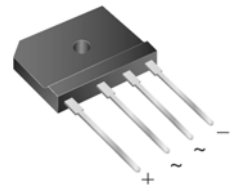


Features

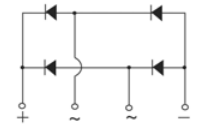
- Plastic package has underwriters laboratory flammability classification 94V-0
- Glass passivated chip junction
- High current capability
- Low forward voltage drop
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU



Package: GBJ

Mechanical Data

- Case: GBJ molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting position: Any



Schematic Diagram

Applications

Used in AC/DC bridge full wave rectification for SMPS, lighting ballaster, adapter, charger, home appliances, office equipment, and telecommunication applications.

Maximum Ratings and Electrical Characteristics

(Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.)

Parameters		Symbols	GSGBJ1016	Unit
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	1600	V
Maximum RMS Voltage		V_{RMS}	1120	V
Maximum DC Blocking Voltage		V_{DC}	1600	V
Maximum Average Forward Rectified Current		$I_{F(AV)}$	10.0	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)		I_{FSM}	160	A
Rating for Fusing (t=8.3ms)		I^2t	107	A ² S
Maximum Instantaneous Forward Voltage at 5.0A DC		V_F	1.1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	$T_J=25^{\circ}C$	I_R	5	μA
	$T_J=125^{\circ}C$		100	μA
Typical Thermal Resistance	Between Junction and Ambient, Without Heatsink	$R_{\theta JA}$	18	$^{\circ}C/W$
	Between Junction and Case, With Heatsink	$R_{\theta JC}$	2.0	
Operating Temperature Range		T_J	-55 to +150	$^{\circ}C$
Storage Temperature Range		T_{STG}	-55 to +150	$^{\circ}C$

Ratings and Characteristics Curves

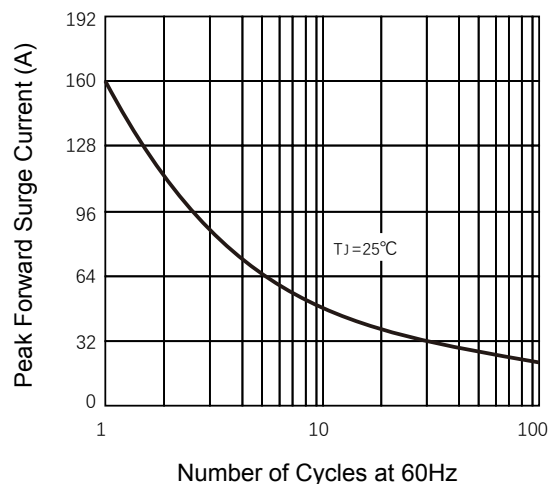


Figure 1. Maximum Forward Surge Current

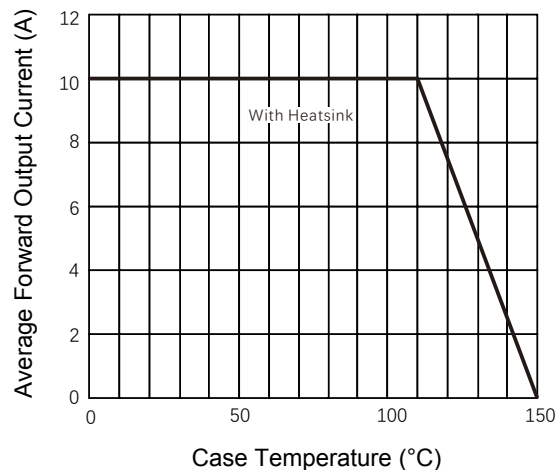


Figure 2. Forward Current Derating Curve

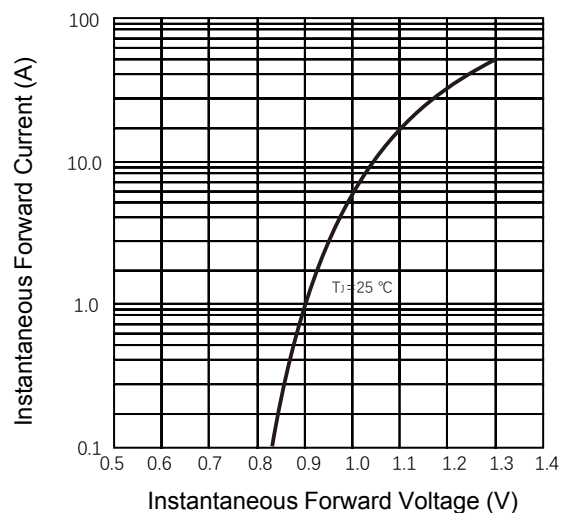


Figure 3. Typical Forward Characteristics

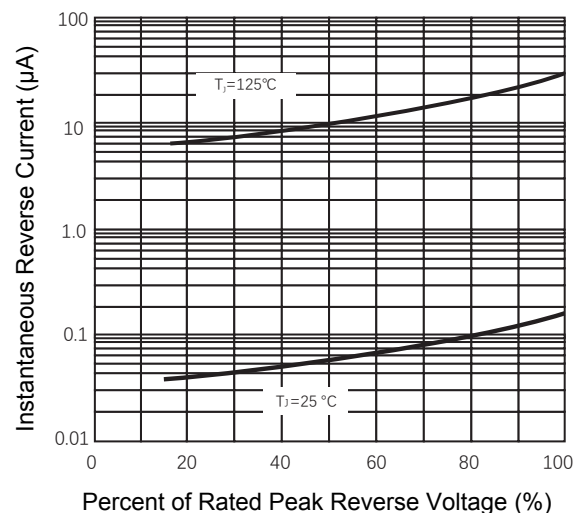
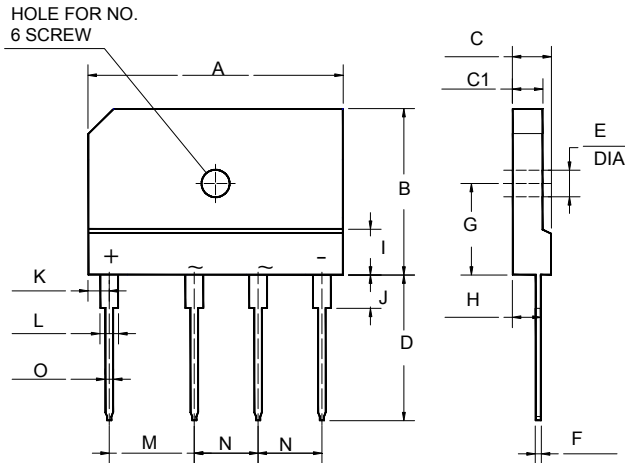


Figure 4. Typical Reverse Characteristics

Package Outline Dimensions (GBJ)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	29.70	30.30	1.169	1.193
B	19.70	20.30	0.776	0.800
C	4.40	4.80	0.173	0.189
C1	3.40	3.80	0.134	0.150
D	17.00	18.00	0.669	0.708
E	3.10	3.40	0.122	0.134
F	0.60	0.80	0.023	0.031
G	10.80	11.20	0.425	0.441
H	3.40	3.90	0.134	0.153
I	4.80	5.80	0.189	0.228
J	3.80	4.20	0.150	0.165
K	2.30	2.70	0.096	0.106
L	2.00	2.40	0.078	0.094
M	9.80	10.20	0.386	0.402
N	7.30	7.70	0.287	0.303
O	0.90	1.10	0.035	0.043

Order Information

Device	Package	Marking	Carrier	Quantity
GSGBJ1016	GBJ	GBJ1016	Tube	15 pcs / Tube