



M50 SERIES

POWER MODULES



Features

- Over 40KW output Capability
- 8 Different Circuits to Choose from
- 50 and 100 A outputs
- UL Recognized E72445

ORDERING OPTIONS

M50 - **50** - **1** - **2** - **F** - **V**

Series	M50
Load Current	50 : 50 Amps 100 : 100 Amps
Circuit Type	1 2 3 4 5 6 7 8 (See schematic diagrams)
AC Line Voltage	1 : 120 VAC 2 : 240 VAC 3 : 280 VAC 4 : 380 VAC 5 : 480 VAC
Free Wheeling Diode	Blank : Not Included F : Included (Circuits 1 & 2 only)
External Suppressor	Blank : Not included V : Include (Circuits 1, 2, 3, 4, 6 & 7 only)

Required for valid part number
 For options only and not required for valid part number

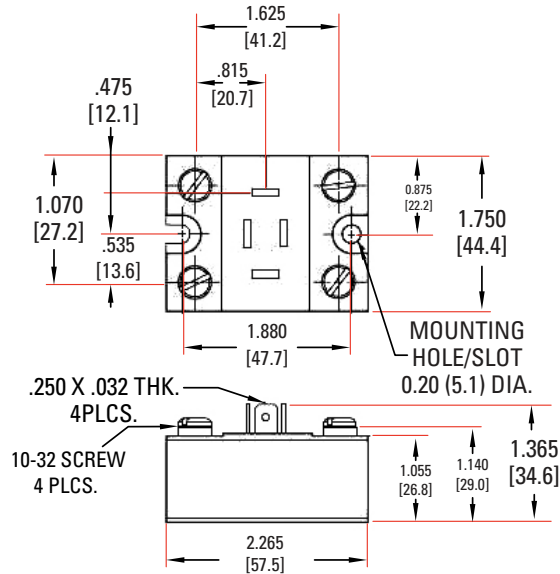
NOTE: Not all Combinations available

ELECTRICAL SPECIFICATIONS

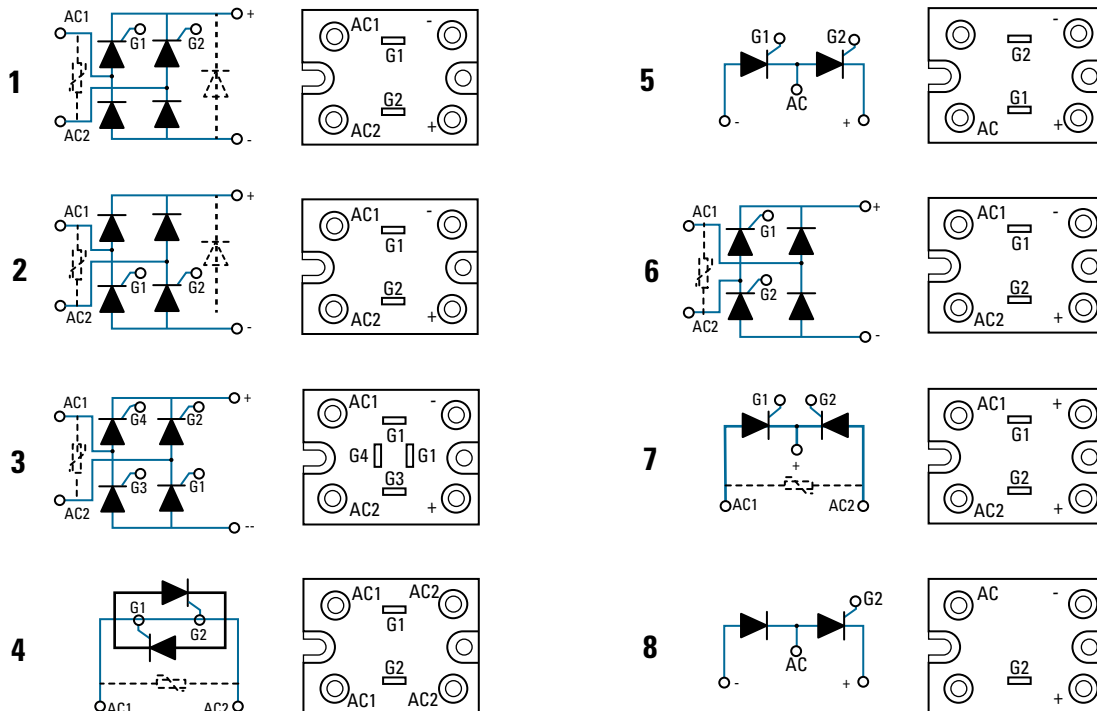
Description	Symbol	M5050	M50100
Maximum DC Output Current (T _c = 85°C)	I _D	60 A	100 A
Maximum Voltage Drop @ Amps Peak	V _F	1.35V @ 50A	1.2V @ 100 A
Operating Junction Temperature Range	T _J	-40 - 125°C	-40 - 125°C
Repetitive Peak Reverse Voltage (AC Line Nominal) [Vpk]	V _{RRMS}	400 (120 VAC)	
		600 (240 VAC)	
		800 (280 VAC)	
		1200 (480 VAC)	
		1400 (530 VAC)	
		1600 (600 VAC)	
Maximum Non-Repetitive Surge Current (1/2 Cycle, 60 Hz) [A]	I _{TSM}	800	1500
Maximum I ² t for Fusing (t=8.3ms)[A ² sec]	I ² T	2650	9350
Maximum Thermal Resistance, Junction to Ceramic Base per Chip [°C/W]	R _{Jc}	0.45°C/W	0.3°C/W
Insolation Voltage [Vrms]	V _{ISOL}	2500	
Weight (typical)		4.5 oz (158g)	

MECHANICAL SPECIFICATIONS

Tolerances: ±0.02 in / 0.5 mm
All dimensions are in: inches [millimeters]



CIRCUIT DIAGRAMS



AGENCY APPROVALS



WARNINGS



RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE

- The product's side panels may be hot, allow the product to cool before touching.
- Follow proper mounting instructions including torque values.
- Do not allow liquids or foreign objects to enter this product.

Failure to follow these instructions can result in serious injury, or equipment damage.



HAZARD OF ELECTRIC SHOCK, EXPLOSION OR ARC FLASH

- Disconnect all power before installing or working with this equipment.
- Verify all connections and replace all covers before turning on power.

Failure to follow these instructions will result in death or serious injury.

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Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

CONTACT US

Americas

+1 (877) 502 5500 – Option 2
sales.crydom@sensata.com

Europe, Middle East & Africa

+44 (1202) 416170
ssr-info.eu@sensata.com

Asia Pacific

sales.isasia@list.sensata.com
China +86 (21) 2306 1500
Japan +81 (45) 277 7117
Korea +82 (31) 601 2004
India +91 (80) 67920890
Rest of Asia +886 (2) 27602006
ext 2808