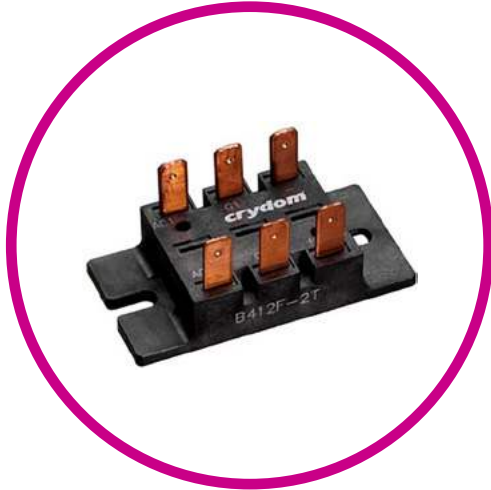




## B-2T, B-2 | SERIES

POWER MODULES



### Features

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



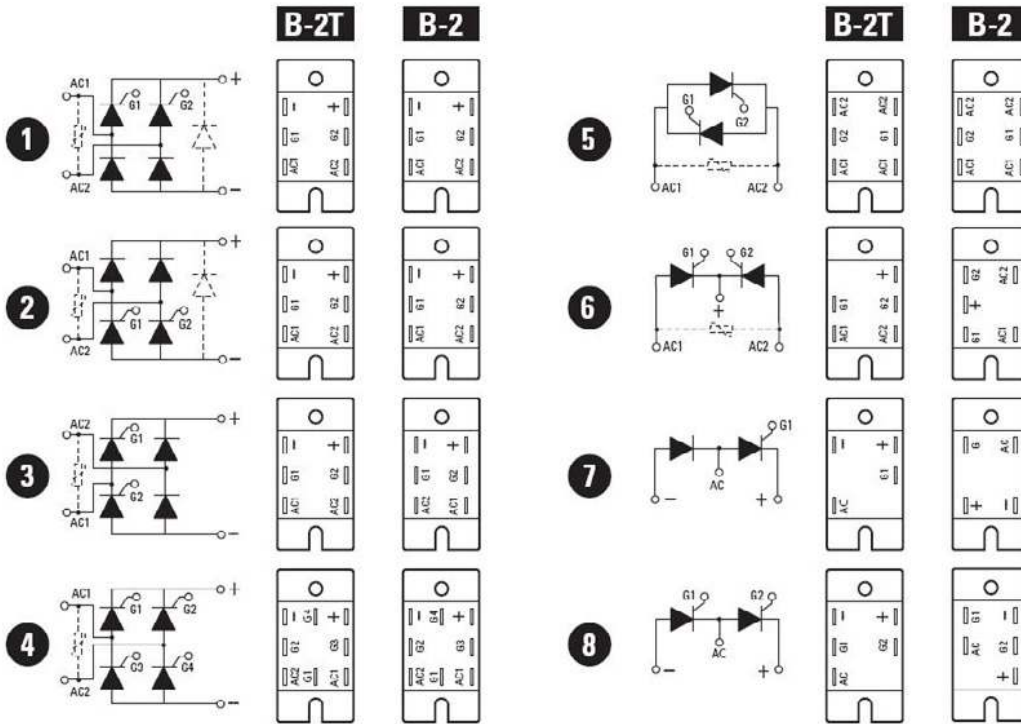
### ELECTRICAL SPECIFICATIONS

Description	Symbol	B5	B6
Maximum DC Output Current (Tc = 85°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 @ TJ=125°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 <sub>RMS</sub> )	100 (400V <sub>RMS</sub> )
AC Line Input Voltage (Repetitive Peak Reverse Voltage)	$V_{RMS}$	240 (400V <sub>RMS</sub> )	240 (400V <sub>RMS</sub> )
AC Line Input Voltage (Repetitive Peak Reverse Voltage)	$V_{RMS}$	280 (400V <sub>RMS</sub> )	280 (400V <sub>RMS</sub> )
AC Line Input Voltage (Repetitive Peak Reverse Voltage)	$V_{RMS}$	480(400V <sub>RMS</sub> )	480 (400V <sub>RMS</sub> )
Maximum Non-Repetitive Surge Current (1/2 Cycle, 60 Hz)	$I_{TSM}$	250A	600A
Maximum I <sup>2</sup> T for Fusing (t=8.3ms) [A <sup>2</sup> sec]	I <sup>2</sup> T	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

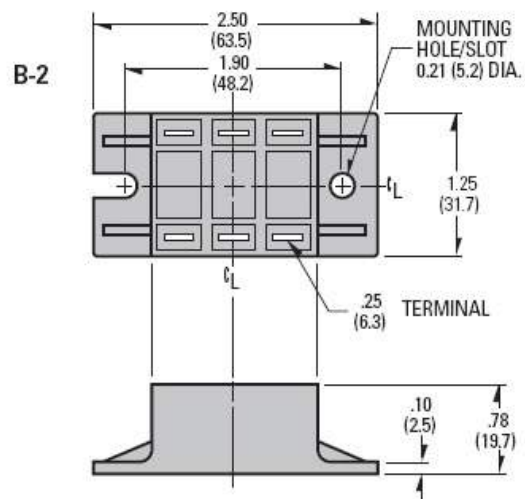
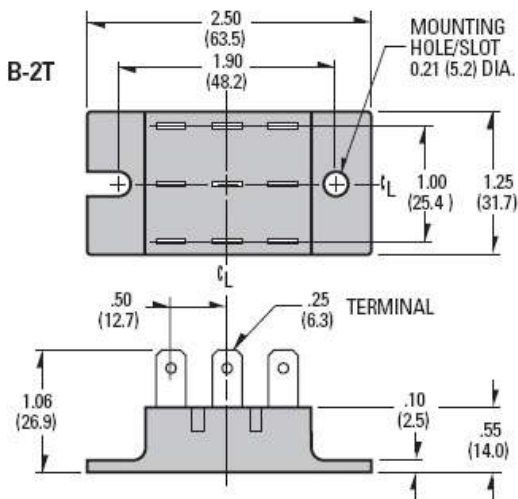
Description	Parameters
Weight (typical)	1.5 oz (42.5g)

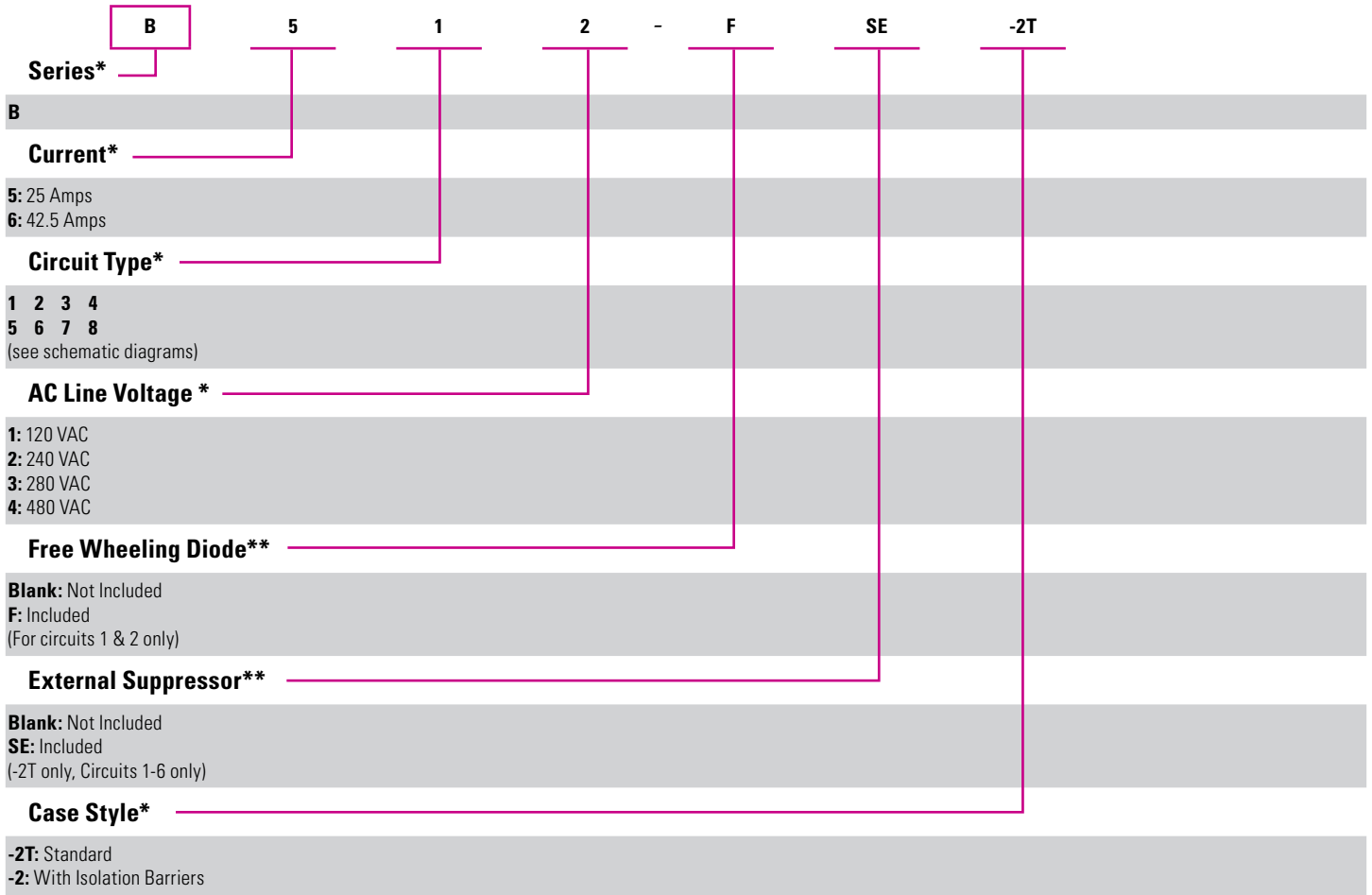
# CIRCUIT DIAGRAMS



# MECHANICAL SPECIFICATIONS

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





\*Required for valid part number

\*\*For options only and not required for valid 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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