



GPJ8A~GPJ8M

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE 50 to 1000 Volts **CURRENT** 8.0 Ampere

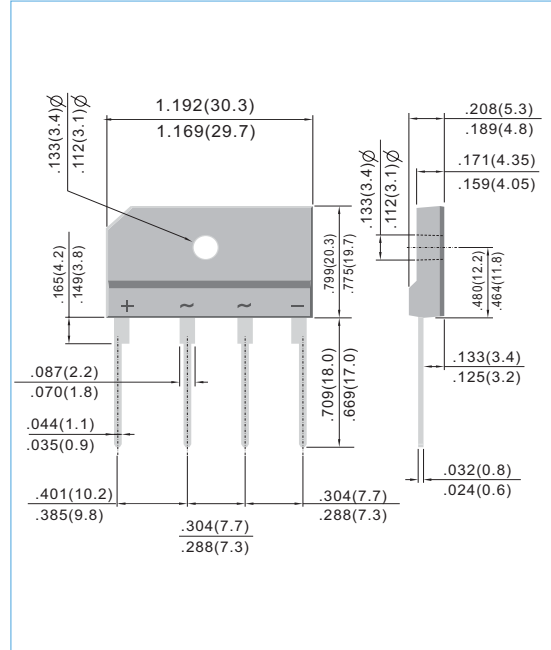
GPJ Unit: inch (mm)

FEATURES

- Plastic material has Underwriters Laboratory, Flammability Classification 94V-O
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- 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 diective request

MECHANICAL DATA

- Case: Reliable low cost construction utilizing
- molded plastic technique
- Terminals: Leads solderable per MIL-STD-750, Method 2026
- Mounting position: Any
- Mounting torque: 5 in. lb. Max.
- Weight: 0.15 ounce, 4.0 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	GPJ8A	GPJ8B	GPJ8D	GPJ8G	GPJ8J	GPJ8K	GPJ8M	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input 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 Rectified Output Current at $T_C=100^\circ\text{C}$ at $T_A=40^\circ\text{C}$	$I_{F(AV)}$	8.0 6.0							A
I ² t Rating for fusing (t < 8.3ms)	I ² t	166							A ² sec
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 4.0A	V_F	1.1							Vpk
Maximum Reverse Leakage Current at Rated @ $T_J=25^\circ\text{C}$ Dc Blocking Voltage @ $T_J=100^\circ\text{C}$	I_R	10 500							uA
Typical Thermal Resistance per leg (Note 2) (Note 3)	$R_{\theta JA}$ $R_{\theta JC}$	8.6 3.1							°C/W
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to + 150							°C

NOTES:

- Recommended mounting position is to bolt down on heatsink with silicone thermal compound for maximum heat transfer with #6 screw.
- 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.
- Units Mounted on a 2.6 x 1.4" x 0.06" thick (6.5 x 3.5 x 0.15cm) AL plate.



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RATING AND CHARACTERISTIC CURVES

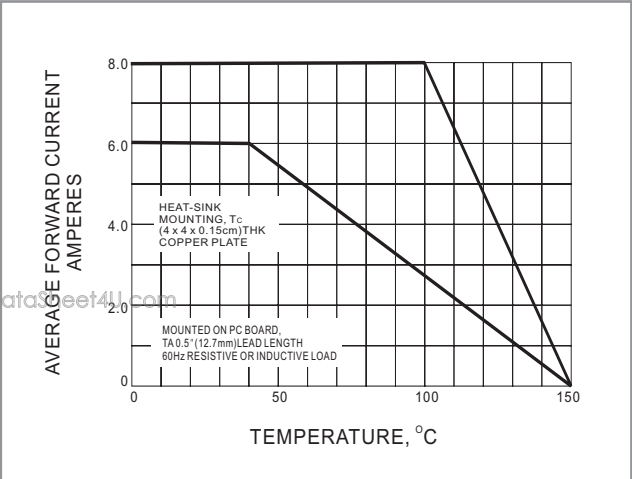


Fig. 1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

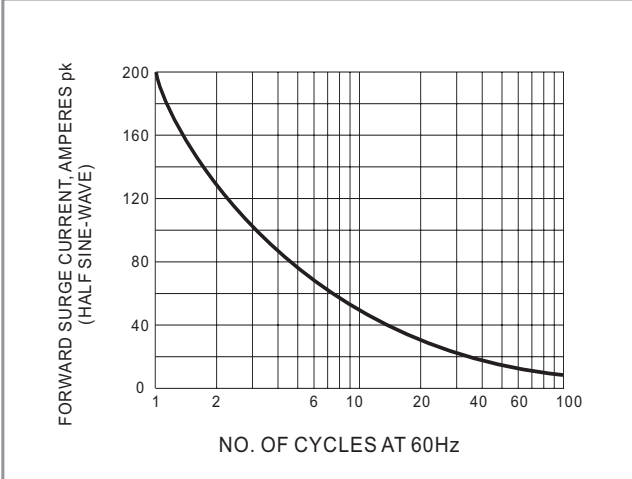


Fig. 2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

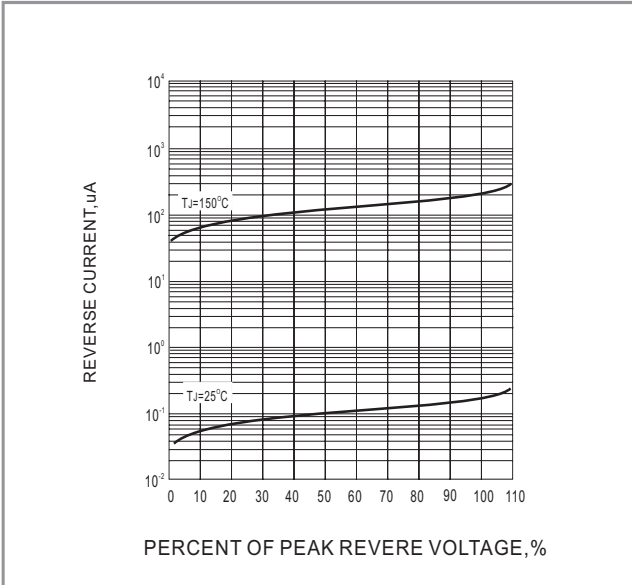


Fig. 3 - TYPICAL REVERSE CHARACTERISTICS

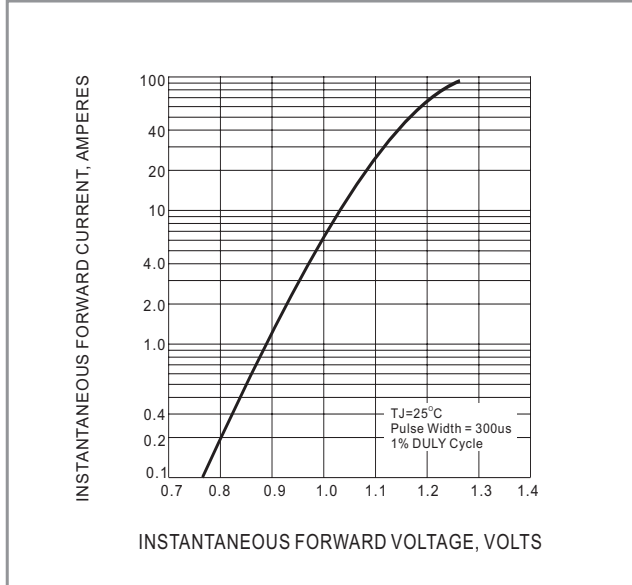


Fig. 4 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER ELEMENT