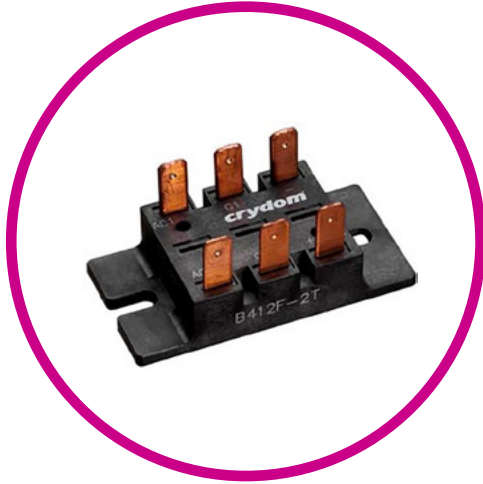


| B-2T / B-2 SERIES

POWER MODULES



Features

- 5 Circuits to choose from
- For AC or DC variable voltage output up to 15 kW
- UL Recognized E72445

SPECIFICATIONS

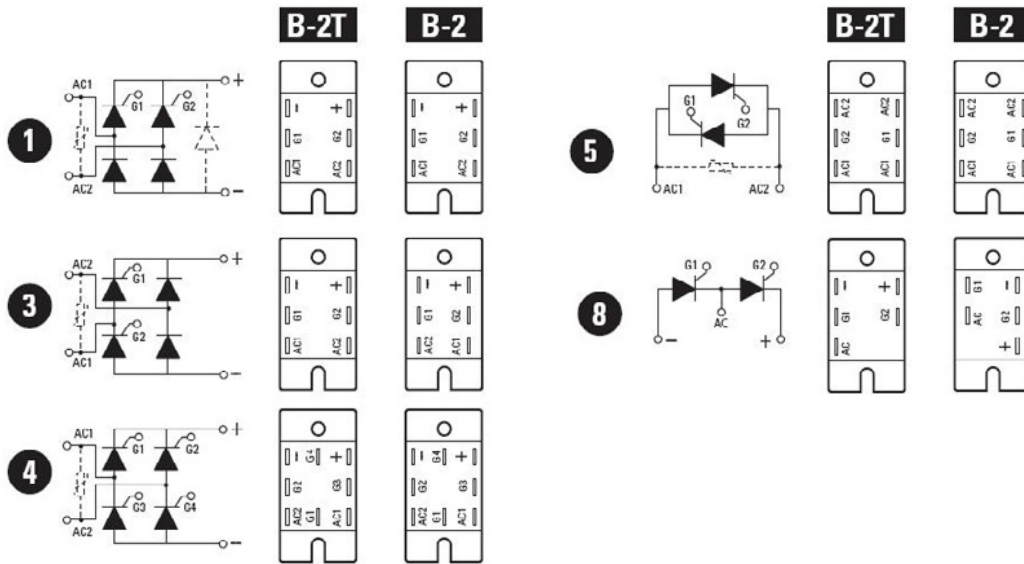
Electrical

Description	Symbol	B5	B6
Maximum DC Output Current ($T_c = 85^\circ\text{C}$)	I_D	25 A	42.5 A
Maximum Voltage Drop @ Amps Peak	V_F	1.65 V @ 25 A	
Operating Junction Temperature Range	T_J	$-40 - 125^\circ\text{C}$	
Critical Rate of Rise of On-State Current @ $T_J=125^\circ\text{C}$	di/dt	100 A/ μs	
Critical Rate of Rise of Off-State Voltage [V/s]	dv/dt	500 V/ μs	
AC Line Input Voltage (Repetitive Peak Reverse Voltage)	V_{RMS}	120 (400 V_{RMS})	
		240 (600 V_{RMS})	
		280 (800 V_{RMS})	
		480 (1200 V_{RMS})	
Maximum Non-Repetitive Surge Current (1/2 Cycle, 60 Hz)	I_{TSM}	250 A	600 A
Maximum I^2t for Fusing ($t=8.3\text{ms}$) [A^2sec]	I^2t	260	1500
Minimum Required Gate Current to Trigger @ 25°C	I_{GT}	60 mA	80 mA
Minimum Required Gate Voltage to Trigger @ 25°C	V_{GT}	2.5 V	3.0 V
Average Gate Power	$P_{G(AV)}$	0.5W	0.5 W
Maximum Peak Reverse Gate Voltage	V_{GM}	5.0 V	5.0 V
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	

General

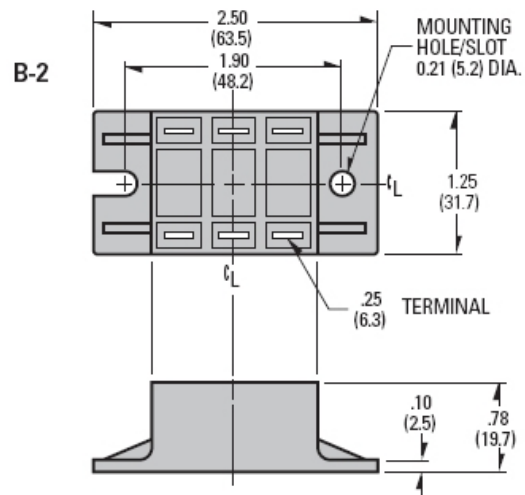
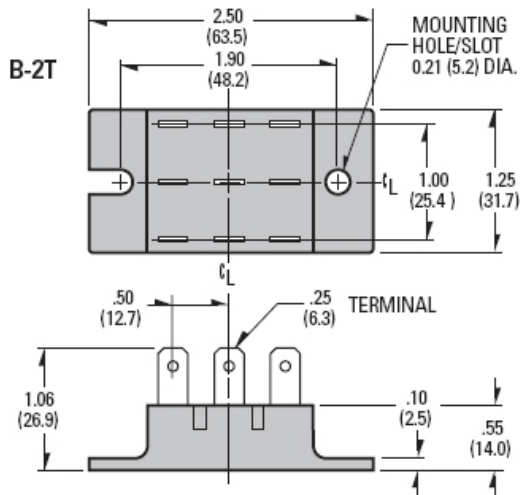
Description	Parameters
Weight (typical)	1.5 oz (42.5g)

CIRCUIT DIAGRAMS



MECHANICAL SPECIFICATIONS

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



AVAILABLE OPTIONS

Example : B512FSE-2T

	B	5	1	2	F	SE	-2T
Series							
B							
Load Current							
5: 25 Amps							
6: 42.5 Amps							
Circuit Type							
1 3 4 5 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 circuit 1 only)							
External Suppressor							
Blank: Not Included							
SE: Included							
(-2T only, Circuits 1-5 only)							
Case Style							
-2T: Standard							
-2: With Isolation Barriers							

NOTE: Not all combinations are available.
Consult factory for information on the availability of a specific part number.

AGENCY APPROVALS & CERTIFICATIONS



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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