

Glass Passivated Bridge Rectifier

multicomp^{PRO}



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

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
Element14.com/multicomp-pro

multicomp^{PRO}

Glass Passivated Bridge Rectifier

Rating and Characteristic Curves

FIG.1-FORWARD CURRENT DERATING CURVE

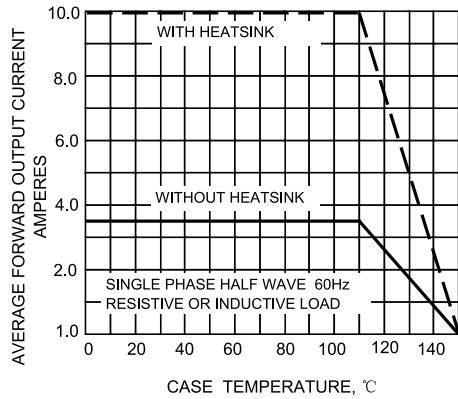


FIG.2-MAXMUN NON-REPETITIVE SURGE CURRENT

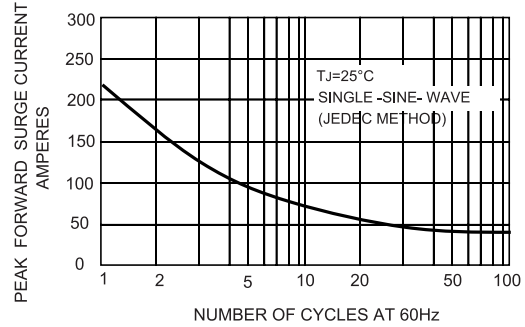


FIG.3-TYPICAL JUNCTION CAPACITANCE

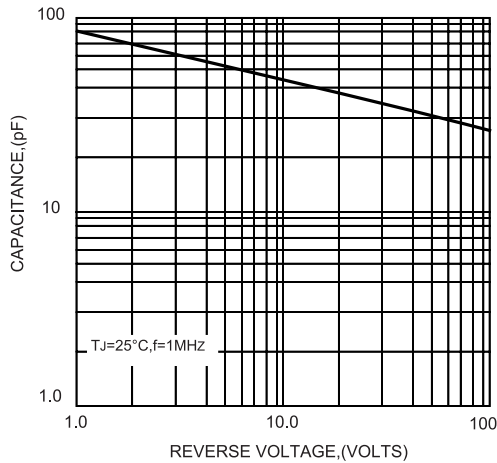


FIG.4-TYPICAL FORWARD CHARACTERISTICS

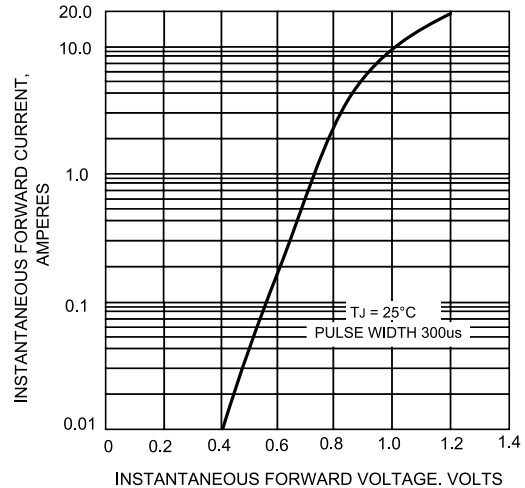
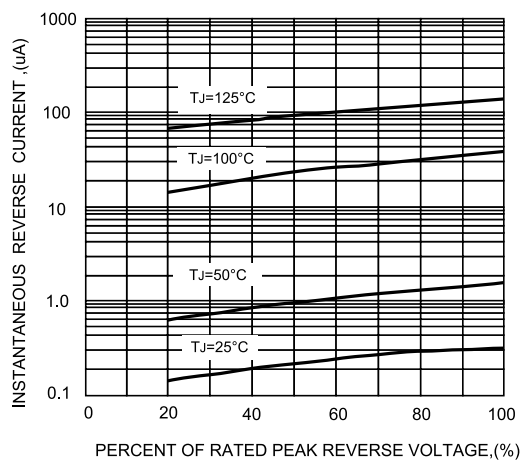
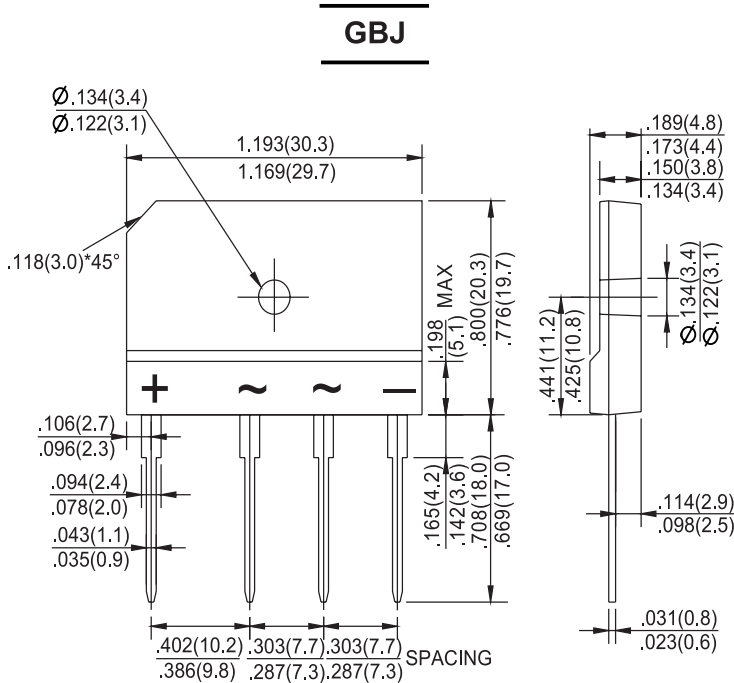


FIG.5-TYPICAL REVERSE CHARACTERISTICS



Glass Passivated Bridge Rectifier

Dimension:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Glass Passivated Bridge Rectifier	GBJ1006U

Important Notice : This data sheet and its contents (the "Information") belong to the members of the AVNET group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp Pro is the registered trademark of Premier Farnell Limited 2019.