

Bridge Refiers

Features

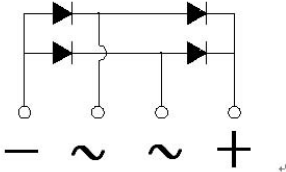
- UL recognition, file #E230084
Universal 3-way terminals: snap-on, wire wrap-around, or PCB mounting
- High surge current capability
- Low thermal resistance
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

General purpose use in AC/DC bridge full wave rectification for power supply, home appliances, office equipment, industrial automation applications.

Mechanical Data

- **Package:** BR- L
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102



■Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BR50005L	BR5001L	BR5002L	BR5004L	BR5006L	BR5008L	BR5010L
Device marking code			BR50005L	BR5001L	BR5002L	BR5004L	BR5006L	BR5008L	BR5010L
Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink Tc=55°C	IO	A	50						
Surge(Non-repetitive)Forward Current @60HZ Half- sine Wave, 1 cycle, Ta=25°C	IFSM	A	500						
Current Squared Time @1ms≤t<8.3ms Tj=25°C, Rating of per diode	I ² t	A ² S	1040						
Storage Temperature	Tstg	°C	-55 ~+150						
Junction Temperature	Tj	°C	-55 ~+150						
Dielectric Strength, Terminals to case, AC 1 minute	Vdis	KV	2.5						
Mounting Torque	TOR	kg-cm	10						

■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	BR50005L	BR5001L	BR5002L	BR5004L	BR5006L	BR5008L	BR5010L
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=25A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	VRM=VRRM	10						



BR50005L THRU BR5010L

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	BR50005L	BR5001L	BR5002L	BR5004L	BR5006L	BR5008L	BR5010L	
Thermal Resistance	Between junction and case, With heatsink	R _{θJ-C}	°C/W	1.2							

■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BR50005L~BR5010L	A1	Approximate 17.1	60	60	600	Paper Box

■ Characteristics (Typical)

FIG1: I_o-T_c Curve

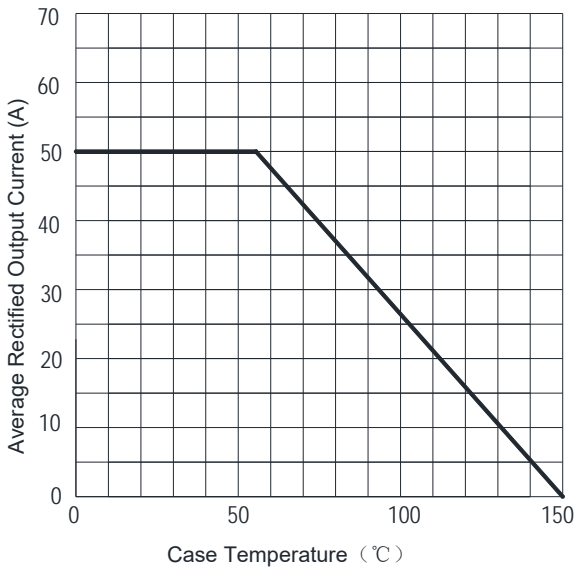


FIG2: Surge Forward Current Capability

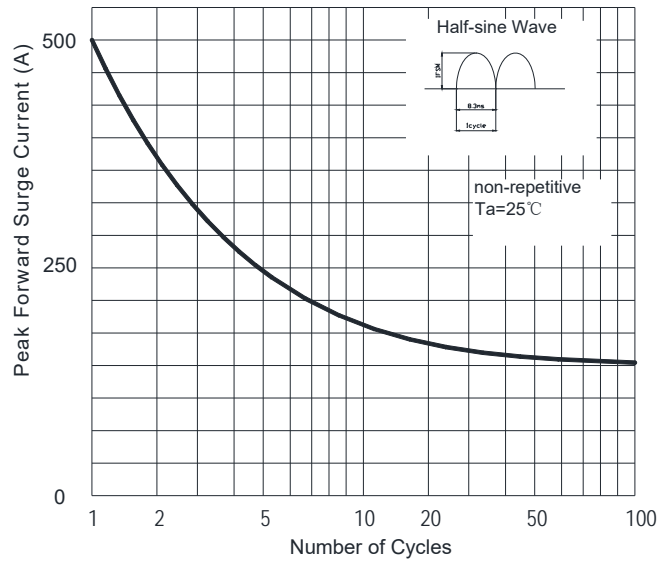


FIG3: Instantaneous Forward Voltage

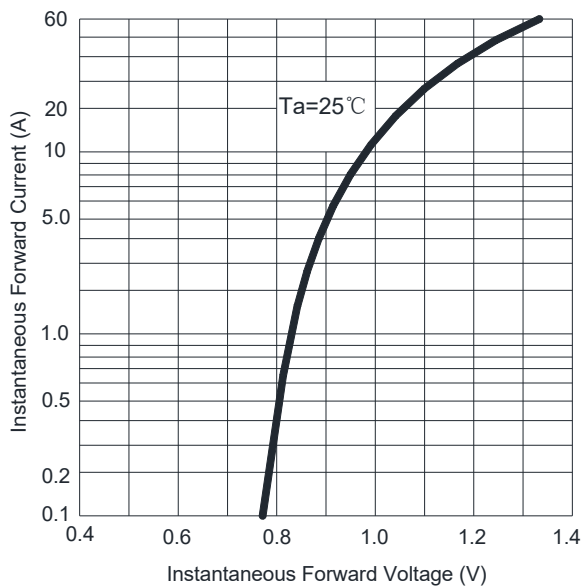
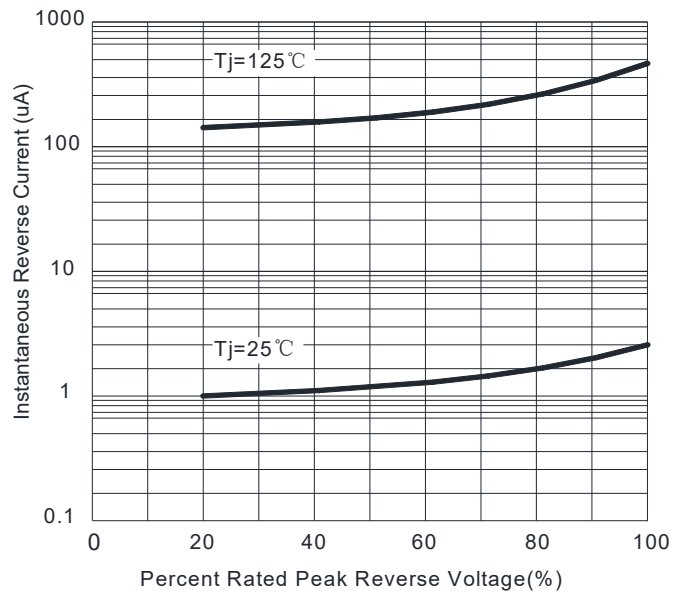


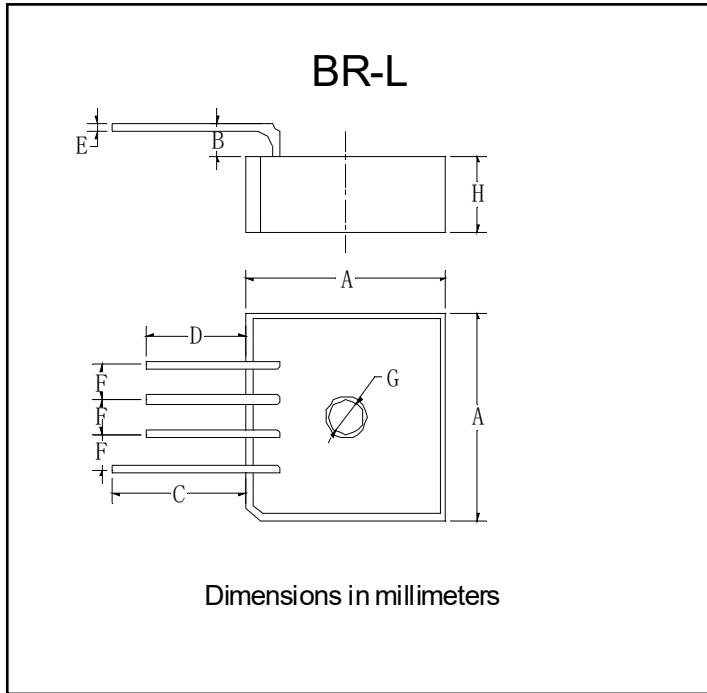
FIG4: Typical Reverse Characteristics





BR50005L THRU BR5010L

■ Outline Dimensions



BR-L		
Dim	Min	Max
A	28.2	28.8
B	3.0	4.5
C	19.1	
D	13.9	
E	1.23	1.33
F	4.6	5.6
G	5	5.5
H	10.8	11.2



BR50005L THRU BR5010L

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