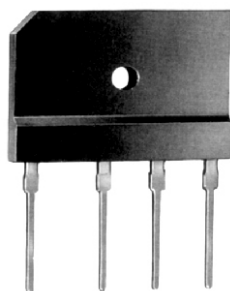


GBJ/KBJ25A thru GBJ/KBJ25M

SILICON BRIDGE RECTIFIERS GLASS PASSIVATED BRIDGE RECTIFIERS



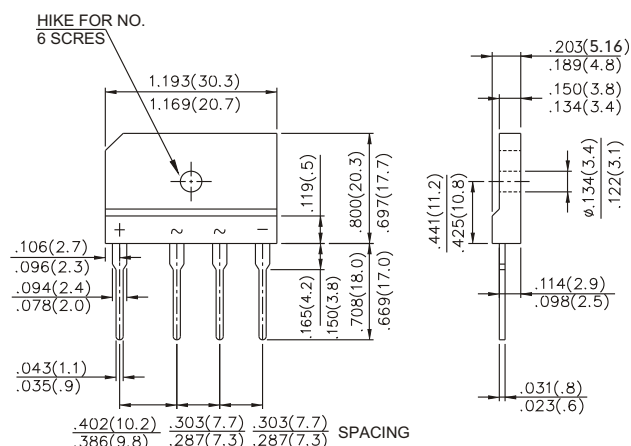
**CHENG-YI
ELECTRONIC**



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-0

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



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%.

| 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 | V | |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| Maximum DC Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum Average Forward (with heatsink Note 2) Rectified Current @ $T_C=110^\circ\text{C}$ (without heatsink) | I_{AV} | 25.0 4.2 | | | | | | | | A |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 350 | | | | | | | | A |
| Maximum Forward Voltage at 12.5A DC | V_F | 1.05 | | | | | | | | V |
| Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ at rated DC Blocking Voltage @ $T_J=125^\circ\text{C}$ | I_R | 10 500 | | | | | | | | μA |
| $I^2 t$ Rating for fusing ($t < 8.3\text{ms}$) | $I^2 t$ | 510 | | | | | | | | A^2S |
| Typical Junction Capacitance per element (Note 1) | C_J | 85 | | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | $R_{\theta JC}$ | 0.6 | | | | | | | | $^\circ\text{C}/\text{W}$ |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | | $^\circ\text{C}$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | | $^\circ\text{C}$ |

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



**CHENG-YI
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RATING AND CHARACTERISTICS CURVES GBJ/KBJ25A THRU GBJ/KBJ25M

FIG. 1 - FORWARD CURRENT DERATING CURVE

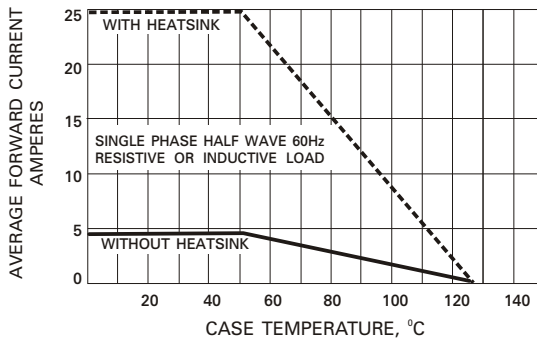


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

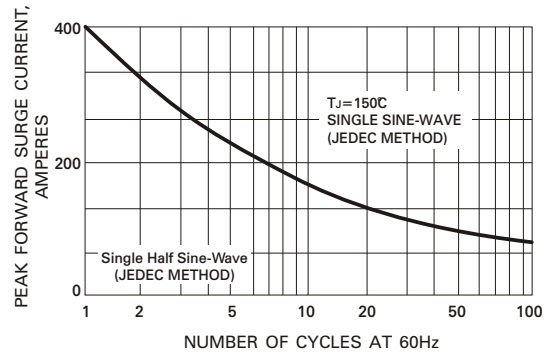


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

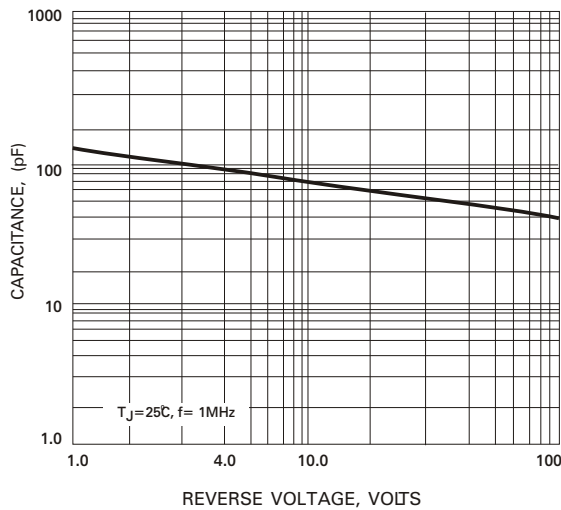


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

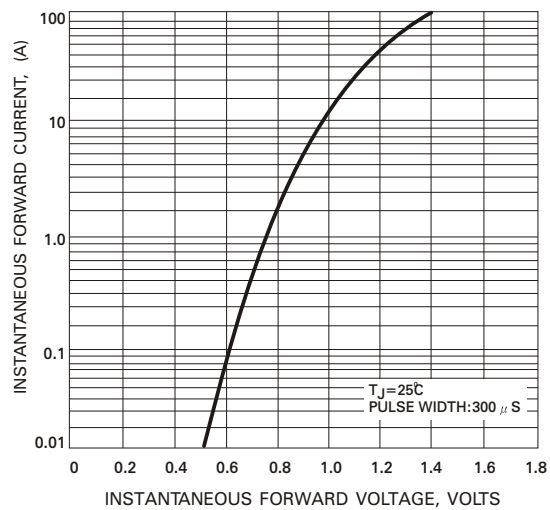


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS

