

Bridge Rectifiers

Features

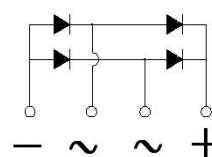
- UL recognition, file #E230084 Universal 3-way terminals: snap-on, wire wrap-around, or PCB mounting
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

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 (T_a=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BR25005L	BR2501L	BR2502L	BR2504L	BR2506L	BR2508L	BR2510L
Device marking code			BR25005L	BR2501L	BR2502L	BR2504L	BR2506L	BR2508L	BR2510L
Repetitive Peak Reverse Voltage	V _{RRM}	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink, T _c =55°C	I _O	A	25						
Surge(Non-repetitive)Forward Current @60Hz Half- sine Wave, 1 cycle, T _a =25°C	I _{FSM}	A	400						
Current Squared Time @1ms≤t≤8.3ms T _j =25°C, Rating of per diode	I ² t	A ² S	660						
Storage Temperature	T _{stg}	°C	-55 ~+150						
Junction Temperature	T _j	°C	-55 ~+125						
Dielectric Strength, Terminals to case, AC 1 minute	V _{dis}	KV	2.5						
Mounting Torque	TOR	kg-cm	10						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	BR25005L	BR2501L	BR2502L	BR2504L	BR2506L	BR2508L	BR2510L
Maximum instantaneous forward voltage drop per diode	V _{FM}	V	I _{FM} =12.5A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RM} =V _{RRM}	10						

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

PARAMETER	SYMBOL	UNIT	BR25005L	BR2501L	BR2502L	BR2504L	BR2506L	BR2508L	BR2510L
Thermal Resistance Between junction and case, With heatsink	R _{θ J-C}	°C/W	2.1						

■ **Ordering Information (Example)**

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BR25005L-BR2510L	A1	Approximate 17.1	60	60	600	Paper Box

■ **Characteristics (Typical)**

FIG1:Io-Tc Curve

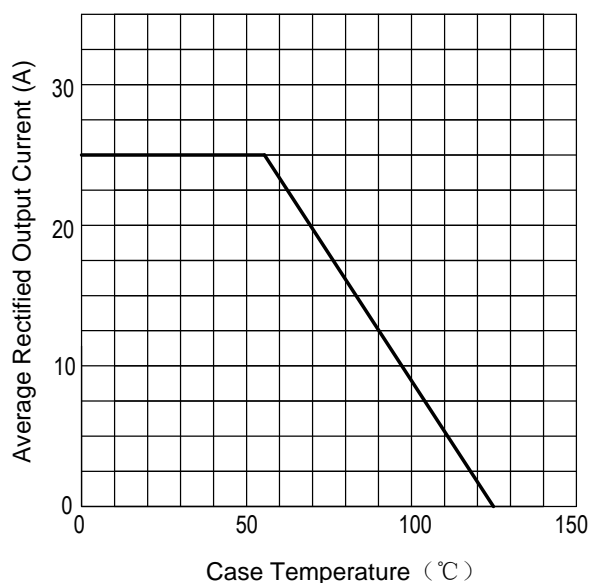


FIG2:Surge Forward Current Capability

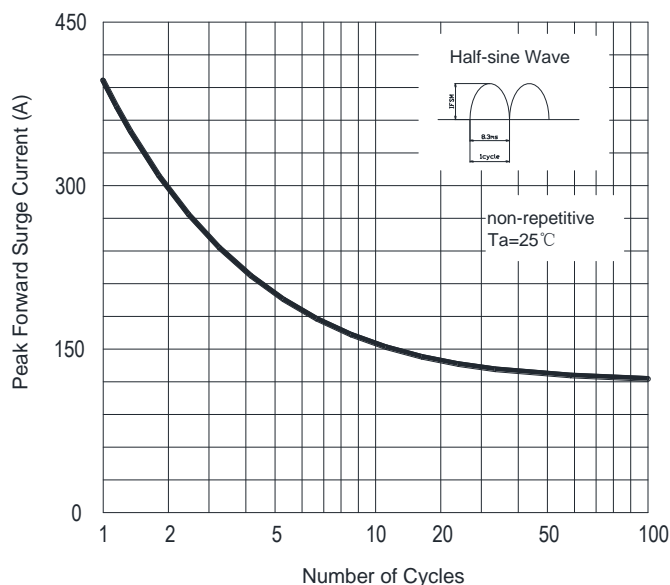


FIG3:Instantaneous Forward Voltage

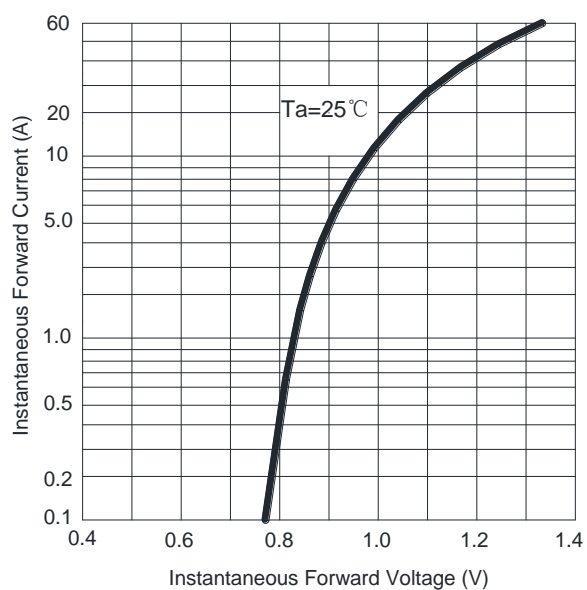
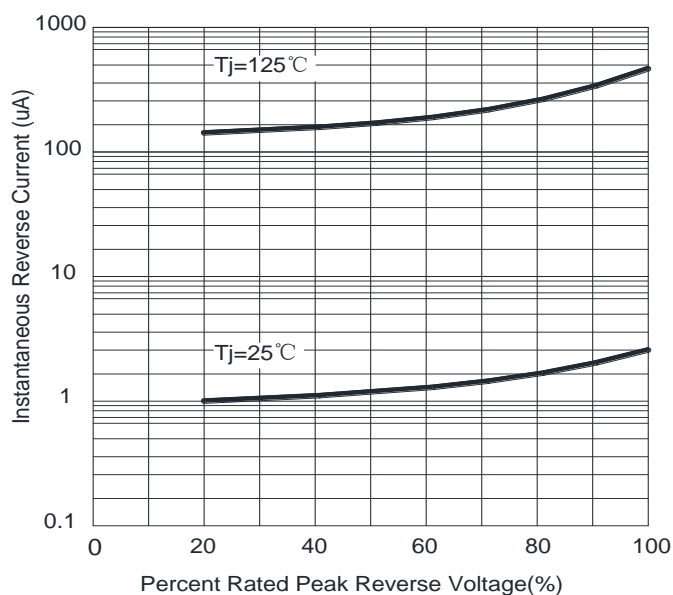
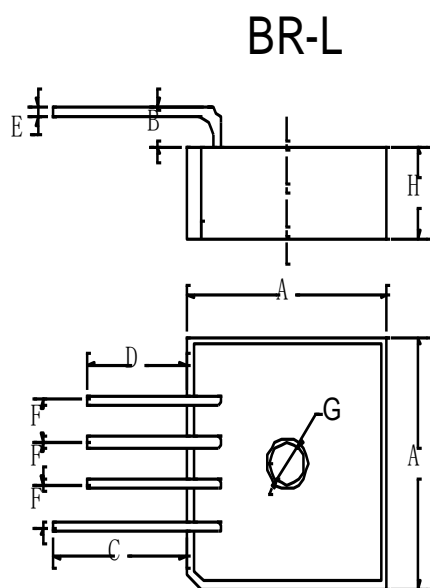


FIG4:Typical Reverse Characteristics



■ 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

Dimensions in millimeters

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