

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



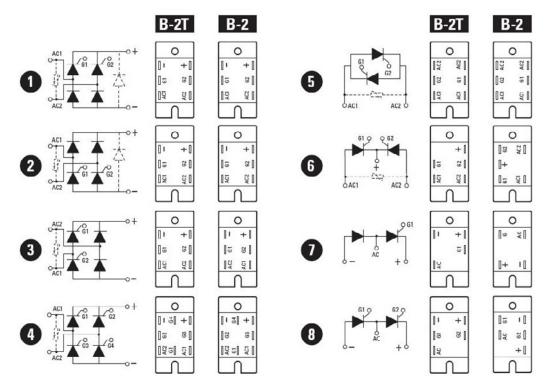
| Description | Symbol | B5 | B6 |
|--|-------------------|----------------------------|----------------------------|
| Maximum DC Output Current (Tc = 85°C) | I _D | 25A | 42.5A |
| Maximum Voltage Drop @ Amps Peak | V _F | 1.65V @ 25A | 1.65V @ 42.5A |
| Operating Junction Temperature Range | T_{J} | -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 _{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 ² T for Fusing (t=8.3ms) [A ² sec] | J ² 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

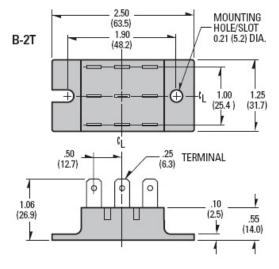
| Description | Parameters |
|------------------|----------------|
| Weight (typical) | 1.5 oz (42.5g) |

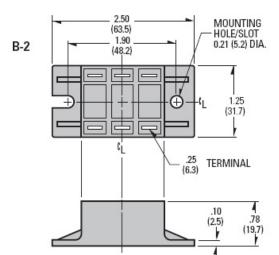
CIRCUIT DIAGRAMS



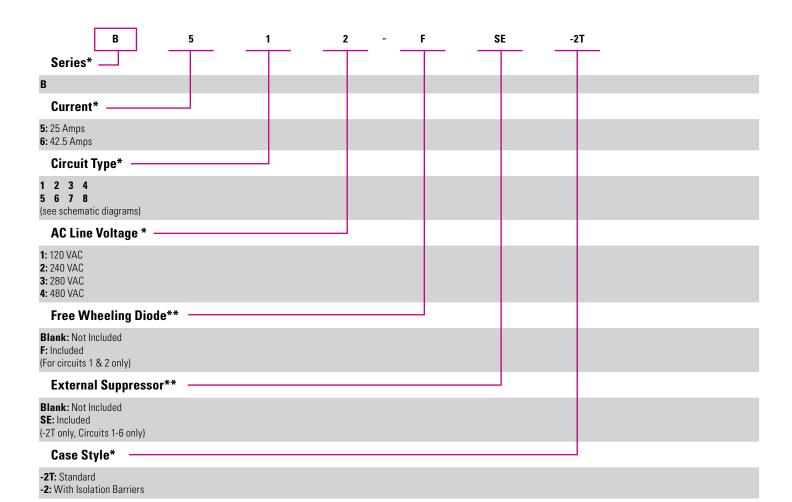
MECHANICAL SPECIFICATIONS

*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















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 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