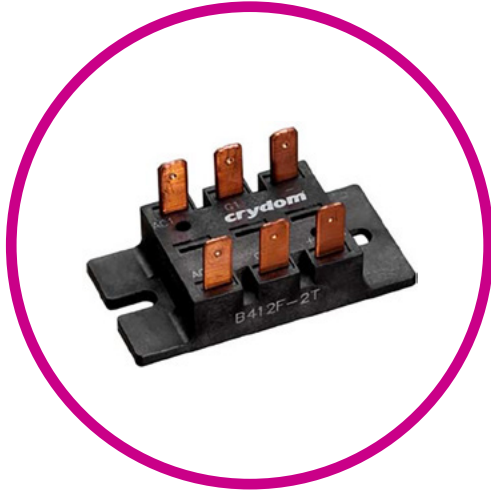




B-2T, B-2 | SERIES

POWER MODULES



Features

- Eight Circuits to Choose from
- For AC or DC Variable Voltage Output Up to 15KW
- UL Recognized E72445



ELECTRICAL SPECIFICATIONS

Description	Symbol	B5	B6
Maximum DC Output Current ($T_c = 85^\circ\text{C}$)	I_D	25A	42.5A
Maximum Voltage Drop @ Amps Peak	V_F	1.65V @ 25A	1.65V @ 42.5A
Operating Junction Temperature Range	T_J	-40 - 125°C	-40 - 125°C
Critical Rate of Rise of On-State Current @ $T_J=125^\circ\text{C}$	di/dt	100A/ μs	100A/ μs
Critical Rate of Rise of Off-State Voltage [V/s]	dv/dt	500V/ μs	500V/ μs
AC Line Input Voltage (Repetitive Peak Reverse Voltage)	V_{RMS}	120 (400V _{RMS})	100 (400V _{RMS})
AC Line Input Voltage (Repetitive Peak Reverse Voltage)	V_{RMS}	240 (400V _{RMS})	240 (400V _{RMS})
AC Line Input Voltage (Repetitive Peak Reverse Voltage)	V_{RMS}	280 (400V _{RMS})	280 (400V _{RMS})
AC Line Input Voltage (Repetitive Peak Reverse Voltage)	V_{RMS}	480(400V _{RMS})	480 (400V _{RMS})
Maximum Non-Repetitive Surge Current (1/2 Cycle, 60 Hz)	I_{TSM}	250A	600A
Maximum I^2T for Fusing ($t=8.3\text{ms}$) [A ² sec]	I^2T	260	1500
Minimum Required Gate Current to Trigger @ 25°C	I_{GT}	60mA	80mA
Minimum Required Gate Voltage to Trigger @ 25°C	V_{GT}	2.5V	3.0V
Average Gate Power	$P_{G(AV)}$	0.5W	0.5W
Maximum Peak Reverse Gate Voltage	V_{GM}	5.0V	5.0V
Maximum Thermal Resistance, Junction to Ceramic Base per Chip	R_{JC}	0.9°C/W	0.7°C/W
Isolation Voltage	V_{ISOL}	2500 Vrms	2500 Vrms

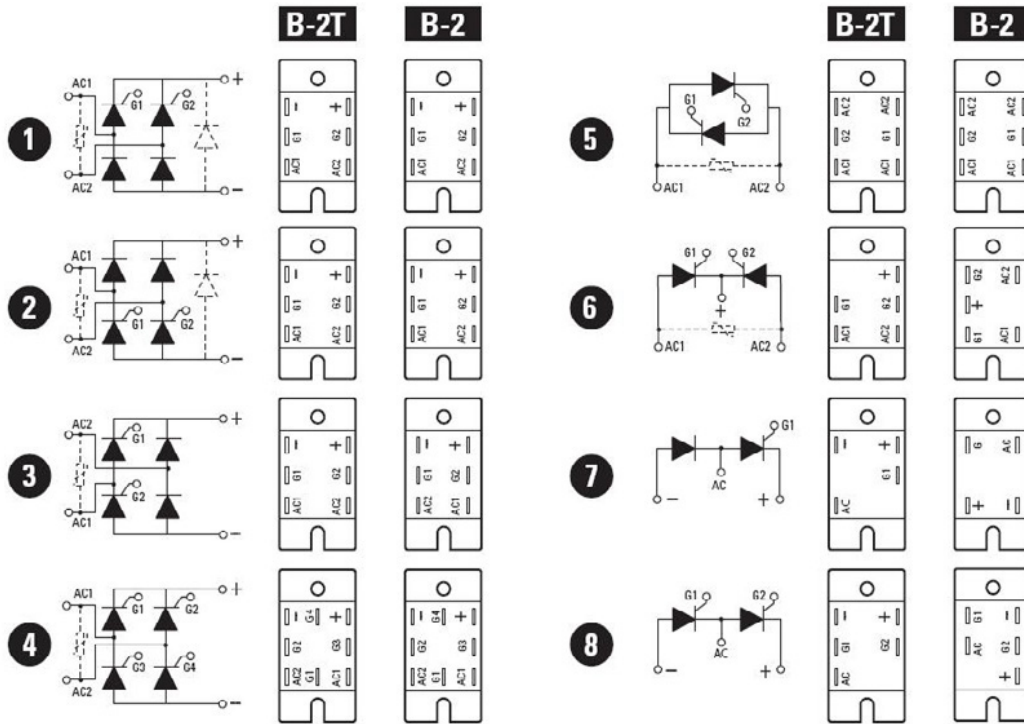


GENERAL SPECIFICATIONS

Description	Parameters
Weight (typical)	1.5 oz (42.5g)

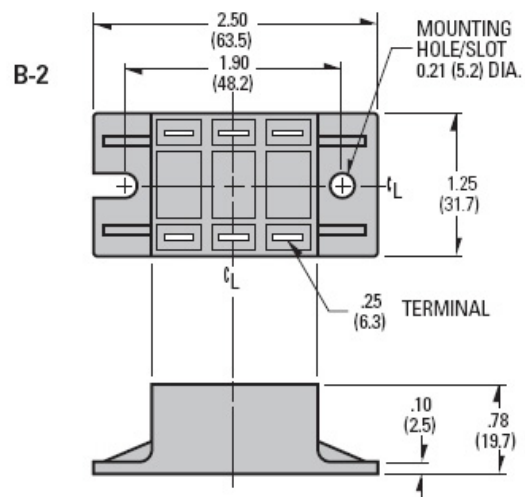
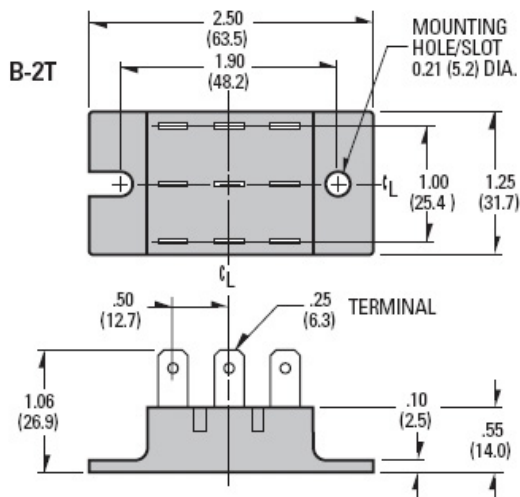


CIRCUIT DIAGRAMS



MECHANICAL SPECIFICATIONS

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





	B	5	1	2	-	F	SE	-2T
Series*								
B								
Current*								
5: 25 Amps 6: 42.5 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: 480 VAC								
Free Wheeling Diode**								
Blank: Not Included F: Included (For circuits 1 & 2 only)								
External Suppressor**								
Blank: Not Included SE: Included (-2T only, Circuits 1-6 only)								
Case Style*								
-2T: Standard -2: With Isolation Barriers								

*Required for valid part number

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



AGENCY APPROVALS & CERTIFICATIONS



E72445



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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