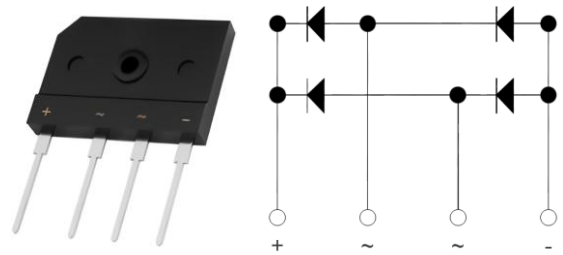


Features

- ◆ Glass Passivated Chip
- ◆ High Surge Current Capability
- ◆ Low Reverse Leakage Current
- ◆ Backside Metal Heat Dissipation
- ◆ Case to Terminal Isolation Voltage 2500V

Application

- ◆ Welding Machine
- ◆ Induction Cooker
- ◆ Household Electrical Appliances
- ◆ General Purpose Single-Phase Bridge Rectifier



Machanical Data

- ◆ Case: Plastic Package
- ◆ Marking / Polarity: Marked on Body
- ◆ Weight: About 6.9 Grams

Maximum Ratings and Thermal Characteristics $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter		Rating	Unit
V_{RRM}	Recurrent Peak Reverse Voltage		1000	V
$I_{F(AV)}$	Average Forward Output Rectified Current, $T_A = 120^\circ\text{C}$		40	A
V_F	Maximum Forward Voltage Per Leg, $I_{FM} = 20\text{A}$		1.1	V
I_{FSM}	Peak Forward Surge Current Single Half Sine-wave Superimposed on Rated Load		480	A
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_A = 25^\circ\text{C}$	5.0	μA
		$T_A = 125^\circ\text{C}$	500	
i^2t	Rating for Fusing ($t < 8.3\text{ms}$)		956	A^2S
V_{isol}	Rms Isolation Voltage from Case to Leads		2500	V
C_J	Typical Junction Capacitance		150	pF
$R_{\theta JC}$	Maximum Thermal Resistance Per Leg		0.8	$^\circ\text{C/W}$
T_J, T_{STG}	Operating Junction and Storage Temperature Range		-55 to 150	$^\circ\text{C}$

Notes:

- a. Junction to case with heatsink.
- b. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with M3 screw.

■ Characteristic Curve

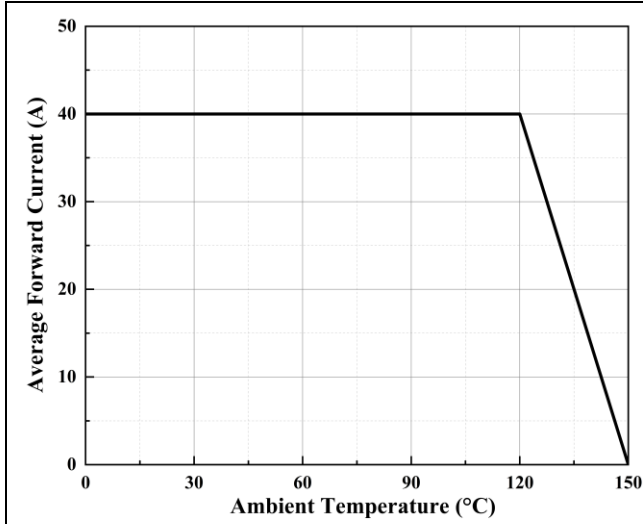


Figure 1. Forward Current Derating Curve

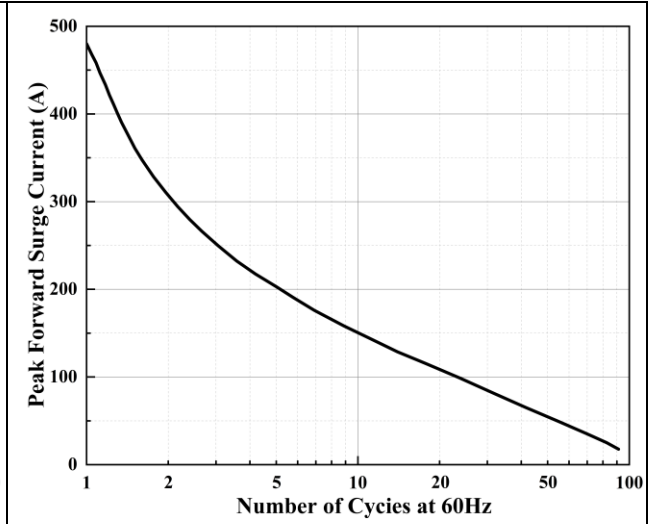


Figure 2. Maximum Non-Repetitive Surge Current

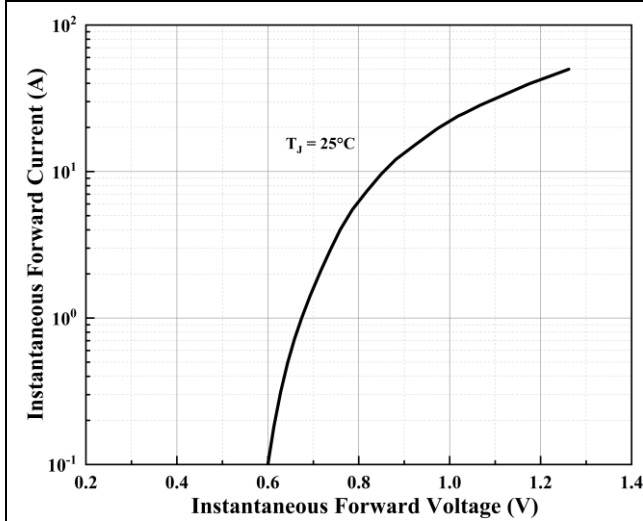


Figure 3. Typical Forward Characteristics Per Diode

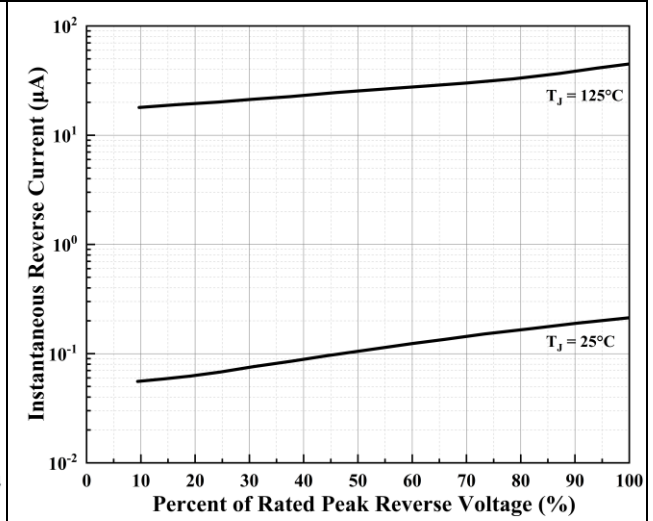
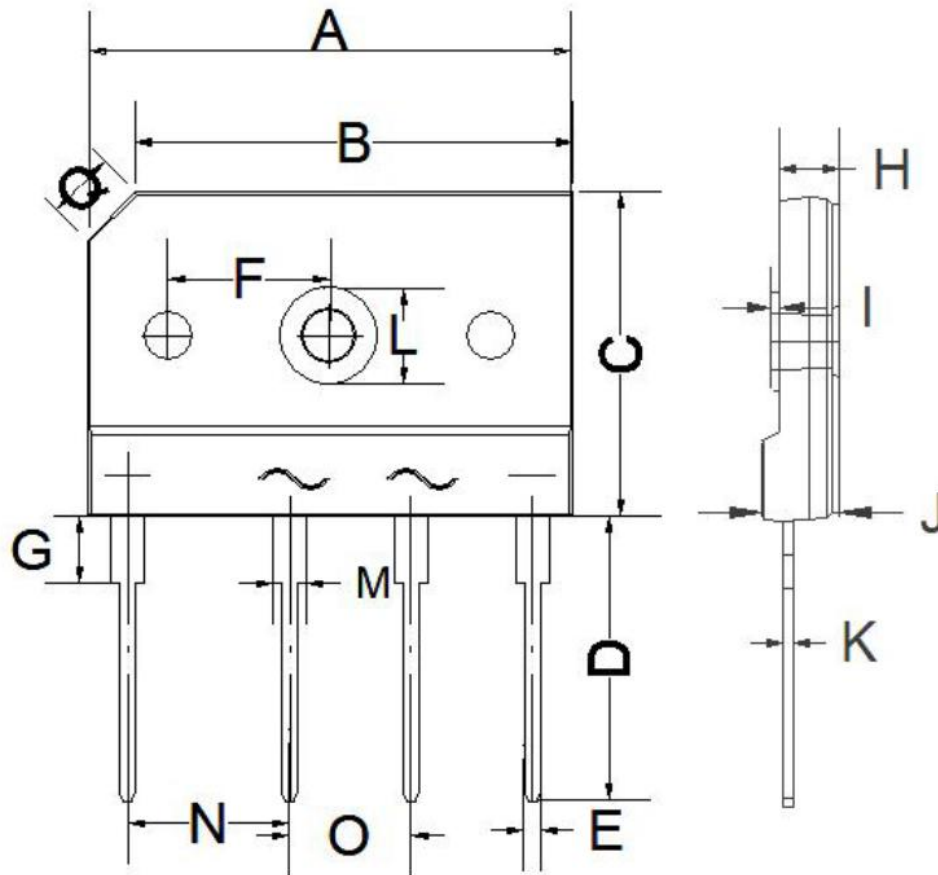


Figure 4. Typical Reverse Leakage Characteristics Per Diode

■ Package Information

LB Series



Item	Min (mm)	Max (mm)
A	29.70	30.30
B	26.80	27.20
C	19.70	20.30
D	17.40	17.80
E	0.98	1.02
F	9.80	10.20
G	3.80	4.30
H	3.45	3.85
I	0.40	0.50
J	4.45	4.85
K	0.58	0.62
L	5.70	6.30
M	1.90	2.30
N	9.80	10.20
O	7.20	7.70
Q	4.00	4.46