

BR5005L Thru. BR5010L

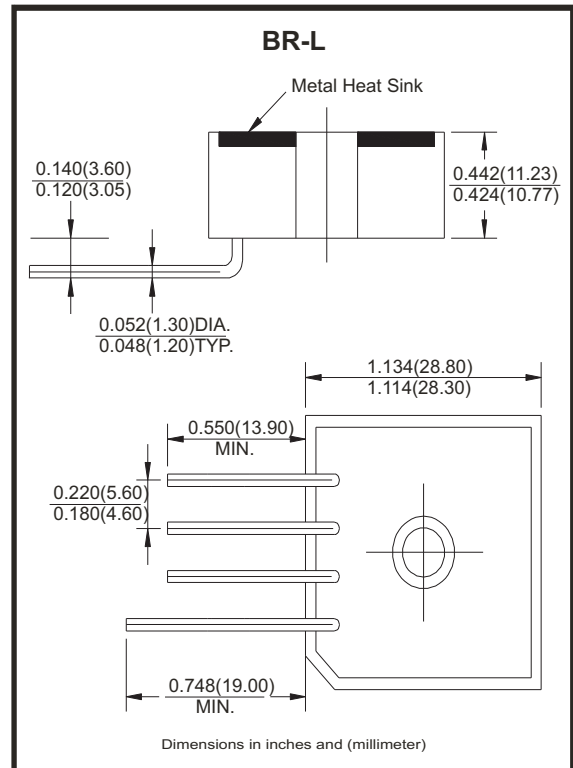
Reverse Voltage: 50 to 1000V
 Forward Current: 50A
 RoHS Device

Features

- Plastic case with heatsink for heat dissipation.
- Surge overload -500 Amperes peak.

Mechanical Data

- Epoxy: U/L 94-V0 rate flame retardant.
- Case: Molded plastic with heatsink integrally, mounted in the bridge encapsulation.
- Mounting position: Any
- Weight: 30 grams
- Terminals: Wire lead Ø 50mils.



Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%

Parameter	Symbol	BR5005L	BR501L	BR502L	BR504L	BR506L	BR508L	BR5010L	Unit
Maximum Peak Recurrent Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Current for Resistive Load @ $T_c=55^\circ\text{C}$	$I_{(AV)}$	50							A
Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Super Imposed On Rated Load	I_{FSM}	500							A
Maximum Forward Voltage Per Bridge Element at 25A Peak	V_F	1.1							V
Maximum Reverse Current at Rate DC Blocking Voltage	@ $T_J=25^\circ\text{C}$	10							μA
	@ $T_J=100^\circ\text{C}$	1000							
Typical Thermal Resistance (FIG.3)	$R_{\theta JC}$	2.0							$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150							$^\circ\text{C}$

Rating and Characteristics Curves (BR5005L Thru. BR5010L)

Fig.1 - Derating Curve Output Rectified Current

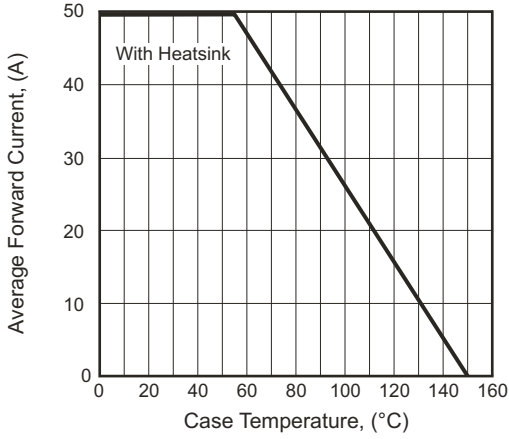


Fig.2 - Maximum Forward Surge Current

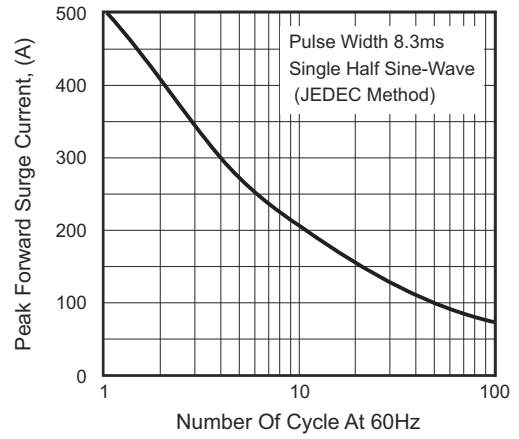


Fig.3 - Typical Forward Characteristics

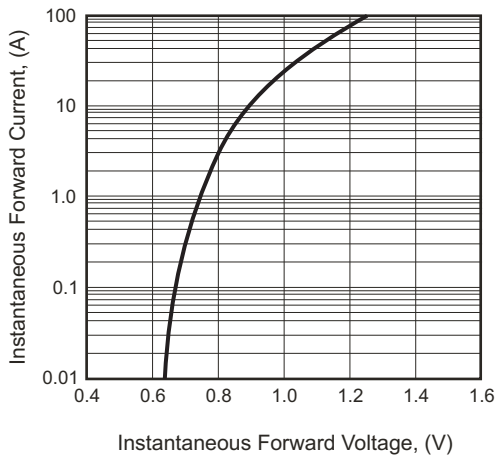
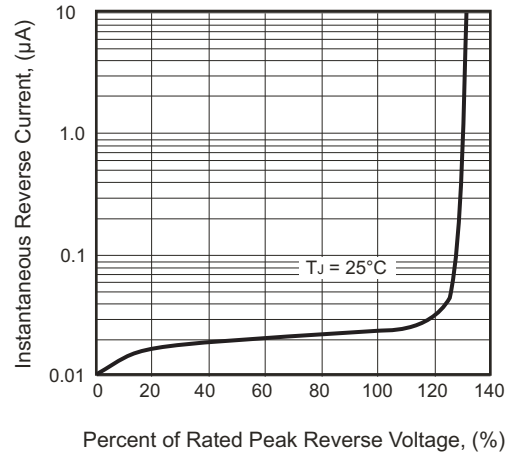
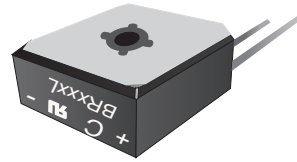


Fig.4 - Typical Reverse Characteristics



Marking Code

Part Number	Marking code
BR5005L-G	BR5005L
BR501L-G	BR501L
BR502L-G	BR502L
BR504L-G	BR504L
BR506L-G	BR506L
BR508L-G	BR508L
BR5010L-G	BR5010L



XXX / XXXX = Product type marking code

Standard Packaging

Case Type	BULK PACK	
	BOX (pcs)	CARTON (pcs)
BR-L	120	1,200