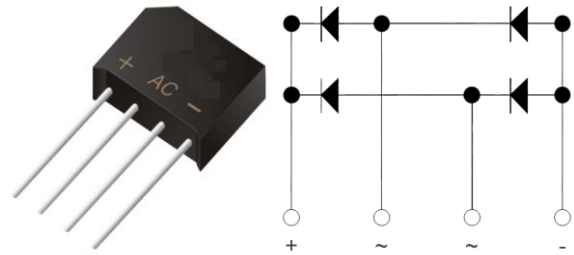


Features

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

Application

- ◆ Switching Mode Power Supply
- ◆ Household Electrical Appliances
- ◆ General Purpose Single-Phase Bridge Rectifier



Machanical Data

- ◆ Case: Plastic Package
- ◆ Marking / Polarity: Marked on Body
- ◆ Weight: About 4.2 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, $T_A = 120^\circ\text{C}$		6.0	A
V_F	Maximum Forward Voltage Per Leg, $I_{FM} = 6.0\text{A}$		1.05	V
I_{FSM}	Peak Forward Surge Current Single Half Sine-wave Superimposed on Rated Load		125	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 ($t < 8.3\text{ms}$)		64	A^2S
V_{isol}	Rms Isolation Voltage from Case to Leads		2500	V
C_J	Typical Junction Capacitance		38	pF
$R_{\theta JC}$	Maximum Thermal Resistance Per Leg		4.2	$^\circ\text{C/W}$
T_J, T_{STG}	Operating Junction and Storage Temperature Range		-55 to 150	$^\circ\text{C}$

Notes:

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

■ Characteristic Curve

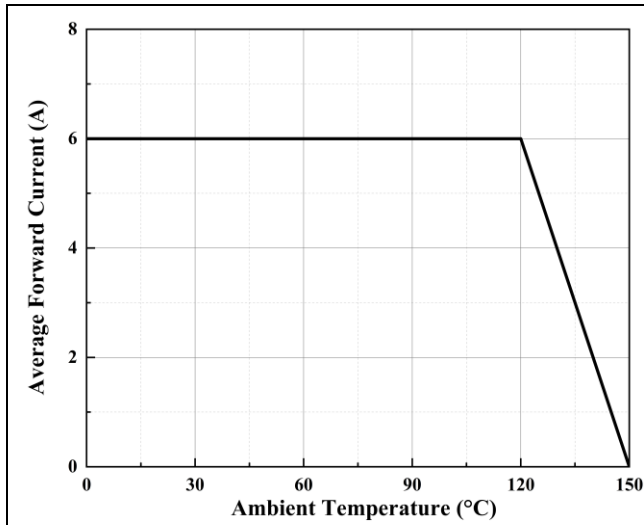


Figure 1. Forward Current Derating Curve

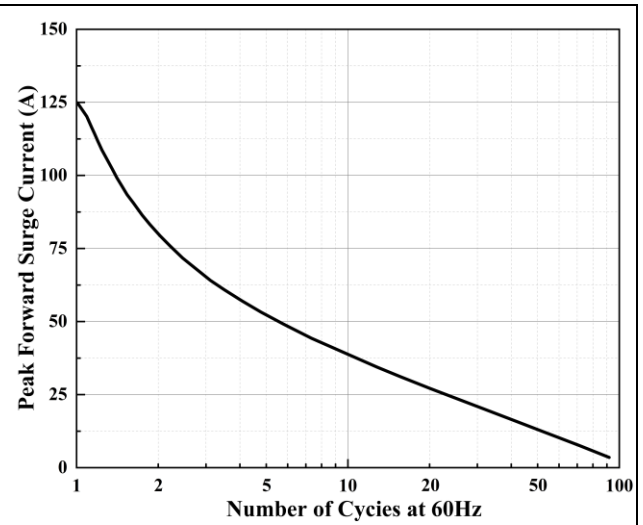


Figure 2. Maximum Non-Repetitive Surge Current

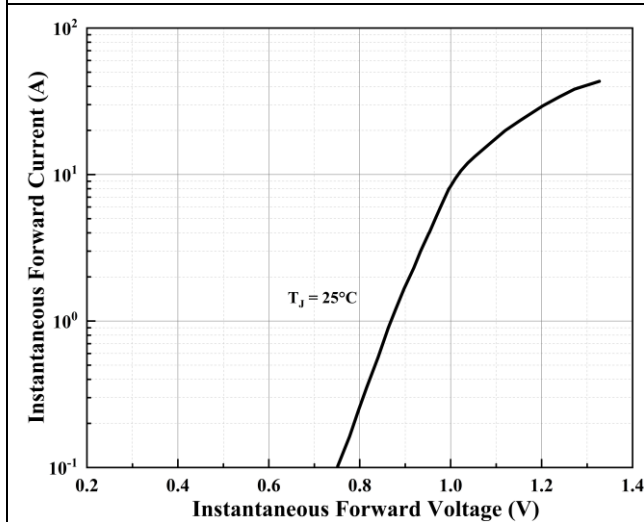


Figure 3. Typical Forward Characteristics Per Diode

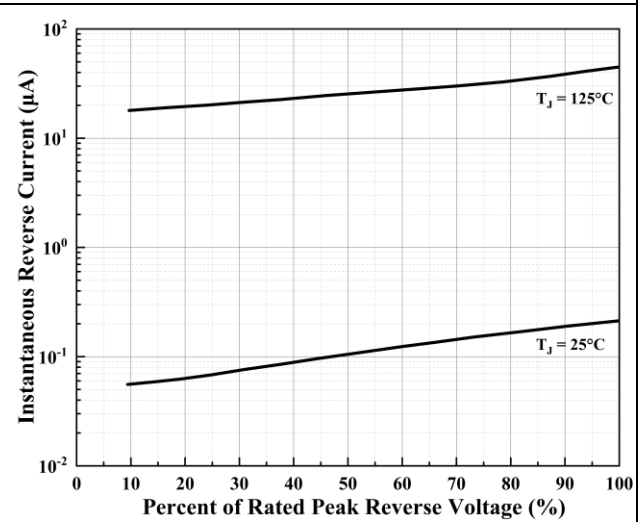
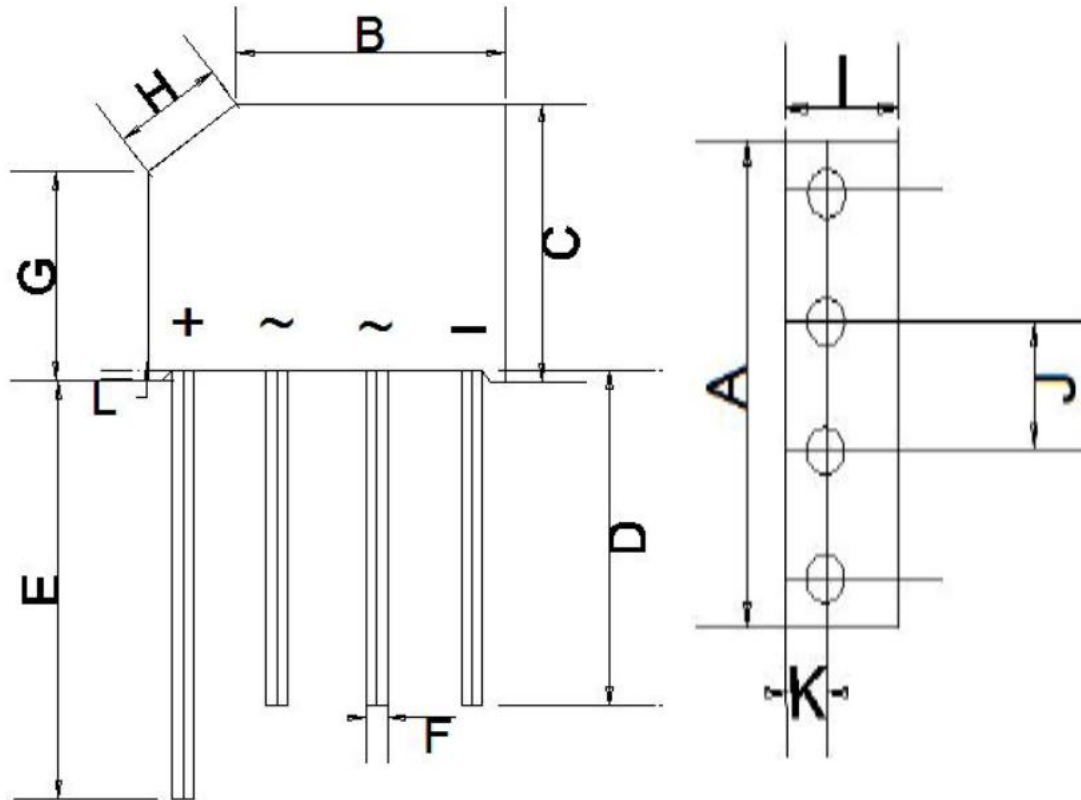


Figure 4. Typical Reverse Leakage Characteristics Per Diode

■ Package Information

KBL Series



Item	Min (mm)	Max (mm)
A	18.70	20.10
B	14.70	15.20
C	15.30	15.70
D	18.40	18.90
E	22.95	23.55
F	1.15	1.25
G	11.30	11.90
H	5.70	6.30
I	5.40	5.60
J	4.70	5.30
K	1.80	2.20
L	0.70	1.10