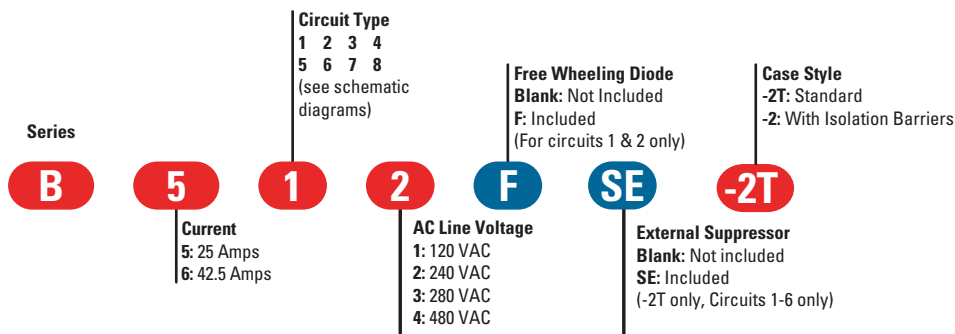




## B-2T, B-2 Series

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

### AVAILABLE OPTIONS



- Required for valid part number
- For options only and not required for valid part number

Note: Not all combinations available

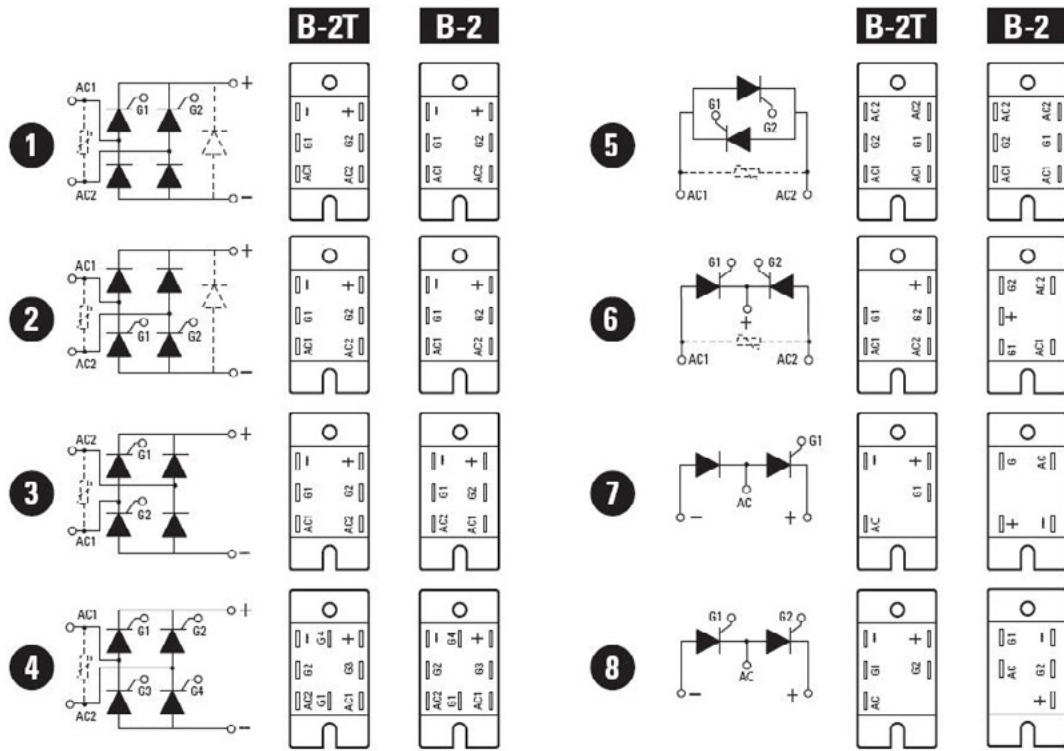
### ELECTRICAL SPECIFICATIONS

	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 @ T <sub>J</sub> =125°C	di/dt	100A/μs	100A/μs
Critical Rate of Rise of Off-State Voltage [V/μs]	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

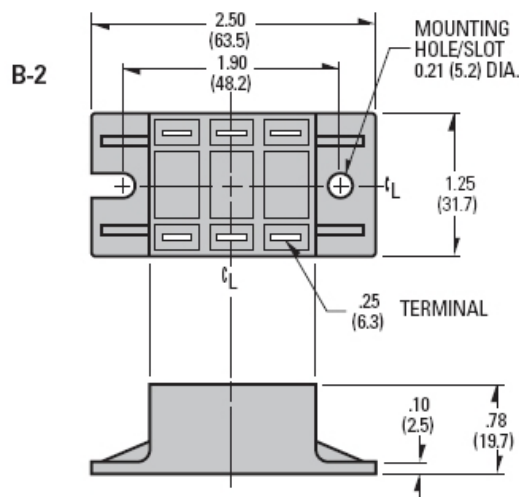
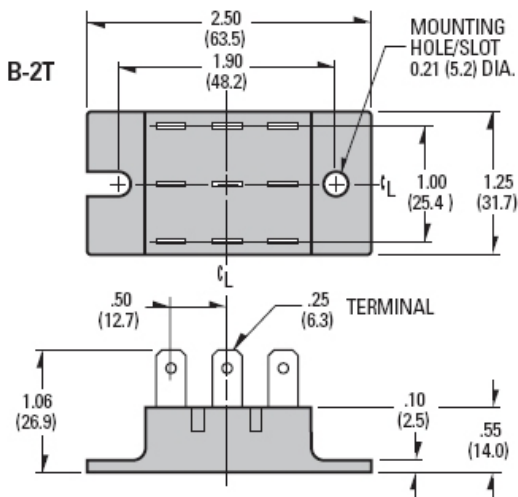
Description	Parameters
Weight (typical)	1.5 oz (42.5g)

**CIRCUIT DIAGRAMS**



**MECHANICAL SPECIFICATIONS**

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



**Agency Approvals**



Rev. 121411

**! DANGER / PELIGRO / DANGER /GEFAHR / PERICOLO / 危險**

<p><b>HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH.</b></p> <ul style="list-style-type: none"> <li>• Disconnect all power before installing or working with this equipment.</li> <li>• Verify all connections and replace all covers before turning on power.</li> </ul> <p><b>Failure to follow these instructions will result in death or serious injury.</b></p>	<p><b>RIESGO DE DESCARGA ELECTRICA O EXPLOSION.</b></p> <ul style="list-style-type: none"> <li>• Desconectar todos los suministros de energia a este equipo antes de trabajar con este equipo.</li> <li>• Verificar todas las conexiones y colocar todas las tapas antes de energizar el equipo.</li> </ul> <p><b>El incumplimiento de estas instrucciones puede provocar la muerte o lesiones serias.</b></p>	<p><b>RISQUE DE DESCARGE ELECTRIQUE OU EXPLOSION</b></p> <ul style="list-style-type: none"> <li>• Eteindre toutes les sources d'énergie de cet appareil avant de travailler dessus de cet appareil</li> <li>• Vérifier tous connexions, et remettre tous couverts en place avant de mettre sous</li> </ul> <p><b>De non-suivi de ces instructions provoquera la mort ou des lésions sérieuses.</b></p>	<p><b>GEFAHR EINES ELEKTRISCHE N SCHLAGES ODER EINER EXPLOSION.</b></p> <ul style="list-style-type: none"> <li>• Stellen Sie jeglichen Strom ab, der dieses Gerät versorgt, bevor Sie an dem Gerät Arbeiten durchführen</li> <li>• Vor dem Drehen auf Energie alle Anschlüsse überprüfen und alle Abdeckungen ersetzen.</li> </ul> <p><b>Unterlassung dieser Anweisungen können zum Tode oder zu schweren Verletzungen führen.</b></p>	<p><b>RISCHIO DI SCOSSA ELETTRICA O DELL'ESPLOSIONE.</b></p> <ul style="list-style-type: none"> <li>• Spenga tutta l'alimentazione che fornisce questa apparecchiatura prima di lavorare a questa apparecchiatura</li> <li>• Verificare tutti i collegamenti e sostituire tutte le coperture prima dell'accensione</li> </ul> <p><b>L'omissione di queste istruzioni provocherà la morte o lesioni serie</b></p>	<p><b>存在电击、爆炸或电弧闪烁危险</b></p> <ul style="list-style-type: none"> <li>• 在操作此设备之前请先关闭电源。</li> </ul> <p><b>若不遵守这些说明,可能会导致严重的人身伤害甚至死亡。</b></p>
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**! WARNING / AVERTISSEMENT / WARNUNG /ADVERTENCIA / AVVERTENZA / 警告**

<p><b>RISK OF MATERIAL DAMAGE AND HOT ENCLOSURE</b></p> <ul style="list-style-type: none"> <li>• The product's side panels may be hot, allow the product to cool before touching.</li> <li>• Follow proper mounting instructions including torque values.</li> <li>• Do not allow liquids or foreign objects to enter this product.</li> </ul> <p><b>Failure to follow these instructions can result in serious injury, or equipment damage.</b></p>	<p><b>RISQUE DE DOMMAGE MATERIEL ET DE SURCHAUFFE DU BOITIER</b></p> <ul style="list-style-type: none"> <li>• Les panneaux latéraux du produit peuvent être chauds. Laisser le produit refroidir avant de le toucher.</li> <li>• Respecter les consignes de montage, et notamment les couples de serrage.</li> <li>• Ne pas laisser pénétrer de liquide ni de corps étrangers à l'intérieur du produit.</li> </ul> <p><b>Le non-respect de cette directive peut entraîner, des lésions corporelles graves ou des dommages matériels.</b></p>	<p><b>GEFAHR VON MATERIALSCHÄDEN UND GEHÄUSEERHITZUNG</b></p> <ul style="list-style-type: none"> <li>• Die Seitenwände können heiß sein. Lassen Sie das Produkt abkühlen, bevor Sie es berühren.</li> <li>• Beachten Sie die Montageanweisungen,</li> <li>• Führen Sie keine Flüssigkeiten oder Fremdkörper in das Produkt ein.</li> </ul> <p><b>Die Nichtbeachtung dieser Anweisung kann Körperverletzung oder Materialschäden zur Folge haben.</b></p>
<p><b>RIESGO DE DAÑOS MATERIALES Y DE SOBRECIENTAMIENTO DE LA UNIDAD</b></p> <ul style="list-style-type: none"> <li>• Los paneles laterales del producto pueden estar calientes. Esperar que el producto se enfríe antes de tocarlo.</li> <li>• Respetar las instrucciones de montaje, y en particular los pares de apretado.</li> <li>• No dejar que penetren líquidos o cuerpos extraños en el producto.</li> </ul> <p><b>Si no se respetan estas precauciones pueden producirse graves lesiones, daños materiales.</b></p>	<p><b>RISCHIO DI DANNI MATERIALI E D'INVOLUCRO CALDO</b></p> <ul style="list-style-type: none"> <li>• I pannelli laterali dell'apparecchio possono scottare; lasciar quindi raffreddare il prodotto prima di toccarlo.</li> <li>• Seguire le istruzioni di montaggio corrette.</li> <li>• Non far entrare liquidi o oggetti estranei in questo apparecchio.</li> </ul> <p><b>La mancata osservanza di questa precauzione può causare gravi rischi per l'incolumità personale o danni alle apparecchiature.</b></p>	<p><b>材料损坏和高温外壳的危险性</b></p> <ul style="list-style-type: none"> <li>• 产品的一侧面板可能很热, 在其冷却前请不要触碰。</li> <li>• 遵照正确的安装说明, 包括扭矩值。</li> <li>• 请勿让液体及其他异物进入本产品。</li> </ul> <p><b>如不能正确执行这些操作说明, 极有可能造成严重人体伤害或者设备的损坏。</b></p>