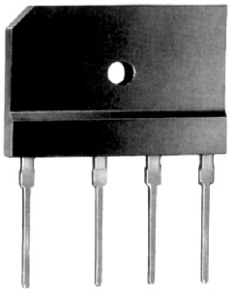
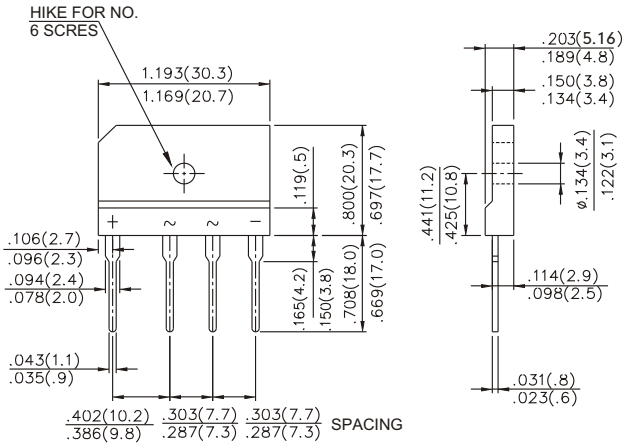
GBJ/KBJ20A thru GBJ/KBJ20M

SILICON BRIDGE RECTIFIERS
GLASS PASSIVATED
BRIDGE RECTIFIERS

CHENG-YI
ELECTRONIC

REVERSE VOLTAGE -50 to 1000 Volts
FORWARD CURRENT -20.0 Amperes





Dimensions in inches and (millimeters)

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

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%.

CHARACTERISTICS	SYMBOL	GBJ KBJ 20A	GBJ KBJ 20B	GBJ KBJ 20D	GBJ KBJ 20G	GBJ KBJ 20J	GBJ KBJ 20K	GBJ KBJ 20M	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 Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward (with heatsink Note 2) Rectified Current @ T_C=100°C (without heatsink)	$I_{(AV)}$	20.0 3.6							A
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	240							A
Maximum Forward Voltage at 10.0A DC	V_F	1.05							V
Maximum DC Reverse Current @ T_J=25°C at Rated DC Blocking Voltage @ T_J=125°C	I_R	10 500							μA
I^2t Rating for fusing (t<8.3ms)	I^2t	240							A^2S
Typical Junction Capacitance per element (Note 1)	C_J	60							pF
Typical Thermal Resistance (Note 2)	$R\theta JC$	0.8							°C/W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-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.

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RATING AND CHARACTERISTICS CURVES
GBJ/KBJ20A THRU GBJ/KBJ20M

FIG. 1 - FORWARD CURRENT DERATING CURVE

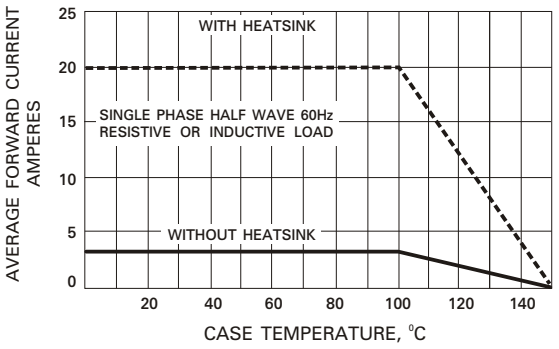

FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

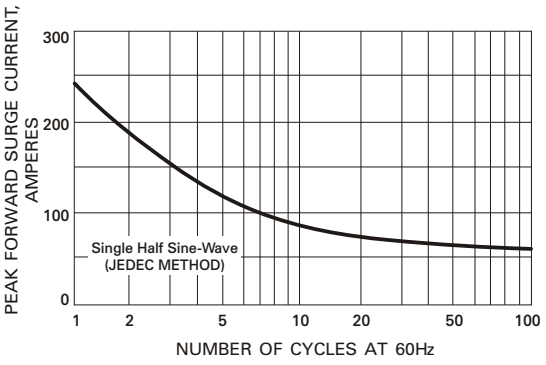

FIG. 3 - TYPICAL JUNCTION CAPACITANCE

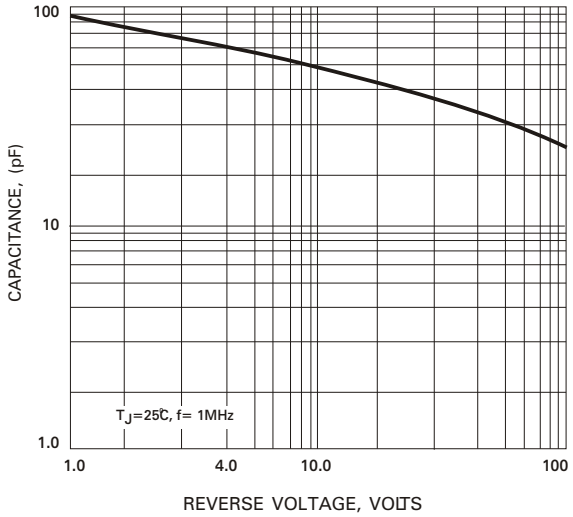

FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

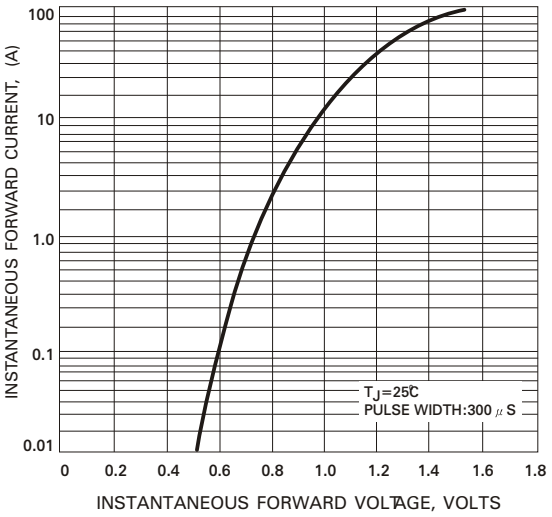

FIG. 5 - TYPICAL REVERSE CHARACTERISTICS