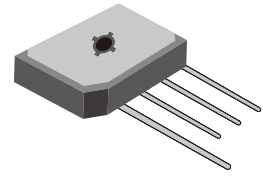


## BR5005L-G Thru. BR5010L-G

Reverse Voltage: 50 to 1000V

Forward Current: 50A

RoHS Device

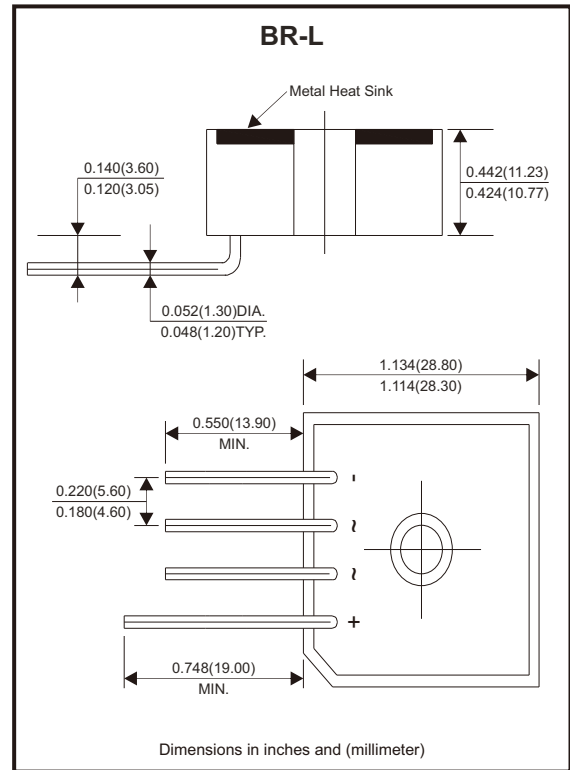


### Features

- Plastic case with heatsink for heat dissipation.
- Surge overload -500 amperes peak.
- UL recognized file # E349301.

### Mechanical Data

- Epoxy: UL 94V-0 rate flame retardant.
- Case: Molded plastic with heat sink integrally mounted in the bridge encapsulation.
- Mounting position: Any
- Weight: 30 grams approx.
- Terminals: Wire lead Ø 50mils.
- Polarity: Symbol marked on body.



### 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	BR 5005L-G	BR 501L-G	BR 502L-G	BR 504L-G	BR 506L-G	BR 508L-G	BR 5010L-G	Unit
Maximum recurrent peak 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 @ $T_c=55^\circ C$	$I_{(AV)}$	50							A
Peak forward surge current , 8.3ms single half sine-wave superimposed 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 rated DC blocking voltage @ $T_J=25^\circ C$	$I_R$	10							$\mu A$
Typical thermal resistance (Fig.3)	$R_{\theta JC}$	2							$^\circ C/W$
Operating temperature range	$T_J$	-55 to +150							$^\circ C$
Storage temperature range	$T_{STG}$	-55 to +150							$^\circ C$

## Rating and Characteristics Curves (BR5005L-G Thru. BR5010L-G)

Fig.1 - Forward Curve Derating Curve

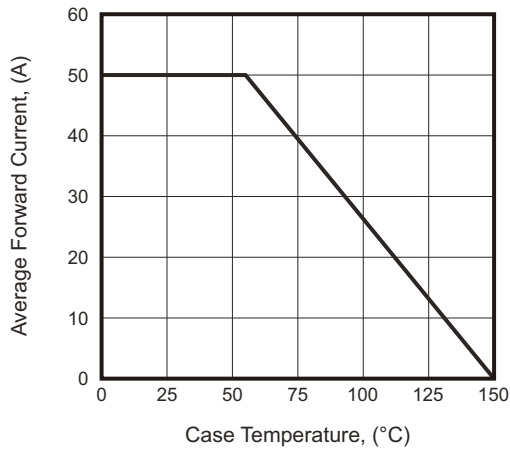


Fig.2 - Maximum Non-Repetitive Surge Current

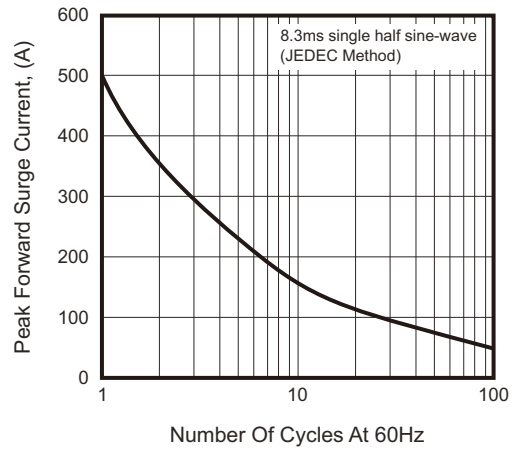


Fig.3 - Typical Forward Characteristics

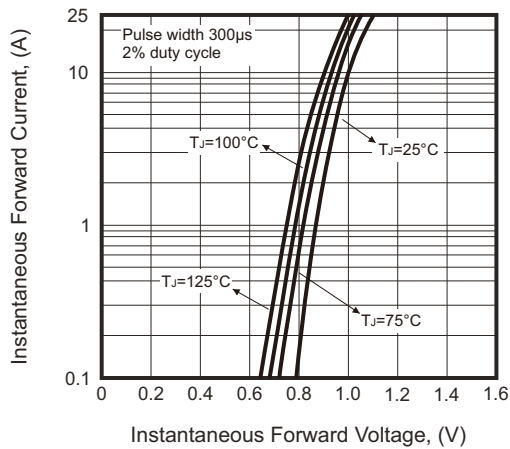
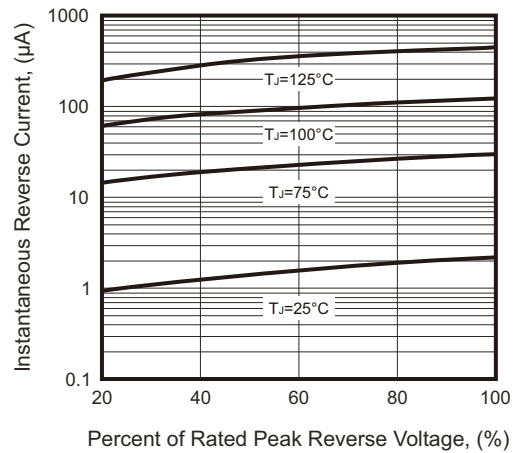
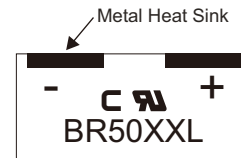


Fig.4 - Typical Reverse Characteristics



## 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



**X / XX = Product type marking code**

## Standard Packaging

Case Type	BULK PACK	
	BOX ( pcs )	CARTON ( pcs )
BR-L	60	120