

Bridge Rectifiers

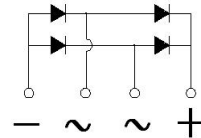
Features

- 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 ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BR15005L	BR1501L	BR1502L	BR1504L	BR1506L	BR1508L	BR1510L
Device marking code			BR15005L	BR1501L	BR1502L	BR1504L	BR1506L	BR1508L	BR1510L
Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink $T_c=55^\circ\text{C}$	IO	A	15						
Surge(Non-repetitive)Forward Current @60Hz Half- sine Wave, 1 cycle, $T_a=25^\circ\text{C}$	IFSM	A	400						
Current Squared Time @ $1\text{ms} \leq t \leq 8.3\text{ms}$ $T_j=25^\circ\text{C}$, Rating of per diode	I^2t	A ² S	660						
Storage Temperature	Tstg	°C	-55 ~+150						
Junction Temperature	Tj	°C	-55 ~+125						
Dielectric Strength, Terminals to case, AC 1 minute	V _{dis}	KV	2.5						
Mounting Torque	TOR	kg-cm	10						

■ Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	BR15005L	BR1501L	BR1502L	BR1504L	BR1506L	BR1508L	BR1510L
Maximum instantaneous forward voltage drop per diode	VFM	V	IFM=7.5A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	µA	V _{RM} =VRRM	10						

■ Thermal Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BR15005L	BR1501L	BR1502L	BR1504L	BR1506L	BR1508L	BR1510L
Thermal Resistance Between junction and case, With heatsink	$R_{\theta J-C}$	°C/W	3.3						



■ Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BR15005L~BR1510L	A1	Approximate 17.1	60	60	600	Paper Box

■ Characteristics (Typical)

FIG1:Io-Tc Curve

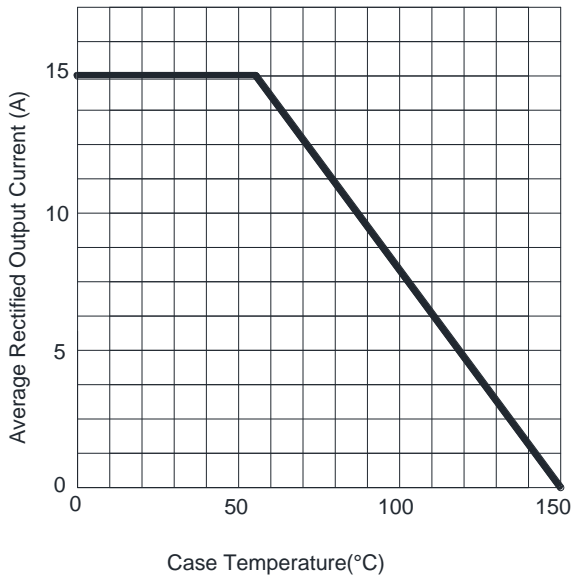


FIG2:Surge Forward Current Capability

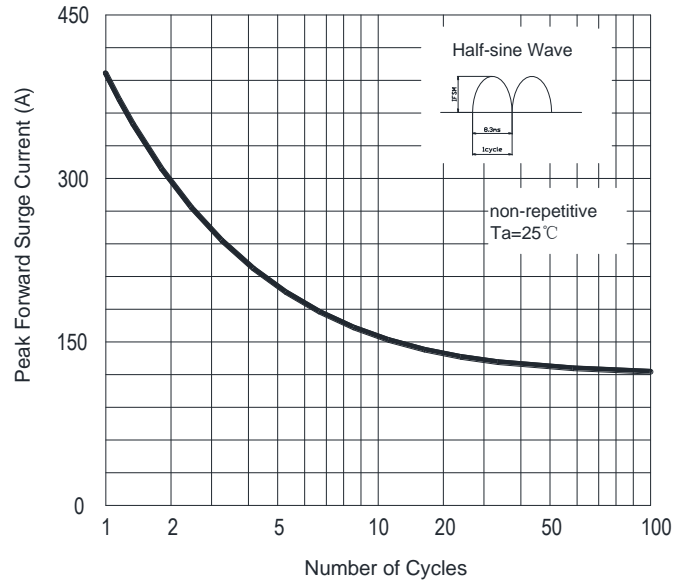


FIG3:Instantaneous Forward Voltage

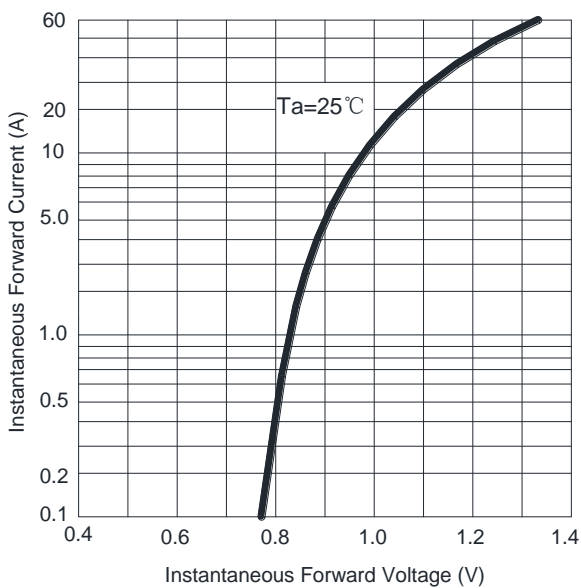
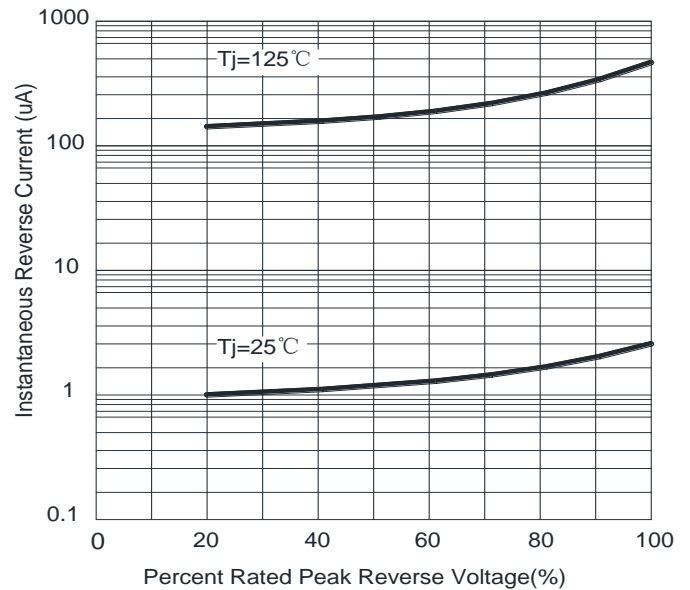
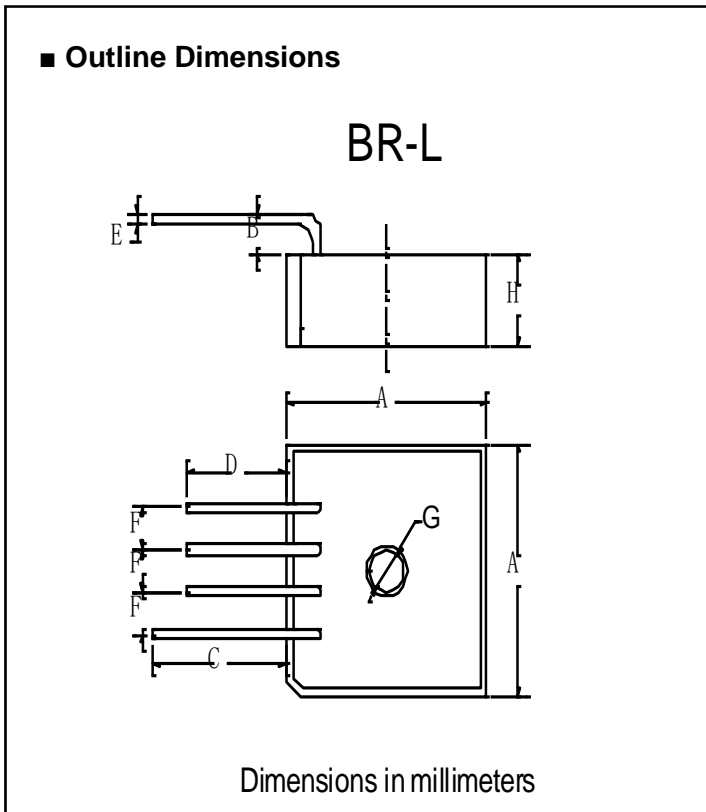


FIG4:Typical Reverse Characteristics





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

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