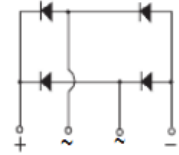
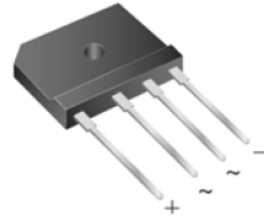


### Features

- Ideal for printed circuit board
- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- High forward surge capability
- High temperature soldering: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2002/95/1 and WEEE 2002/96/EC



### Mechanical Date

- **Case:** GBJ Molded plastic over glass passivated chip
- **Terminals:** Solder plated, solderable per J-STD-002 and JESD22-B102D
- **Polarity:** Polarity symbols marked on body

### Major Ratings and Characteristics

$I_{F(AV)}$	10A
$V_{RRM}$	50 to 1000V
$I_{FSM}$	200 A
$I_R$	5 $\mu$ A
$V_F$	1.1V
$T_{j\ max.}$	150°C

### Maximum Ratings & Thermal Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Items	Symbol	GBJ							UNIT
		10005	1001	1002	1004	1006	1008	1010	
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	$I_{F(AV)}$	10							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	200							A
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	166							A <sup>2</sup> s
RMS isolation voltage from case to leads	$V_{ISO}$	2500							V
Thermal resistance from junction to case <sup>(1)</sup>	$R_{\theta JC}$	1.0							°C/W
Operating junction and storage temperature range	$T_J, T_{STG}$	-55 to +150							°C

Note 1: Junction to case with heatsink

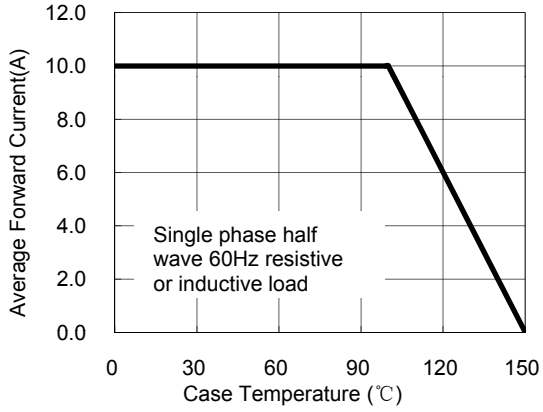
### Electrical Characteristics for Rectifier ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

Items	Test conditions	Symbol	Min	Type	Max	UNIT
Instantaneous forward voltage per leg	$I_F = 5\text{A}^{(2)}$	$V_F$	-	-	1.10	V
Reverse current per leg	$V_R = V_{DC}$ $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	$I_R$	-	-	10 500.0	$\mu$ A

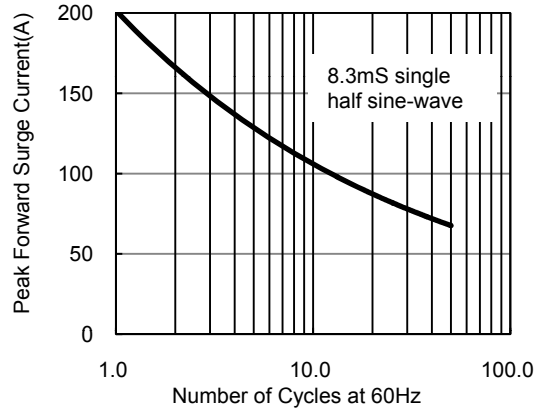
Note2: Pulse test: 300 $\mu$ s pulse width, 1% duty circle.

**Characteristic Curves**

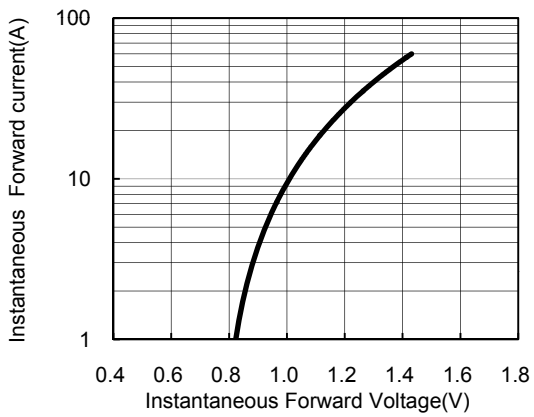
**Fig.1 Forward Current Derating Curve**



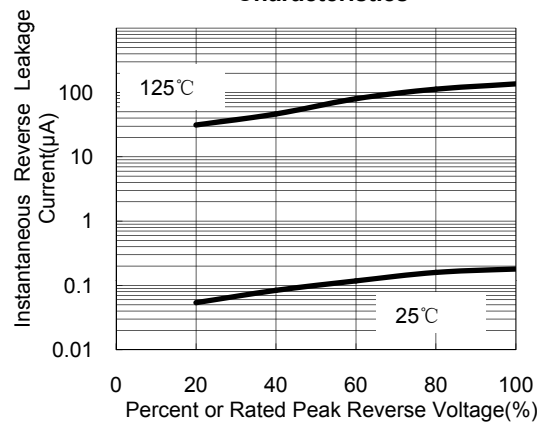
**Fig.2 Maximum Non-Repetitive Peak Forward Surge Current**



**Fig.3 Typical Instantaneous Forward Characteristics**

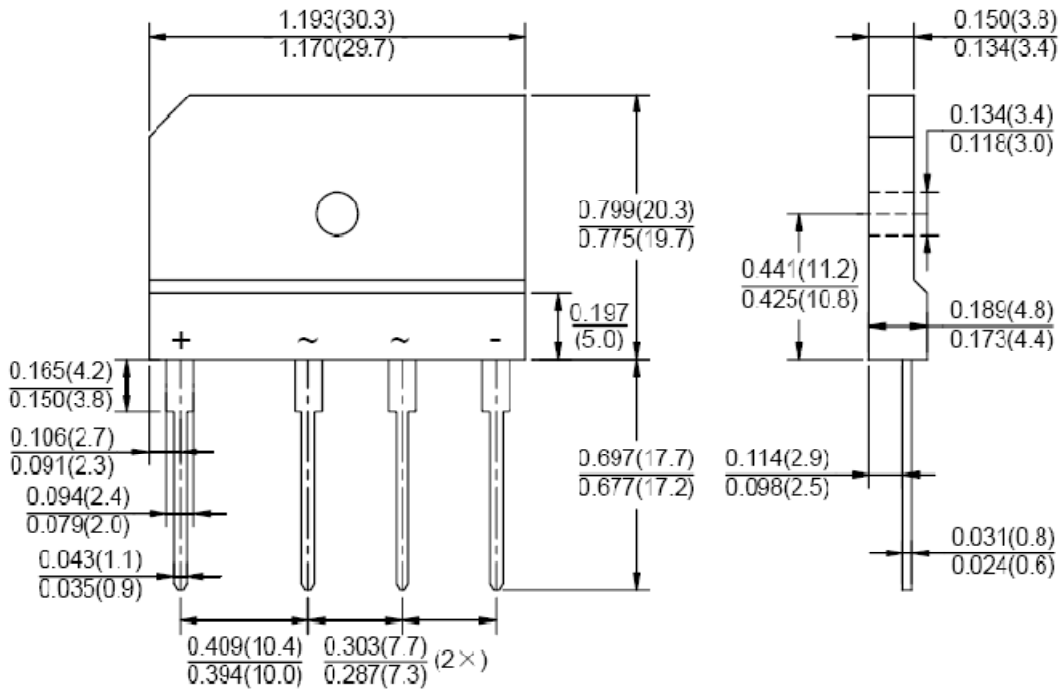


**Fig.4 Typical Reverse Leakage Characteristics**



**Package Outline**

**GBJ**



**Dimensions in inches (mm)**