Central Plate Electronics Co., Ltd.

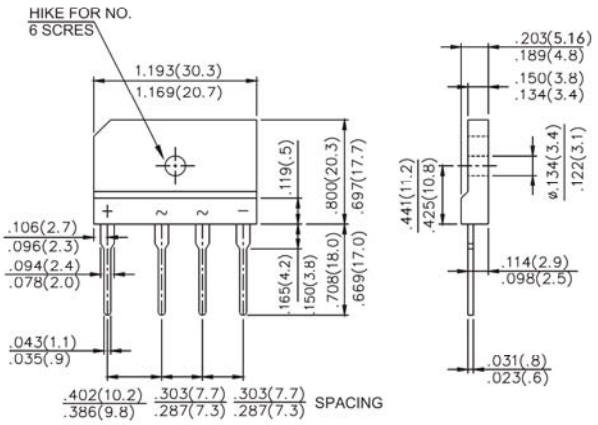
SILICON BRIDGE RECTIFIERS GLASS PASSIVATED BRIDGE RECTIFIERS

GBJ/KBJ20A thru GB /KBJ20M 50 to 1000 V 20.0 A

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

GBJ



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ 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	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward (with heatsink Note2) Rectified Current @ T_C =100℃ (without heatsink)	$I_{(AV)}$	20.0 3.6							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load	I_{FSM}	240							Amp
Maximum DC Forward Voltage at 10.0A DC	V_F	1.05							Volts
Maximum DC Reverse Current at rated @ T_J=25℃ DC Blocking Voltage Per Element @ T_J=125℃	I_R	10.0 500							uAmp
I^2t Rating for fusing (t<8.3ms)	I^2T	240							A^2S
Typical Junction Capacitance (Note 1)	C_J	60							pF
Typical Thermal Resistance (Note 2)	$R_{\Theta JC}$	0.8							℃/W
Operating Temperature Range	T_J	-55 to +150							℃
Storage Temperature Range	T_{STG}	-55 to +150							℃

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.

RATINGS AND CHARACTERISTIC CURVES (GBJ/KBJ20A THRU GBJ/KBJ20M)

FIG. 1 - FORWARD CURRENT DERATING CURVE

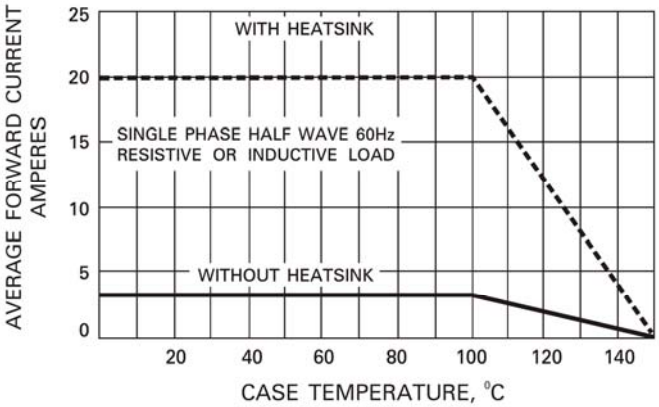


FIG. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

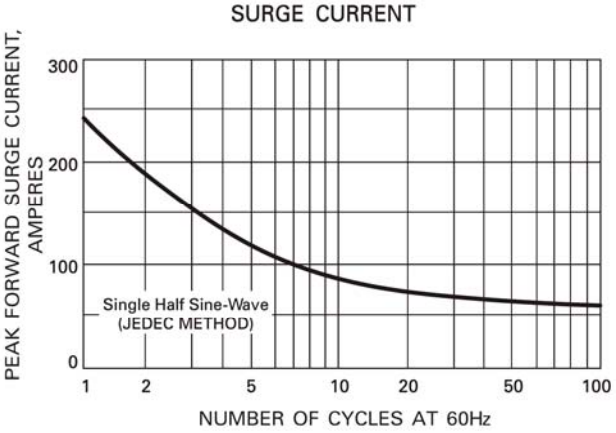


FIG. 3 - TYPICAL JUNCTION CAPACITANCE

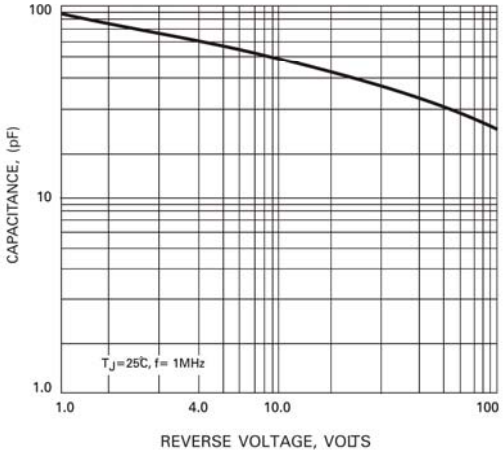


FIG. 4 - TYPICAL FORWARD CHARACTERISTICS

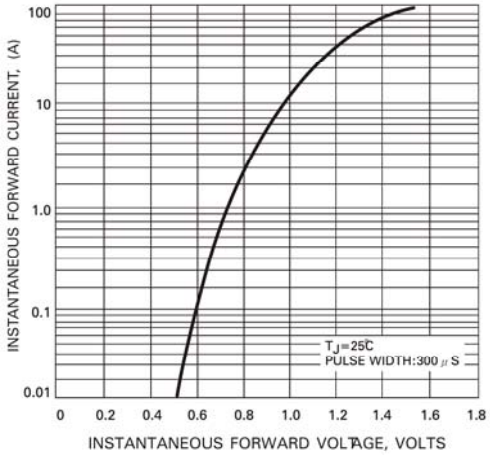


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS