4	G1/K1	-
GATELEAD PB20 G2K2	PB20	6/7	G2/K2	-
GATELEAD PB34-60 G1K1	PB34, PB50, PB50 (Single), PB60	5/4	G1/K1, G2/K2, G1/K1	-
GATELEAD PB34-70 G2K2	PB34, PB50, PB70 (Single), PB60	6/7, 5/4, 6/7	G2/K2	-

# Bridge rectifier & AC-switches

Product	Product status	Packages	$V_{DRM}/V_{RRM}$ [V]	$I_{RMSM}$ [A]	$I_{(FSM) max}$ [A]	Housing	Configuration
<b>Diode Bridges</b>							
DDB6U85N16L	active and preferred	AG-ISOPACK-1	1600.0	85.0	550.0	IsoPACK™	Diode Bridges
DDB6U145N16L	active and preferred	AG-ISOPACK-1	1600.0	145.0	1000.0	IsoPACK™	Diode Bridges
DDB6U205N16L	active and preferred	AG-ISOPACK-1	1600.0	205.0	1375.0	IsoPACK™	Diode Bridges
DDB6U215N16L	active and preferred	AG-ISOPACK-2	1600.0	215.0	1850.0	IsoPACK™	Diode Bridges
DDB6U144N16R	active and preferred	AG-ECONO2-3	1600.0	144.0	1000.0	EconoBRIDGE™	Diode Bridges
<b>Diode Bridges with Brake Chopper</b>							
DDB6U84N16RR	not for new design	AG-ECONO2-3	1600.0	84.0	550.0	EconoBRIDGE™	Diode Bridges with Brake Chopper
DDB6U100N16RR	not for new design	AG-ECONO2-3	1600.0	100.0	550.0	EconoBRIDGE™	Diode Bridges with Brake Chopper
DDB6U180N16RR	active and preferred	AG-ECONO2-7	1600.0 V	180.0 A	1600.0 A	EconoBRIDGE™	Diode Bridges with Brake Chopper
DDB6U180N16RR_B11	active and preferred	AG-ECONO2-7	1600.0 V	180.0 A	1600.0 A	EconoBRIDGE™	Diode Bridges with Brake Chopper
<b>Diode Bridges with Brake Chopper</b>							
DDB6U134N16RR	active and preferred	AG-ECONO2-7	1600.0 V	134.0 A	550.0 A	EconoBRIDGE™	Diode Bridges with Brake Chopper and NTC
DDB6U104N16RR	active and preferred	AG-ECONO2-7	1600.0 V	104.0 A	550.0 A	EconoBRIDGE™	Diode Bridges
DDB6U75N16W1R	active and preferred	AG-EASY1B-1	1600.0 V	75.0 A	605.0 A	EasyBRIDGE 1	Diode Bridges with Brake Chopper and NTC
DDB6U75N16W1R_B11	active and preferred	AG-EASY1B-2	1600.0 V	75.0 A	605.0 A	EasyBRIDGE 1	Diode Bridges with Brake Chopper and NTC
DDB6U25N16VR	discontinued	AG-EASY750-1	1600.0 V	25.0 A	330.0 A	EasyBRIDGE 750	Diode Bridges with Brake Chopper and NTC
DDB2U30N08VR	active and preferred	AG-EASY750-1	800.0 V	30.0 A	480.0 A	EasyBRIDGE 750	Diode Bridges with Brake Chopper and NTC
DDB6U30N08VR	active and preferred	AG-EASY750-1	800.0 V	30.0 A	310.0 A	EasyBRIDGE 750	Diode Bridges with Brake Chopper and NTC
<b>Diode Bridges with Brake Chopper and NTC</b>							
DDB2U50N08W1R_B23	active and preferred	AG-EASY1B-2	800.0 V	50.0 A	450.0 A	Easy1B	Diode Bridges with MOSFET Chopper and NTC
<b>Fully Controlled AC-Switches</b>							
TTW3C85N16LOF	active and preferred	AG-ISOPACK-2	1600.0 V	85.0 A	620.0 A	IsoPACK™	Fully Controlled AC-Switches
<b>Fully Controlled Bridges</b>							
TTB6C135N16LOF	active and preferred	AG-ISOPACK-2	1600.0 V	135.0 A	870.0 A	IsoPACK™	Fully Controlled Bridges
TTB6C165N16LOF	active and preferred	AG-ISOPACK-2	1600.0 V	165.0 A	1050.0 A	IsoPACK™	Fully Controlled Bridges
TDB6HK95N16LOF	active and preferred	AG-ISOPACK-2	1600.0 V	95.0 A	620.0 A	IsoPACK™	Half Controlled Bridges
<b>Half Controlled Bridges with Brake Chopper and NTC</b>							
TDB6HK124N16RR	active and preferred	AG-ECONO2-7	1600.0 V	124.0 A	550.0 A	EconoBRIDGE™	Half Controlled Bridges with Brake Chopper and NTC
<b>Half Controlled Bridges with Brake Chopper</b>							
TDB6HK180N16RR	active and preferred	AG-ECONO2-7	1600.0 V	180.0 A	1400.0 A	EconoBRIDGE™	Half Controlled Bridges with Brake Chopper
TDB6HK180N16RR_B11	active and preferred	AG-ECONO2-7	1600.0 V	180.0 A	1400.0 A	EconoBRIDGE™	Half Controlled Bridges with Brake Chopper

# Bridge rectifier & AC-switches

Product	Product status	Packages	$V_{DRM}/V_{RRM}$ [V]	$I_{RMSM}$ [A]	$I_{(FSM) max}$ [A]	Housing	Configuration
Half Controlled Bridges with NTC							
TDB6HK240N16P	active and preferred	AG-ECONO4-1	1600.0 V	240.0 A	1800.0 A	EconoBRIDGE™	Half Controlled Bridges with NTC
TDB6HK360N16P	active and preferred	AG-ECONO4-1	1600.0 V	360.0 A	2300.0 A	EconoBRIDGE™	Half Controlled Bridges with NTC

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

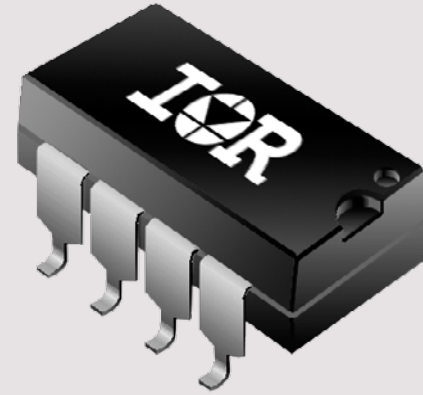
Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays



## Solid state relays

# Photovoltaic isolators & relays

Our solid-state relay range consists of HEXFET® power MOSFET and IGBT output photovoltaic relays plus photovoltaic isolators that give designers the flexibility to create their own relays.

Photovoltaic isolators offer single- and dual-channel, optically isolated outputs that can be used for directly driving the gates of discrete power MOSFETs and/or IGBTs. This range of devices gives designers the flexibility to create custom solid-state relays capable of controlling loads in excess of 1000 V and 100 A.

[www.infineon.com/photovoltaic-isolators](http://www.infineon.com/photovoltaic-isolators)

The operating parameters of photovoltaic relays are ideal for switching low-level signal loads in instrumentation and data acquisition to medium power loads in industrial controls and process automation, i.e. from microvolts and microamps to 400 V (AC peak or DC) and up to 6.0 A of load current at a contact resistance as low as 15 milliohms.

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Bare dies

Discrete

IGBT  
modules

IPMs

Stacks &  
boardsDriver &  
controller

SiC

Presspacks

SCR / diode  
modulesSolid state  
relays

## Photovoltaic isolators

Product	Product status	Control current (nominal) min [uA]	Type	Short circuit current min [uA]	Output voltage [V]
PVI1050N	active	10	2 Form A	5	5
PVI1050NS	active	10	2 Form A	5	5
PVI5013R	active	5	2 Form A	1	3
PVI5013RS	active	5	2 Form A	1	3
PVI5033R	active	10	2 Form A	5	5
PVI5033RS	active	10	2 Form A	5	5
PVI5050N	active	10	1 Form A	5	5
PVI5050NS	active	10	1 Form A	5	5
PVI5080N	active	10	1 Form A	8	5
PVI5080NS	active	10	1 Form A	8	5

Bare dies

Discrete

IGBT  
modules

IPMs

Stacks &  
boardsDriver &  
controller

SiC

Presspacks

SCR/diode  
modulesSolid state  
relays

# Photovoltaic relays

Product	Product status	Control current (nominal) min [mA]	Dielectric strength max [V]	Load current (AC) [mA]	Load current (DC) [mA]	Load voltage (DC) max [V]	Load voltage (AC (peak)) [V]	Response time (On) max [us]	Response time (Off) max [us]	Thermal offset [uV]	Type
<b>20 V</b>											
PVN012	active	5.0	4000	2500	4500	20	20	5000	500	-	1 Form A
PVN012A	active	10.0	4000	4000	6000	20	20	3000	500	-	1 Form A
PVN012AS	active	10.0	4000	4000	6000	20	20	3000	500	-	1 Form A
PVN012S	active	5.0	4000	2500	4500	20	20	5000	500	-	1 Form A
PVN013	active	5.0	4000	2500	4500	20	20	5000	500	-	1 Form A
PVN013S	active	5.0	4000	2500	4500	20	20	5000	500	-	1 Form A
<b>60 V</b>											
PVAZ172N	active	10.0	4000	1000	1000	60	60	2000	500	-	1 Form A
PVAZ172NS	active	10.0	4000	1000	1000	60	60	2000	500	-	1 Form A
PVDZ172N	active	10.0	4000	-	1500	60	-	2000	500	-	1 Form A
PVDZ172NS	active	10.0	4000	-	1500	60	-	2000	500	-	1 Form A
PVG612	active	10.0	4000	1000	2000	60	60	2000	500	-	1 Form A
PVG612A	active	10.0	4000	2000	4000	60	60	3500	500	-	1 Form A
PVG612AS	active	10.0	4000	2000	4000	60	60	3500	500	-	1 Form A
PVG612S	active	10.0	4000	1000	2000	60	60	2000	500	-	1 Form A
PVG613	active	10.0	4000	1000	2000	60	60	2000	500	-	1 Form A
PVG613S	active	10.0	4000	1000	2000	60	60	2000	500	-	1 Form A
<b>100 V - 150 V</b>											
PVA1352N	active	5.0	4000	375	375	100	100	150	125	0.2	1 Form A
PVA1352NS	active	5.0	4000	375	375	100	100	150	125	0.2	1 Form A
PVA1354N	active	5.0	4000	375	375	100	100	150	125	0.2	1 Form A
PVA1354NS	active	5.0	4000	375	375	100	100	150	125	0.2	1 Form A
PVD1352N	active	5.0	4000	-	550	100	-	150	125	0.2	1 Form A
PVD1352NS	active	5.0	4000	-	550	100	-	150	125	0.2	1 Form A
PVD1354N	active	5.0	4000	-	550	100	-	150	125	0.2	1 Form A
PVD1354NS	active	5.0	4000	-	550	100	-	150	125	0.2	1 Form A
PVR1300N	active	5.0	1500	360	660	100	100	150	125	0.2	2 Form A
PVR1301N	active	5.0	1500	360	660	100	100	150	125	0.2	2 Form A
PVT212	active	5.0	4000	550	825	150	150	3000	500	-	1 Form A
PVT212S	active	5.0	4000	550	825	150	150	3000	500	-	1 Form A

Bare dies

Discrete

IGBT modules

IPMs

Stacks &amp; boards

Driver &amp; controller

SiC

Presspacks

SCR / diode modules

Solid state relays

## Photovoltaic relays

Product	Product status	Control current (nominal) min [mA]	Dielectric strength max [V]	Load current (AC) [mA]	Load current (DC) [mA]	Load voltage (DC) max [V]	Load voltage (AC (peak)) [V]	Response time (On) max [us]	Response time (Off) max [us]	Thermal offset [uV]	Type
200 V - 250 V											
PVA2352N	active	5.0	4000	150	150	200	200	100	110	0.2	1 Form A
PVA2352NS	active	5.0	4000	150	150	200	200	100	110	0.2	1 Form A
PVT312	active	5.0	4000	190	320	250	250	3000	500	-	1 Form A
PVT312L	active	5.0	4000	170	300	250	250	3000	500	-	1 Form A
PVT312LS	active	5.0	4000	170	300	250	250	3000	500	-	1 Form A
PVT312S	active	5.0	4000	190	320	250	250	3000	500	-	1 Form A
PVT322	active	5.0	4000	170	170	250	250	3000	500	-	2 Form A
PVT322A	active	5.0	4000	170	170	250	250	3000	500	-	2 Form A
PVT322AS	active	5.0	4000	170	170	250	250	3000	500	-	2 Form A
PVT322S	active	5.0	4000	170	170	250	250	3000	500	-	2 Form A
300 V											
PVA3054N	active	5.0	4000	50	50	300	300	60	100	0.2	1 Form A
PVA3054NS	active	5.0	4000	50	50	300	300	60	100	0.2	1 Form A
PVA3055N	active	5.0	4000	50	50	300	300	60	100	0.2	1 Form A
PVA3055NS	active	5.0	4000	50	50	300	300	60	100	0.2	1 Form A
PVA3324N	active	2.0	4000	150	150	300	300	100	110	0.2	1 Form A
PVA3324NS	active	2.0	4000	150	150	300	300	100	110	0.2	1 Form A
PVA3354N	active	5.0	4000	150	150	300	300	100	110	0.2	1 Form A
PVA3354NS	active	5.0	4000	150	150	300	300	100	110	0.2	1 Form A
400 V											
PVT412	active	5.0	4000	140	210	400	400	2000	500	0.5	1 Form A
PVT412A	active	5.0	4000	240	360	400	400	3000	500	-	1 Form A
PVT412AS	active	5.0	4000	240	360	400	400	3000	500	-	1 Form A
PVT412L	active	5.0	4000	120	200	400	400	2000	500	0.5	1 Form A
PVT412LS	active	5.0	4000	120	200	400	400	2000	500	0.5	1 Form A
PVT412S	active	5.0	4000	140	210	400	400	2000	500	-	1 Form A
PVT422	active	5.0	4000	120	120	400	400	2000	2000	-	2 Form A
PVT422S	active	5.0	4000	120	120	400	400	2000	2000	-	2 Form A
PVU414	active	5.0	4000	140	210	400	400	500	200	0.2	1 Form A
PVU414S	active	5.0	4000	140	210	400	400	500	200	0.2	1 Form A
PVX6012	active	5.0	3750	1000	1000	400	400	7000	1000	-	1 Form A



Solid state relays
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SiC
Driver & controller
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IPMs
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Discrete
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