DATA SHEET

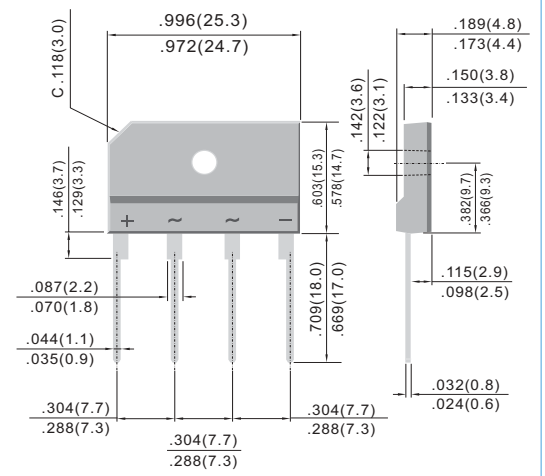
GBJ10A~GBJ10K

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE 50 to 800 Volts **CURRENT** 10 Ampere

Recongnized File #E228882

GBJ Unit: inch (mm)



FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Surge overload rating: 200 Amperes peak
- High temperature soldering guaranteed: 260°C/10 seconds/.375"(9.5mm) lead length at 5 lbs. (2.3kg) tension
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICALDATA

Case: Reliable low cost construction utilizing molded plastic technique

Terminals: Leads solderable per MIL-STD-202, Method 208

Mounting position: Any

Mounting torque: 5 in. lb. Max.

Weight: 0.15 ounce, 4.0 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°Cambient temperature unless otherwise specified. Resistive or inductive load, 60Hz.
For Capacitive load derate current by 20%.

PARAMETER	SYMBOL	GBJ10A	GBJ10B	GBJ10D	GBJ10G	GBJ10J	GBJ10K	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	V
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	V
Maximum Average Forward T_C=100 °C Rectified Output Current at T_A=45 °C	I_{AV}	10.0 8.0						A
I^2t Rating for fusing (t<8.3ms)	I^2t	166						A^2sec
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200						Apk
Maximum Instantaneous Forward Voltage Drop per element at 5.0A	V_F	1.0						Vpk
Maximum Reverse Leakage Current at Rated @ T_A=25°C Dc Blocking Voltage @ T_A=100°C	I_R	5.0 500						uA
Typical Thermal Resistance per leg (Note 2) (Note 3)	RθJA RθJC	18.0 3.1						°C/W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to + 150						°C

NOTES:

1. Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.
2. Units Mounted in free air, no heatsink, P.C.B at 0.375"(9.5mm) lead length with 0.5 x 0.5"(12 x 12mm)copper pads.
3. Units Mounted on a 2.6 x 1.4" x 0.06" thick (6.5 x 3.5 x 0.15cm) AL plate.

RATING AND CHARACTERISTIC CURVES

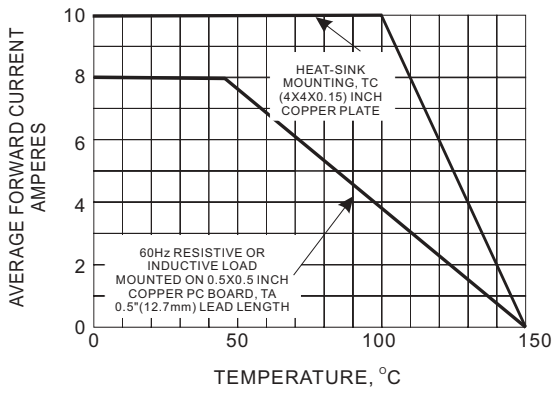


Fig.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

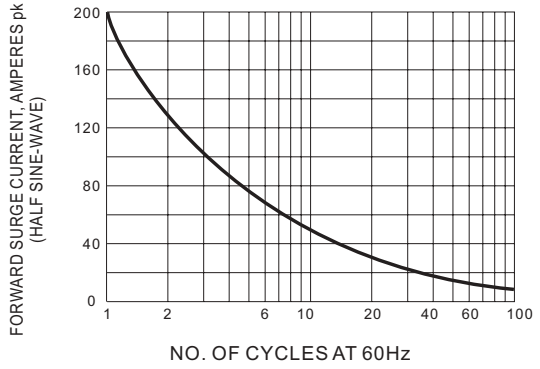


Fig.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

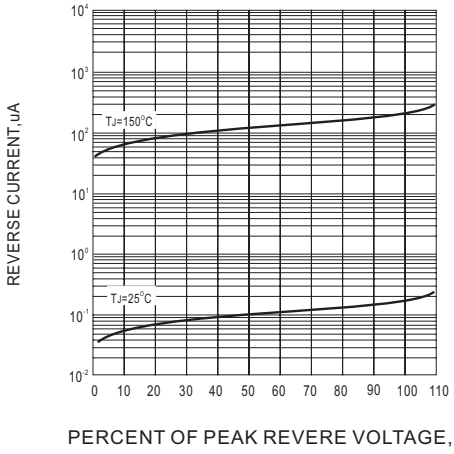


Fig.3 - TYPICAL REVERSE CHARACTERISTICS

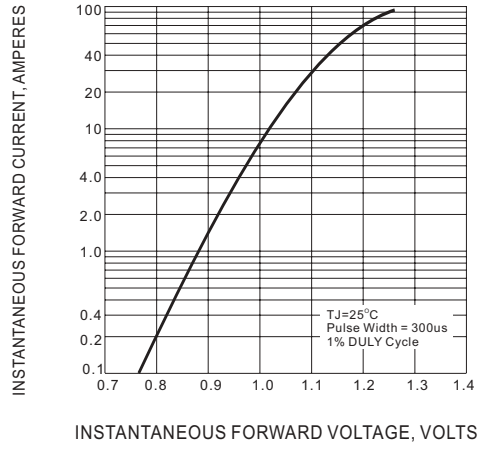


Fig.4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT