PANJIT SEMI CONDUCTOR

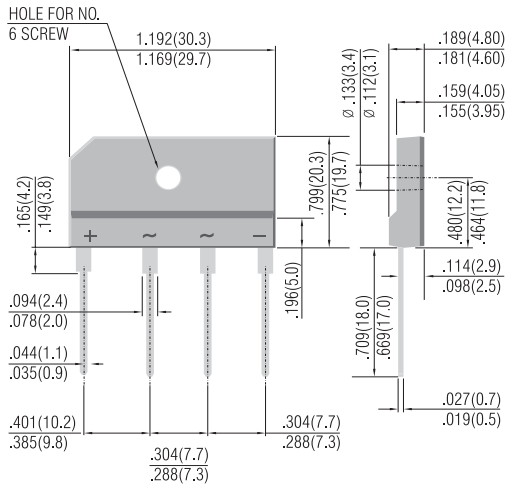
DATA SHEET

GPJ2500~GPJ2510

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE 50 to 1000 Volts **CURRENT** 25 Amperes

KBJ Unit: inch (mm)



FEATURES

- Plastic material has Underwriters Laboratory Flammability Classification 94V-O
- Ideal for printed circuit board
- Surge overload rating: 350 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 can meet Rohs environment substance directive request

MECHANICALDATA

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

PARAMETER	SYMBOL	GPJ2500	GPJ2501	GPJ2502	GPJ2504	GPJ2506	GPJ2508	GPJ2510	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	100	V
Maximum Average Forward T_C=100 °C NOTES 3 Rectified Output Current at T_A=25 °C MOTES 2	$I_{F(AV)}$	25 3.5							A
I^2t Rating for fusing (t<8.3ms)	I^2t	500							A^2Sec
Peak Forward Surge Current single sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	350							A
Maximum Instantaneous Forward Voltage Drop per element at 12.5A	V_F	1.1							V
Maximum Reverse Leakage Current at Rated @ T_A=25°C Dc Blocking Voltage @ T_C=125°C	I_R	10 350							µA
Typical Thermal Resistance per leg (Note 2) (Note 3)	RθJA RθJC	22 1							°C/W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-50 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.

Ratings and Characteristic Curves (T_A=25°C unless otherwise noted)

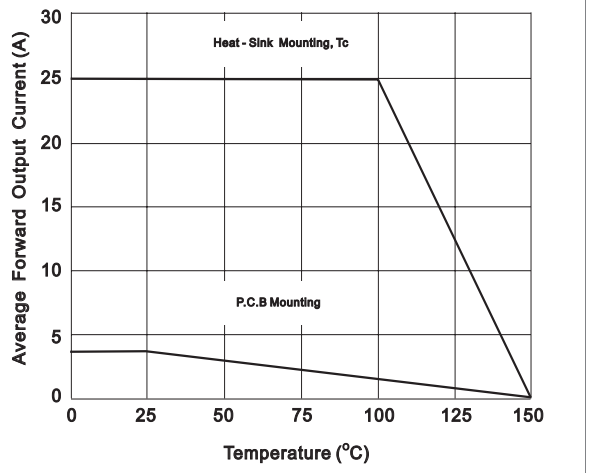


FIG.1-Derating Curve Output Rectified Current

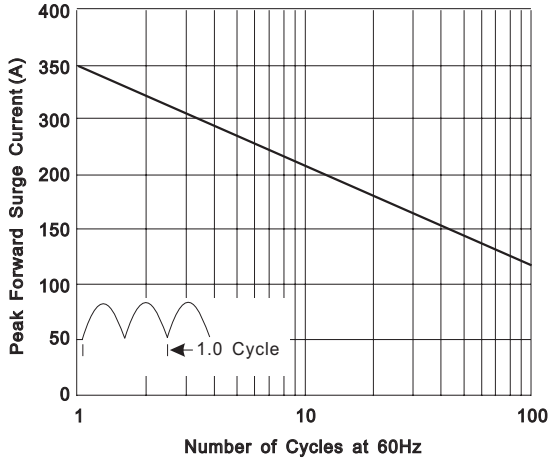


FIG.2-Maximum Non-Repetitive Peak Forward Surge Current Per Leg

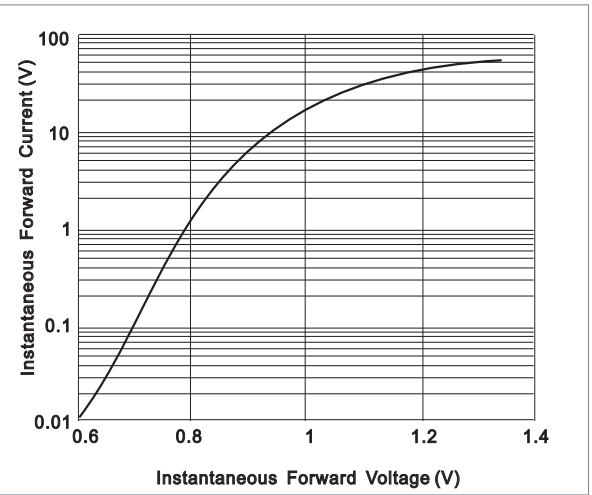


FIG.3-Typical Forward Characteristics Per Leg

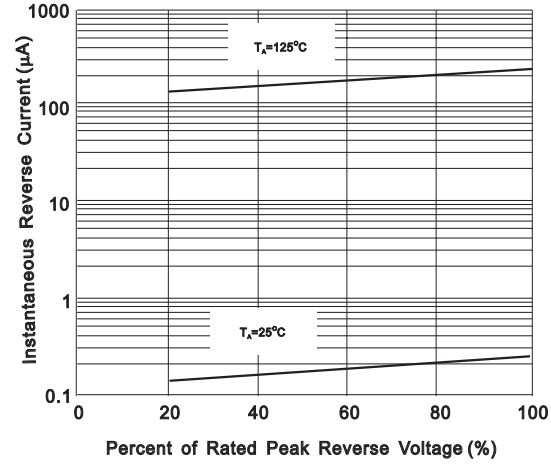


FIG.4-Typical Reverse Characteristics Per Leg

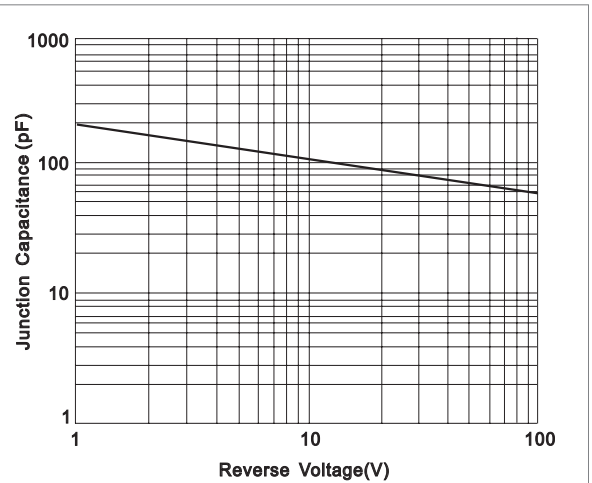


FIG.5-Typical Junction Capacitance Per Leg

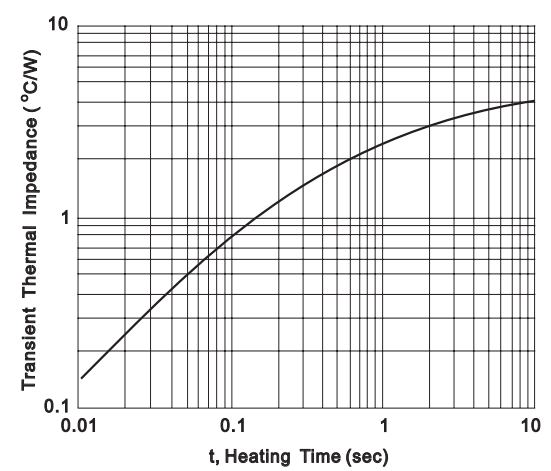


FIG.6-Typical Transient Thermal Impedance