

CRSH16D-40FP
CRSH16D-60FP
CRSH16D-100FP

DUAL, COMMON CATHODE
SILICON SCHOTTKY RECTIFIERS
16 AMP, 400 THRU 100 VOLT



TO-220FP CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CRSH16D-40FP series devices are dual silicon Schottky rectifiers designed for fast switching applications requiring a low forward voltage drop.

MARKING: FULL PART NUMBER

FEATURES:

- High reliability
- High current capability
- UL flammability classification 94V-O
- Low power loss, high efficiency
- Low forward voltage
- High surge capacity
- High voltage

MAXIMUM RATINGS: ($T_C=25^\circ\text{C}$ unless otherwise noted)

	SYMBOL	CRSH16D			UNITS
		-40FP	-60FP	-100FP	
Peak Repetitive Reverse Voltage	V_{RRM}	40	60	100	V
DC Blocking Voltage	V_R	40	60	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	26	42	80	V
Average Forward Current ($T_C=90^\circ\text{C}$)	I_O		16		A
Peak Forward Surge Current ($t_p=8.3\text{ms}$)	I_{FSM}		150		A
Critical Rate of Rise of Reverse Voltage	dv/dt		10,000		V/ μs
Operating and Storage Junction Temperature	T_J, T_{stg}		-65 to +150		$^\circ\text{C}$
Typical Thermal Resistance	θ_{JC}		4.0		$^\circ\text{C}/\text{W}$
Typical Thermal Resistance	θ_{JA}		60		$^\circ\text{C}/\text{W}$

ELECTRICAL CHARACTERISTICS PER DIODE: ($T_C=25^\circ\text{C}$ unless otherwise noted)

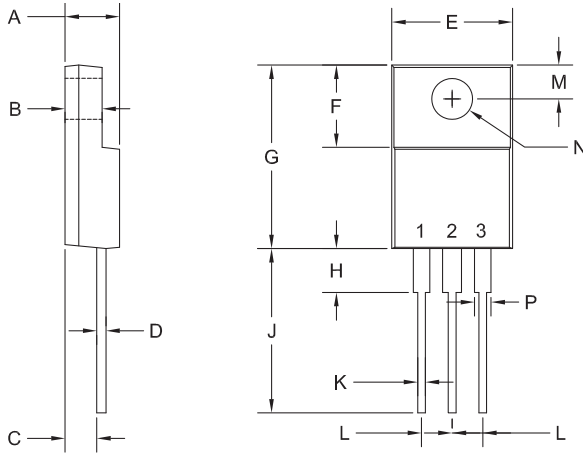
SYMBOL	TEST CONDITIONS	CRSH16D -40FP		CRSH16D -60FP		CRSH16D -100FP		UNITS
		TYP	MAX	TYP	MAX	TYP	MAX	
I_R	$V_R=\text{Rated } V_{RRM}$	-	200	-	200	-	200	μA
I_R	$V_R=\text{Rated } V_{RRM}, T_C=125^\circ\text{C}$	-	15	-	15	-	15	mA
V_F	$I_F=8.0\text{A}$	-	0.65	-	0.75	-	0.85	V
V_F	$I_F=8.0\text{A}, T_C=125^\circ\text{C}$	-	0.57	-	0.65	-	0.75	V
V_F	$I_F=16\text{A}$	-	0.84	-	0.95	-	1.1	V
V_F	$I_F=16\text{A}, T_C=125^\circ\text{C}$	-	0.72	-	0.85	-	1.0	V
C_J	$V_R=4.0\text{V}, f=1.0\text{MHz}$	300	-	300	-	300	-	pF

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TO-220FP CASE - MECHANICAL OUTLINE

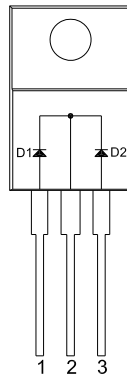


SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.165	0.202	4.20	5.12
B	0.090	0.130	2.30	3.30
C	0.098	0.122	2.50	3.10
D	-	0.031	-	0.80
E	0.382	0.418	9.70	10.63
F	0.238	0.276	6.06	7.00
G	0.583	0.640	14.80	16.25
H	-	0.161	-	4.10
J	0.506	0.543	12.85	13.80
K	0.020	0.031	0.50	0.79
L	0.100		2.54	
M	0.120	0.140	3.05	3.55
N (DIA)	0.116	0.134	2.95	3.40
P	0.039	0.058	1.00	1.47

TO-220FP (REV: R4)

R4

PIN CONFIGURATION



LEAD CODE:

- 1) Anode D1
- 2) Cathode D1, D2
- 3) Anode D2

MARKING:

FULL PART NUMBER

R2 (20-May 2015)

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SERVICES

- Bonded Inventory
- Custom Electrical Screening
- Custom Electrical Characteristic Curves
- SPICE Models
- Custom Packaging
- Package Base Options
- Custom Device Development/ Multi Discrete Modules (MDM™)
- Bare Die Available for Hybrid Applications

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R2 (20-May 2015)