

Glass Passivated Bridge Rectifier



Features

- Rating 600V PRV
- Ideal for printed circuit board
- Low forward voltage drop, high current capability
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- The plastic material has U/L flammability classification 94V-0

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%

Characteristic	Symbol	Values	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	
Maximum DC Blocking Voltage	V_{DC}	600	
Maximum Average Forward (with heatsink Note 2) Rectified Current @ $T_c = 110^\circ\text{C}$ (without heatsink)	$I_{(AV)}$	10 3.5	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	220	
Typical Forward Voltage at 5A DC	V_F	0.89	V
Maximum Forward Voltage at 5A DC	V_F	0.9	
Maximum DC Reverse Current @ $T_J = 25^\circ\text{C}$ at Rated DC Blocking Voltage @ $T_J = 125^\circ\text{C}$	I_R	10 120	μA
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	200	A^2s
Typical Junction Capacitance Per Element (Note 1)	C_J	55	pF
Typical Thermal Resistance	$R_{\theta JC}$	1.4	$^\circ\text{C/W}$
Operating Temperature Range	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}		

Notes:

1. Measured at 1MHz and applied reverse voltage of 4V DC
2. Device mounted on 150mm × 150mm × 1.6mm Cu plate heatsink.
3. The typical data above is for reference only

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Rating and Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

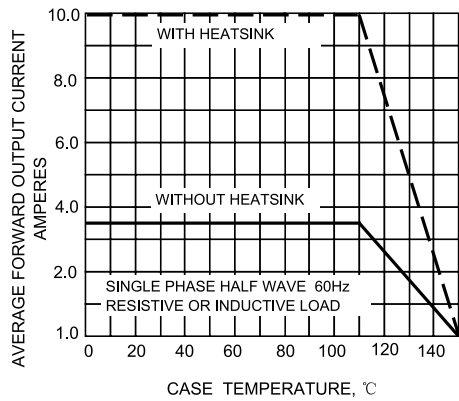


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

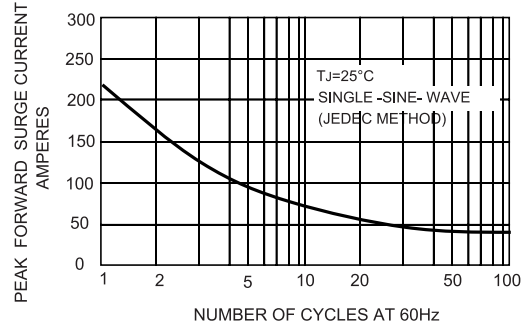


FIG.3-TYPICAL JUNCTION CAPACITANCE

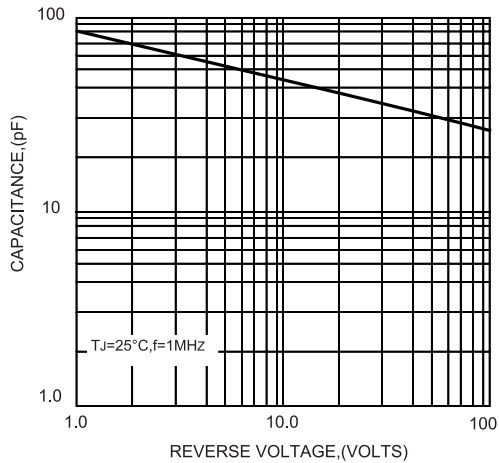


FIG.4-TYPICAL FORWARD CHARACTERISTICS

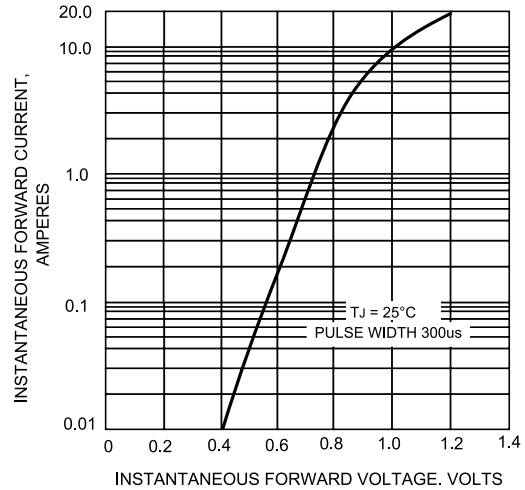
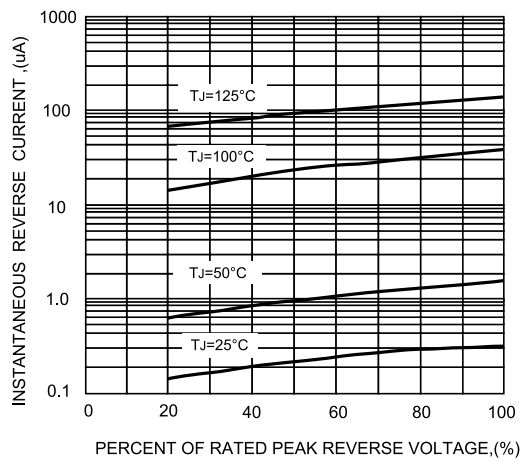
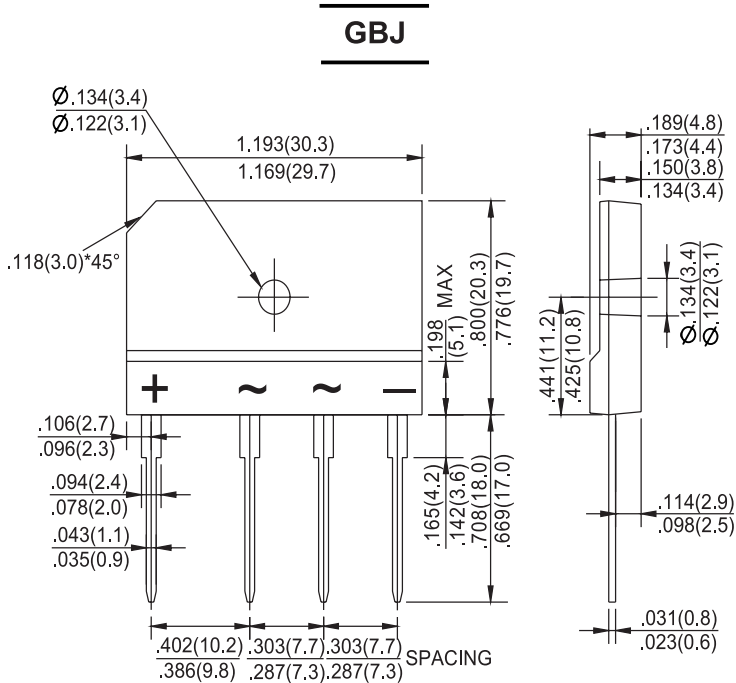


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Glass Passivated Bridge Rectifier

Dimension:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Glass Passivated Bridge Rectifier	GBJ1006U

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