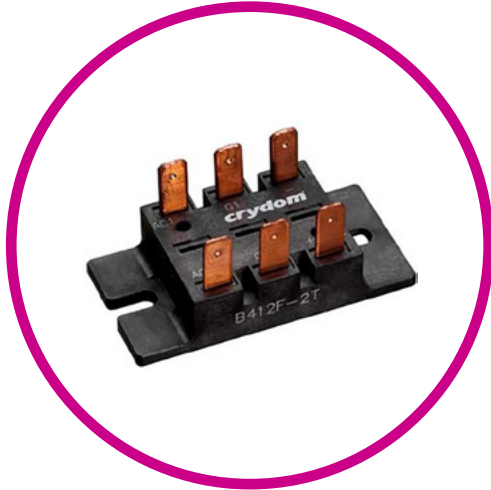




## B-2T, B-2 | SERIES

POWER MODULES



### Features

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



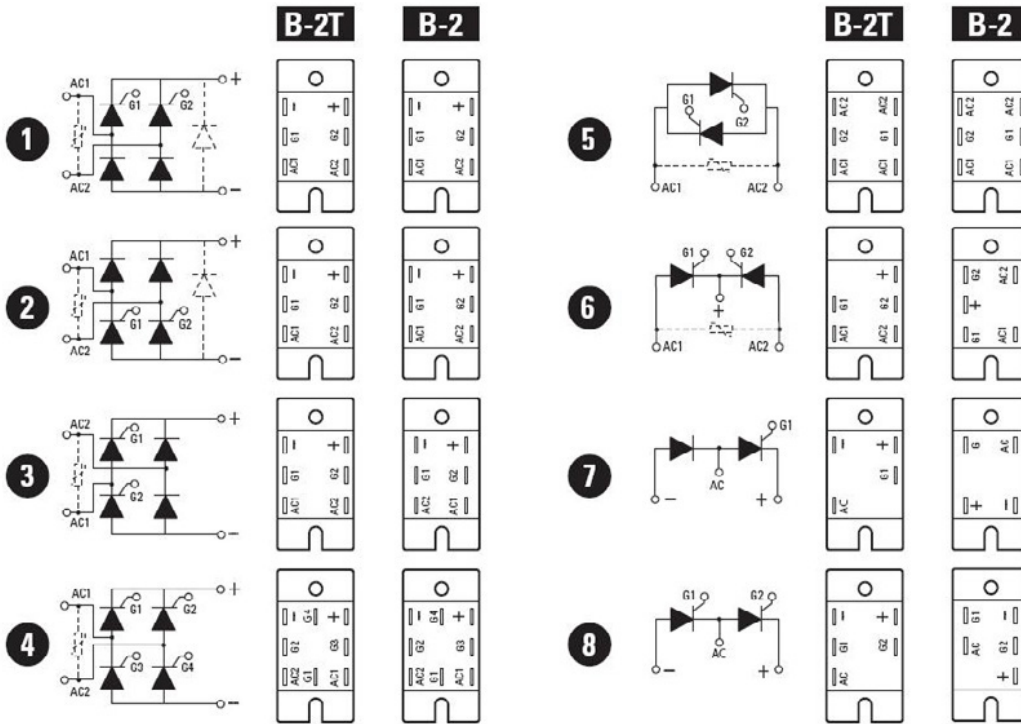
### ELECTRICAL SPECIFICATIONS

| 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

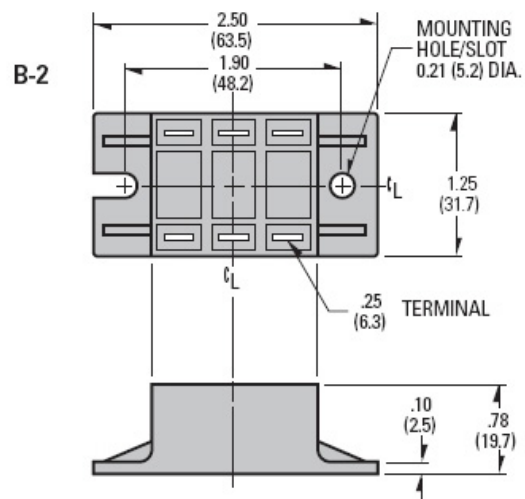
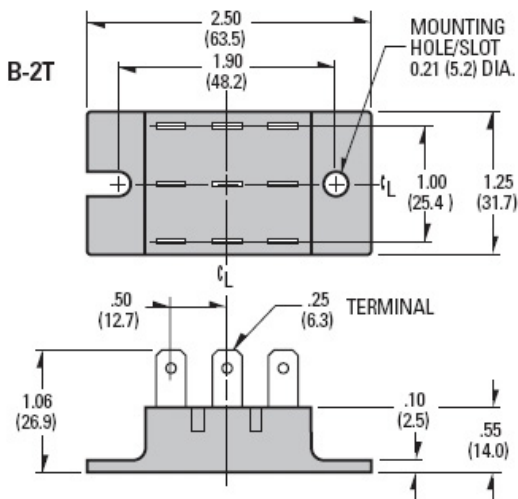
| Description      | Parameters     |
|------------------|----------------|
| Weight (typical) | 1.5 oz (42.5g) |

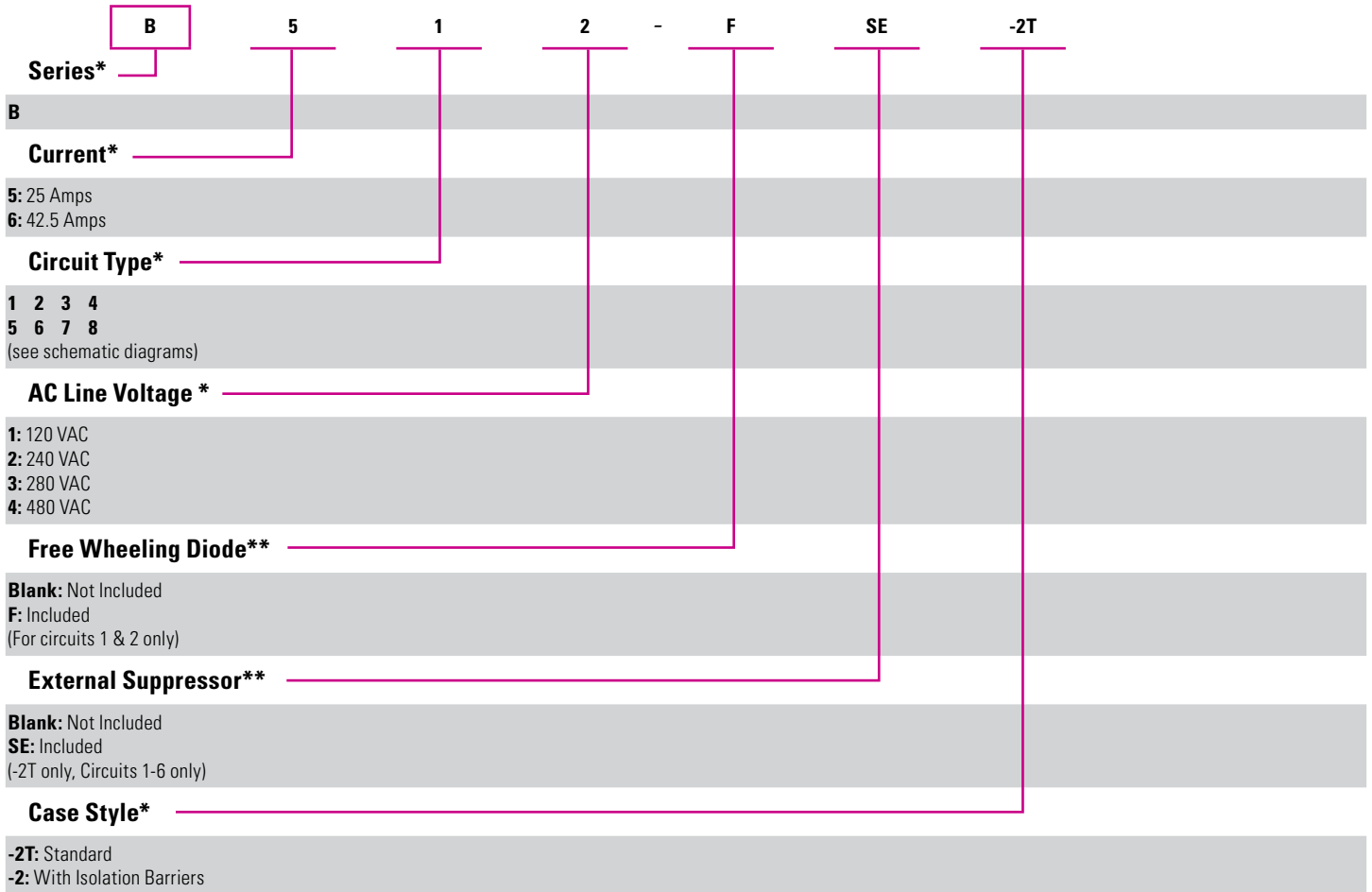
# CIRCUIT DIAGRAMS



# 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