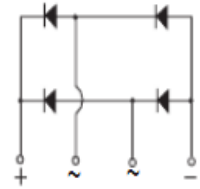
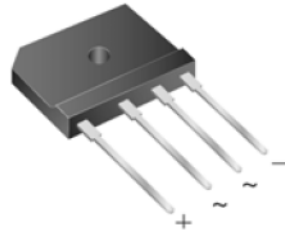


Glass Passivated Single-Phase Bridge Rectifier

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



Mechanical Date

- **Case:** GBJ Molded plastic over glass passivated chip
- **Terminals:** Plated leads solderable per MIL-STD-750, Method 2026
- **Polarity:** Polarity symbols marked on body

Major Ratings and Characteristics

$I_{F(AV)}$	35 A
V_{RRM}	200V to 1000V
I_{FSM}	400A
I_R	10μA
V_F	1.1 V
$T_j \text{ max.}$	150 °C

Maximum Ratings & Thermal Characteristics

($T_A = 25\text{ °C}$ unless otherwise noted)

Items	Symbol	GBJ 3502	GBJ 3504	GBJ 3506	GBJ 3508	GBJ 3510	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Maximum average forward rectified current at $T_C=55\text{ °C}$	$I_{F(AV)}$	35.0					A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	400					A
Thermal resistance from junction to case per leg	$R_{\theta JC}^{(1)}$	1.0					°C/W
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	660					A ² s
RMS isolation voltage from case to leads	V_{ISO}	2500					V
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150					°C

Note 1: Junction to case with heatsink

Electrical Characteristics

($T_A = 25\text{ °C}$ unless otherwise noted)

Items	Test conditions	Symbol	Min	Type	Max	UNIT
Instantaneous forward voltage per leg	$I_F=17.5\text{A}$	V_F	-	-	1.10	V
Reverse current per leg	$V_R=V_{DC}$ $T_J=25\text{ °C}$ $T_I=125\text{ °C}$	I_R	-	-	10 500	μA

Glass Passivated Single-Phase Bridge Rectifier

Characteristic Curves ($T_A=25\text{ }^\circ\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

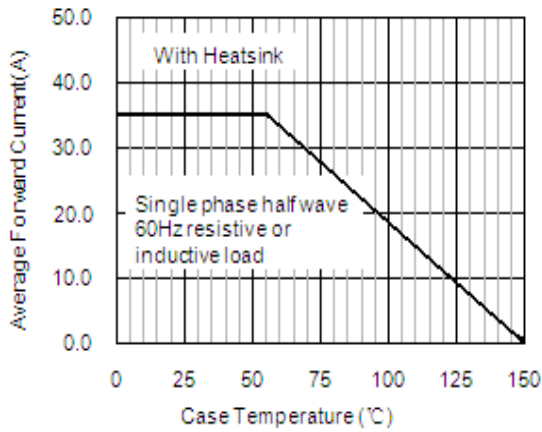


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

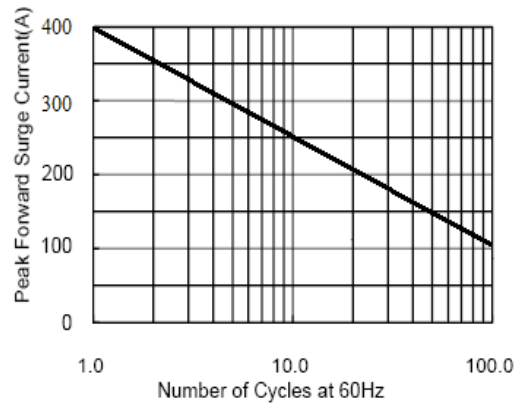


Fig.3 Typical Instantaneous Forward Characteristics

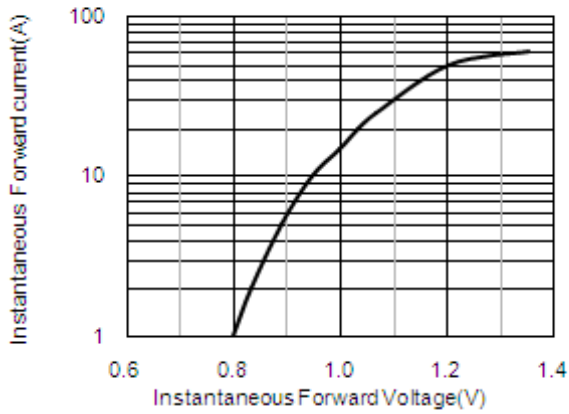
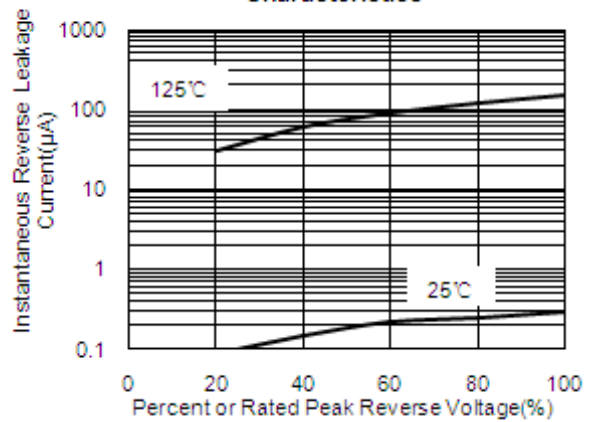
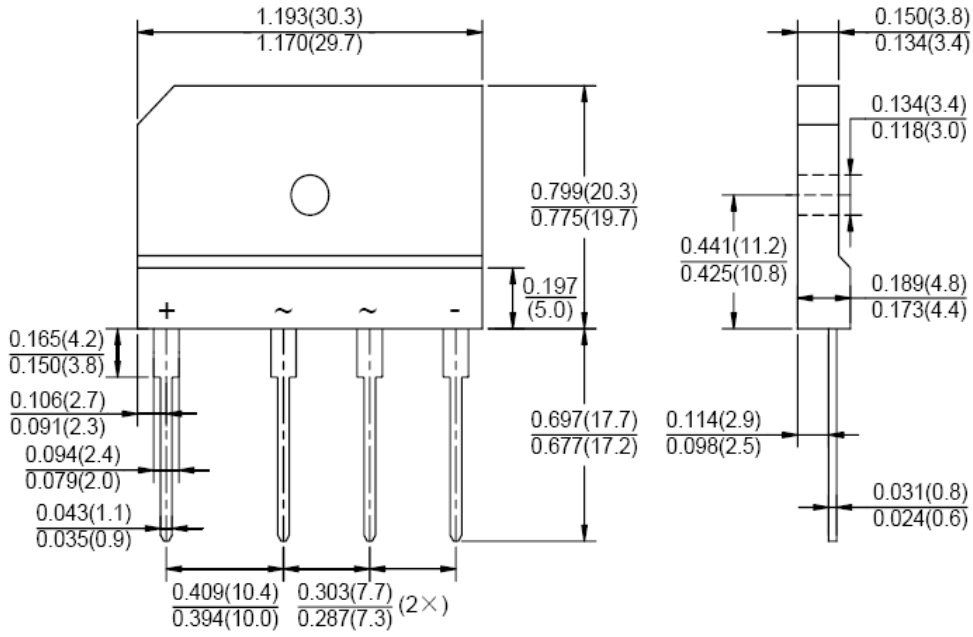


Fig.4 Typical Reverse Leakage Characteristics



Glass Passivated Single-Phase Bridge Rectifier

Package Outline



Dimensions in inches (mm)