



# GBJ25A THRU GBJ25M

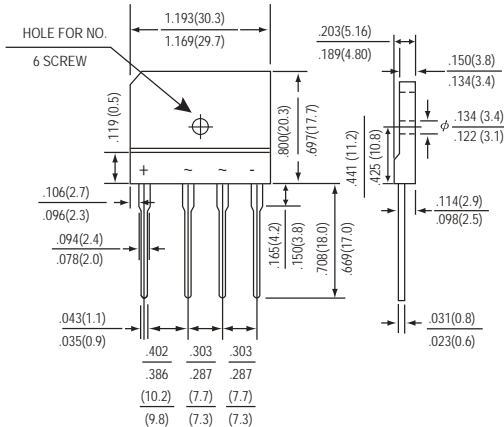
## SINTERED GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 25.0 Amperes

**PATENTED**

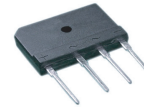
**GBJ**



\*Dimensions in inches and (millimeters)

**SuperBridge with GPRC inside**

**SUPEREX II**™



### FEATURES

- \* Internal Constructure with GPRC (Glass Passivated Rectifier Chip) inside
- \* High Case Dielectric Strength of 1500VRMS
- \* Low Reverse Leakage Current
- \* High Surge Current Capability
- \* Ideal for Printed Circuit Board Applications
- \* Plastic Material-UL Recognition Flammability Classification 94V-0

### MECHANICAL DATA

**Case :** GBJ molded plastic  
**Terminals :** Plated Leads, solderable per MIL-STD-750, Method 2026  
**Polarity :** Molded on body  
**Mounting :** Through Hole for # 6 screw  
**Mounting torque :** 5.0 in-lbs maximum  
**Weight :** 6.6 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.	SYMBOLS	GBJ25A	GBJ25B	GBJ25D	GBJ25G	GBJ25J	GBJ25K	GBJ25M	UNITS
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	Vdc	50	100	200	400	600	800	1000	Volts
Maximum average forward (with heatsink Note 2) rectified current at Tc=100°C	I (AV)	25							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	350							Amps
Maximum instantaneous forward voltage @ IF=12.5 A	VF	1.05							Volts
Maximum DC reverse current @ Tc=25°C at rated DC blocking voltage @ Tc=125°C	IR	10 500							uA
I <sup>2</sup> t rating for fusing ( t < 8.3ms )	I <sup>2</sup> t	510							A <sup>2</sup> s
Typical junction capacitance per element (NOTE 1)	CJ	85							pF
Typical thermal resistance (NOTE 2)	R θJC	0.6							K / W
Operating junction and storage temperature range	TJ,TSTG	-55 to +175							°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.  
 (2) Device mounted on 300 x 300 x 1.6mm Cu Plate Heatsink.

# RATINGS AND CHARACTERISTIC CURVES GBJ25A THRU GBJ25M

FIG.1 - FORWARD CURRENT DERATING CURVE

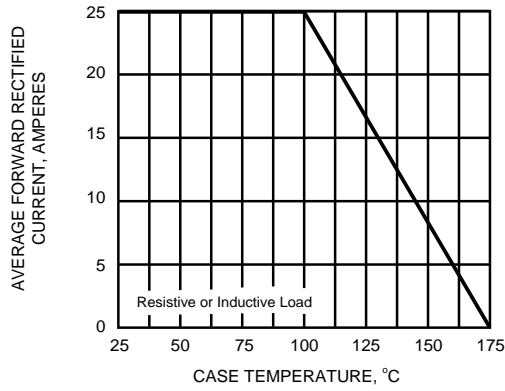


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

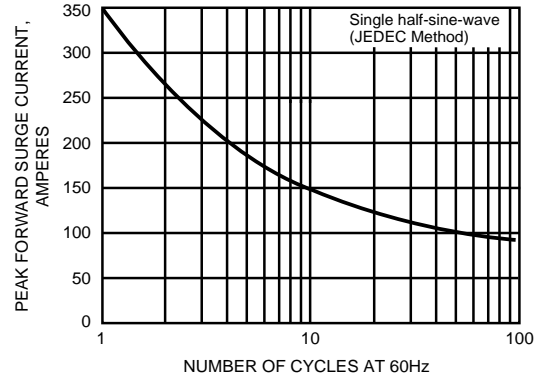


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

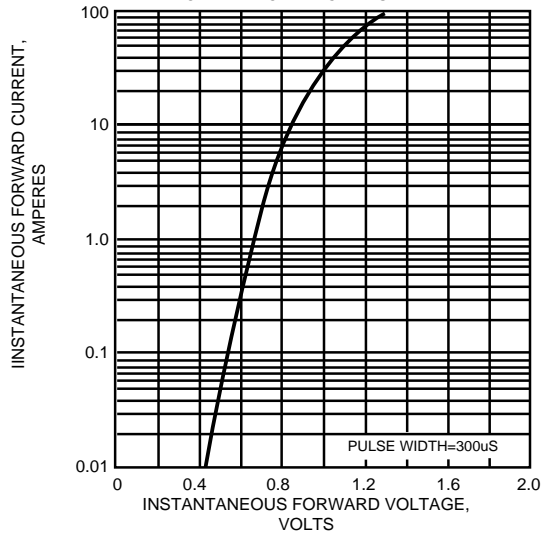


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

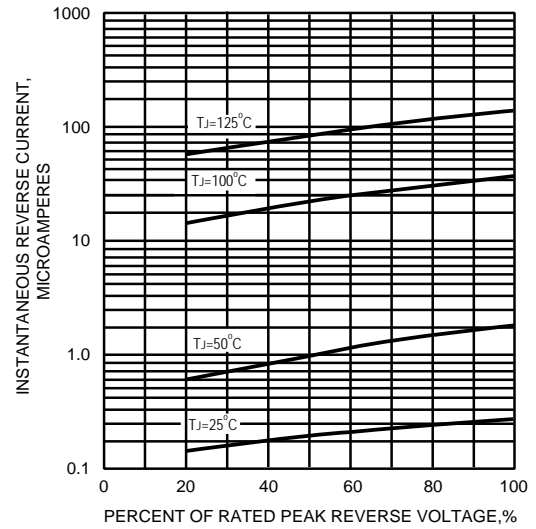


FIG.5 - TYPICAL JUNCTION CAPACITANCE

