Glass Passivated Bridge Rectifier

Features

- Surge overload rating - 150 amperes peak
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- The plastic material has UL flammability classification 94V-0
- Mounting position: Any

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 = 100°C (without heatsink)	$I_{(AV)}$	4 2.4	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load (JEDEC Method)	I_{FSM}	135	
Typical Forward Voltage at 4A DC	V_F	0.89	V
Maximum Forward Voltage at 4A DC		0.9	
Maximum DC Reverse Current @ T_J = 25°C at Rated DC Blocking Voltage @ T_J = 125°C	I_R	10 120	µA
I^2t Rating for Fusing (t<8.3ms)	I^2t	76	A^2s
Typical Junction Capacitance Per Element (Note1)	C_J	45	pF
Typical Thermal Resistance	$R_{\theta JC}$	2.2	°C/W
Operating Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{STG}		

Notes:

1. Measured at 1MHz and applied reverse voltage of 4V DC
2. Device mounted on 50mm × 50mm × 1.6mm Cu plate heatsink.
3. The typical data above is for reference only

Rating and Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

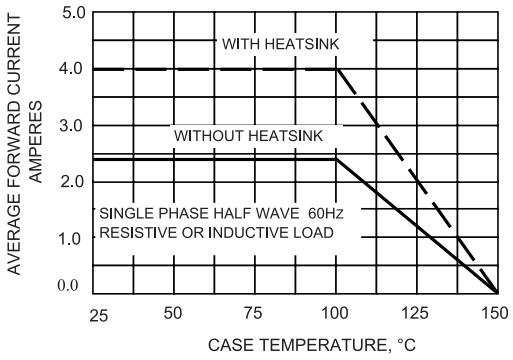


FIG.2-MAXIMUM NON-REPETITIVE SURGE CURRENT

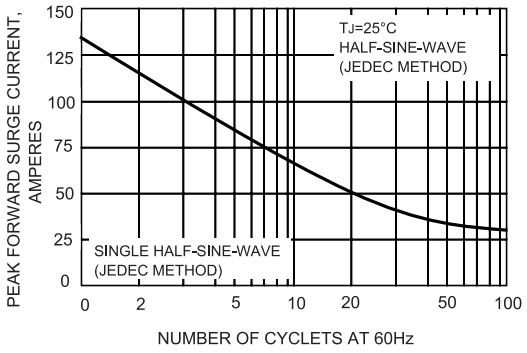


FIG.3-TYPICAL FORWARD CHARACTERISTICS

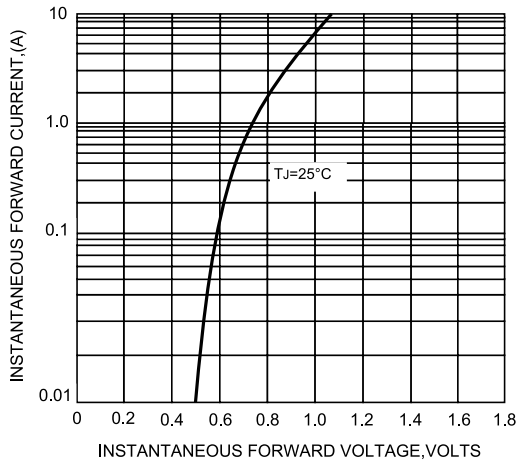


FIG.4-TYPICAL REVERSE CHARACTERISTICS

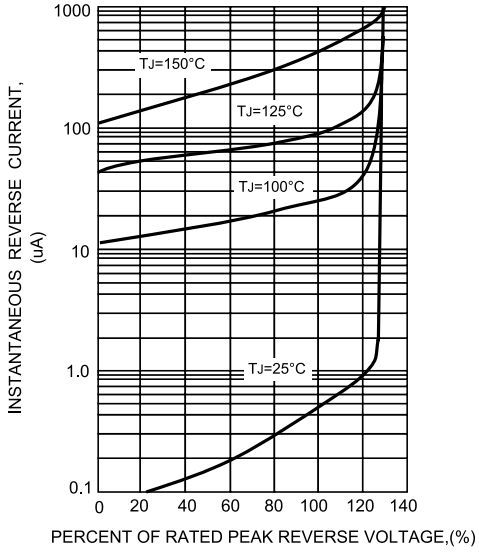
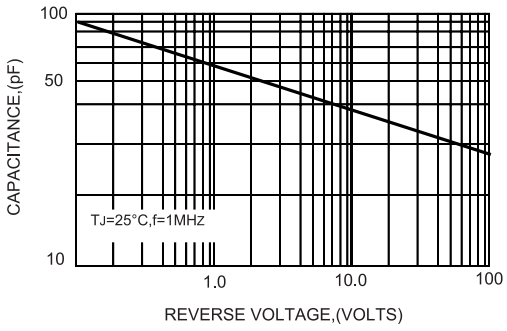
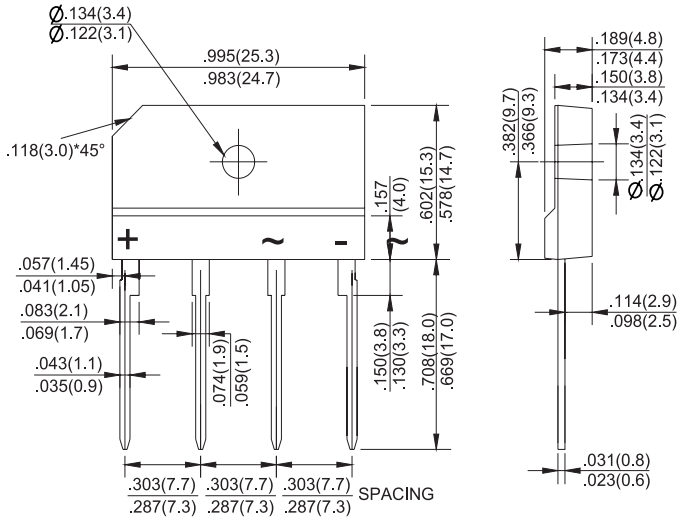


FIG.5-TYPICAL JUNCTION CAPACITANCE



Dimension:

4GBJ



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Glass Passivated Bridge Rectifier	4GBJ406U