

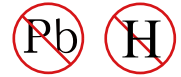


YEA SHIN TECHNOLOGY CO., LTD

G1A THRU G1M

GPP SURFACE MOUNT RECTIFIER

VOLTAGE- 50 to 1000 Volts CURRENT - 1.0 Amperes



SMF

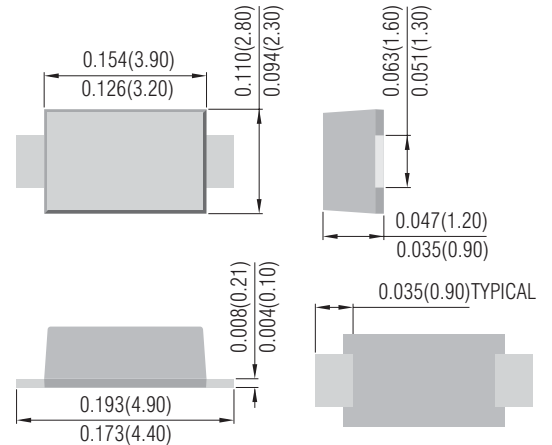
Unit:inch(mm)

FEATURES

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 utilizing
- Low Forward Drop
- High temperature soldering : 260°C /10 seconds at terminals

MECHANICAL DATA

Case: SMF molded plastic
 Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
 Polarity: Indicated by cathode band
 Standard packaging: 12mm tape (EIA-481)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

PARAMETER	SYMBOLS	G1A	G1B	G1D	G1G	G1J	G1K	G1M	UNIT
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 Rectified Current, at $T_L=75^\circ C$	$I(AV)$	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1.0A	V_F	1.1							V
Maximum DC Reverse Current $T_A = 25^\circ C$	I_R	5.0							μA
at Rated DC Blocking Voltage $T_A = 125^\circ C$		100							μA
Typical Junction Capacitance (Note 1)	C_J	12							pF
Maximum Thermal Resistance(Note 2)	$R_{\theta JA}$	75							$^\circ C/ W$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ C$

NOTES: 1. Measured at 1 MHz and applied VDC = 4.0 volts.
 2. 8.0 mm² (.013mm thick) land areas.

DEVICE CHARACTERISTICS

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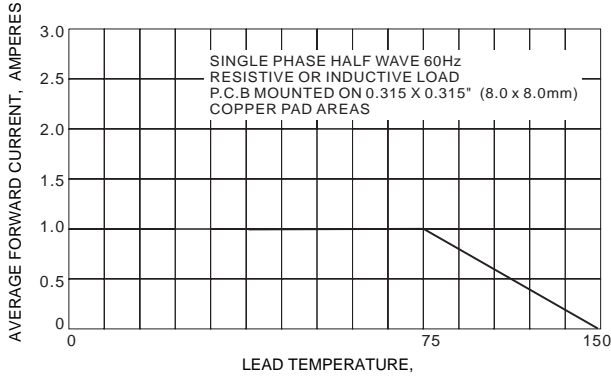


Fig.1-FORWARD CURRENT DERATING CURVE

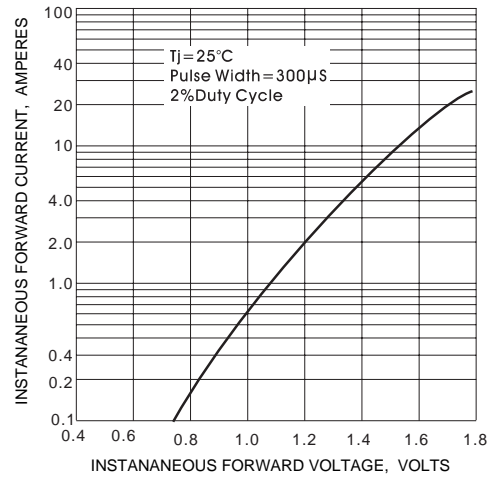


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

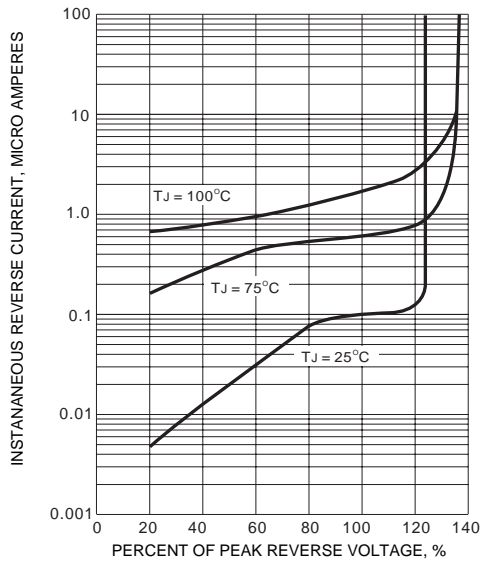


Fig.3-TYPICAL REVERSE CHARACTERISTICS

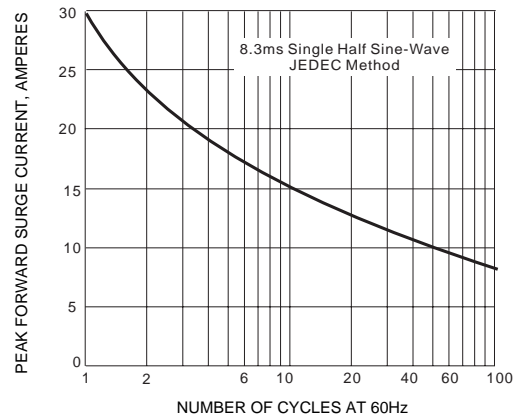


Fig.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

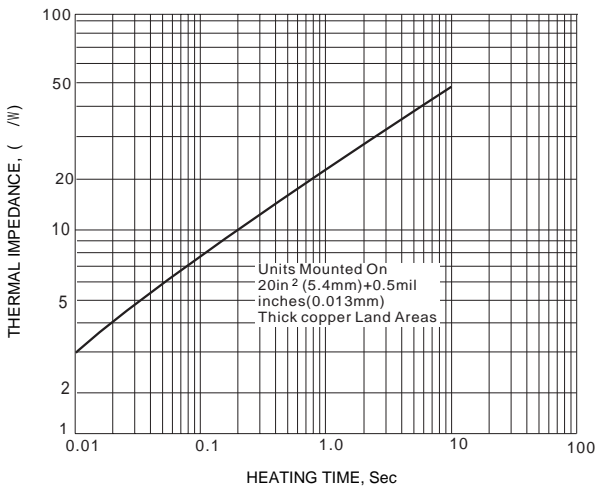


Fig.5-TRANSIENT THERMAL IMPEDANCE

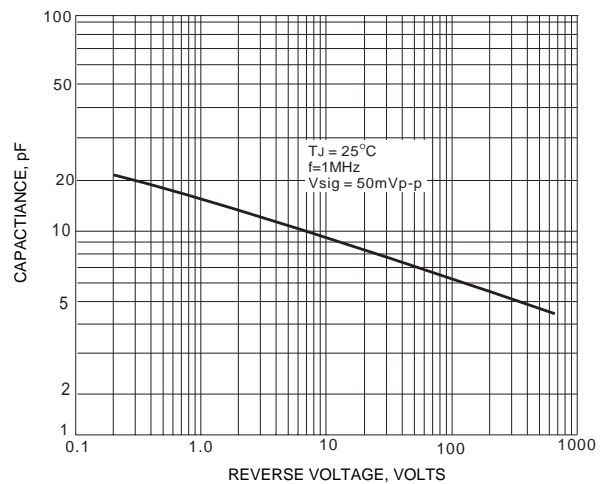


Fig.6-TYPICAL JUNCTION CAPACITANCE