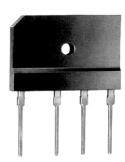
## GBJ/KBJ25A thru GBJ/KBJ25M

# SILICON BRIDGE RECTIFIERS GLASS PASSIVATED BRIDGE RECTIFIERS

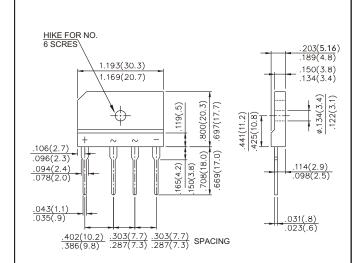


REVERSE VOLTAGE -50 to 1000 Volts FORWARD CURRENT -25 Amperes



#### **FEATURES**

- Rating to 1000V 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 UL flammability classification 94V-O



Dimensions in inches and (millimeters)

#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Tor capacitive load, derate current by 20 %.									
CHARACTERISTICS	SYMBOL	GBJ KBJ 25A	GBJ KBJ 25B	GBJ KBJ 25D	GBJ KBJ 25G	GBJ KBJ 25J	GBJ KBJ 25K	GBJ KBJ 25M	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	٧
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	٧
Maximum DC Voltage	$V_{DC}$	50	100	200	400	600	800	1000	٧
Maximum Average Forward (with heatsink Note 2) Rectified Current @ T <sub>C</sub> =110°C (without heatsink)	I <sub>(AV)</sub>	25.0 4.2							А
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	350							A
Maximum Forward Voltage at 12.5A DC	V <sub>F</sub>	1.05							٧
Maximum DC Reverse Current @ T <sub>J</sub> =25°C at rated DC Blocking Voltage @ T <sub>J</sub> =125°C	I <sub>R</sub>	10 500							μΑ
I <sup>2</sup> t Rating for fusing (t<8.3ms)	l <sup>2</sup> †	510							A <sup>2</sup> S
Typical Junction Capacitance per element (Note 1)	CJ	85							РF
Typical Thermal Resistance (Note 2)	$R\theta JC$	0.6							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

NOTES: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on 300mm x 300mm X 1.6mm Cu Plate Heatsink.

## GBJ/KBJ25A thru GBJ/KBJ25M

### SILICON BRIDGE RECTIFIERS **GLASS PASSIVATED BRIDGE RECTIFIERS**



RATING AND CHARACTERISTICS CURVES GBJ/KBJ25A THRU GBJ/KBJ25M

FIG. 1 - FORWARD CURRENT DERATING CURVE AVERAGE FORWARD CURRENT AMPERES 15 SINGLE PHASE HALF WAVE 60Hz RESISTIVE OR INDUCTIVE LOAD 10 WITHOUT HEATSINK

SURGE CURRENT

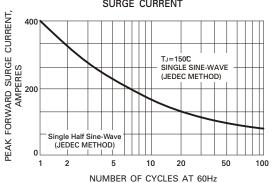


FIG. 2 - MAXIMUM NON-REPETITIVE

CASE TEMPERATURE, °C FIG. 3 - TYPICAL JUNCTION CAPACITANCE

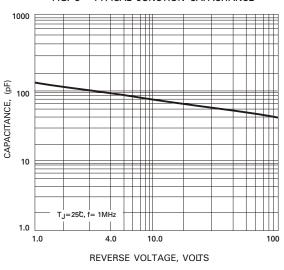


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

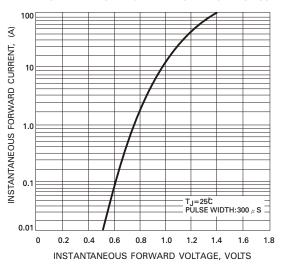


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

