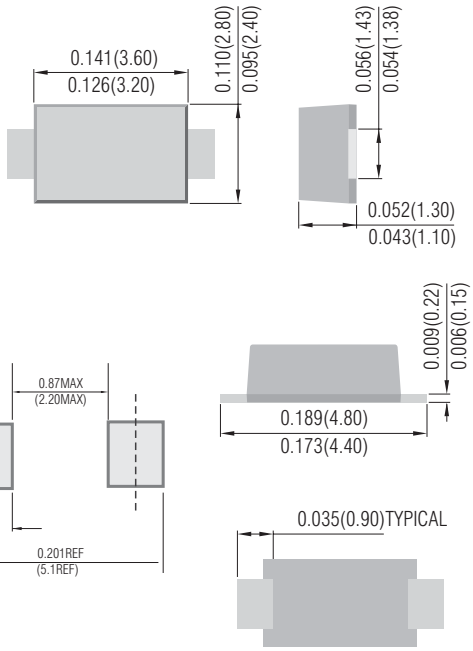
SEMICONDUCTOR

DATA SHEET

G2A THRU G2M

GPP SURFACE MOUNT RECTIFIER
VOLTAGE- 50 to 1000 Volts CURRENT - 2.0 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-O
- 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%.

	SYMBOLS	G2A	G2B	G2D	G2G	G2J	G2K	G2M	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°C	I(AV)	2. 0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	60							A
Maximum Instantaneous Forward Voltage at 2.0A	V_F	1. 1							V
Maximum DC Reverse Curren TA =25°C	I_R	5. 0							μA
at Rated DC Blocking Voltage TA =125°C		100							μA
Maximum Reverse Recovery Time(Note 1) TJ=25°C	T_{RR}	2. 5							μs
Typical Junction Capacitance (Note 2)	C_J	12							pF
Maximum Thermal Resistance(Note 3)	RθJA	75							°C/ W
Operating and Storage Temperature Range	T_J,T_{STG}	- 55 t o +150							°C

NOTES:

1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{rr} =0.25A
2. Measured at 1 MHz and applied V_r= 4.0 volts.
3. 8.0 mm^2 (.013mm thick) land areas.

RATING AND CHARACTERISTIC CURVES

G2A THRU G2M

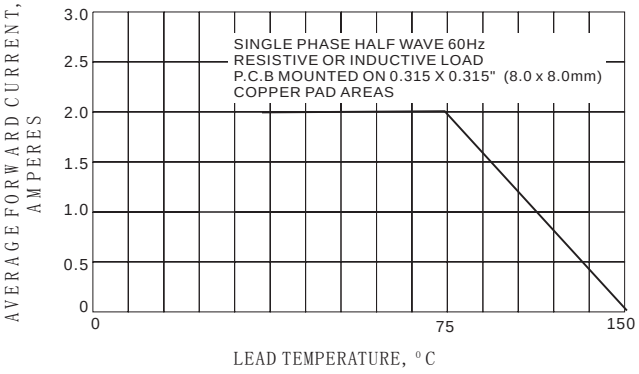


Fig. 1-FORWARD CURRENT DERATING CURVE

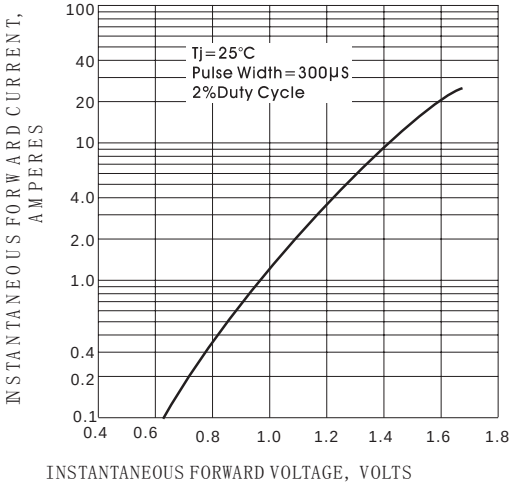


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

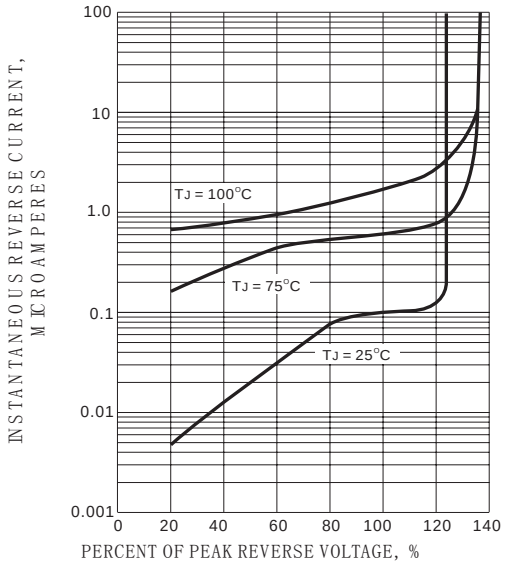


Fig. 3-TYPICAL REVERSE CHARACTERISTICS

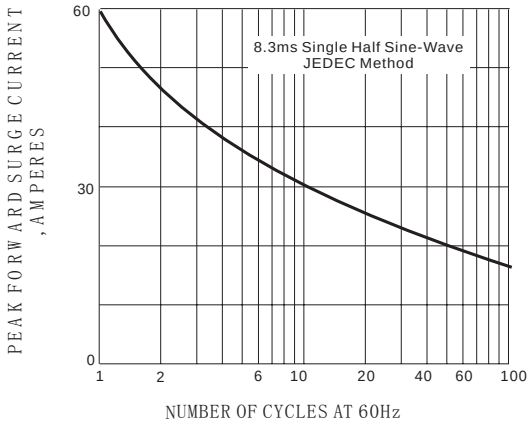


Fig. 4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

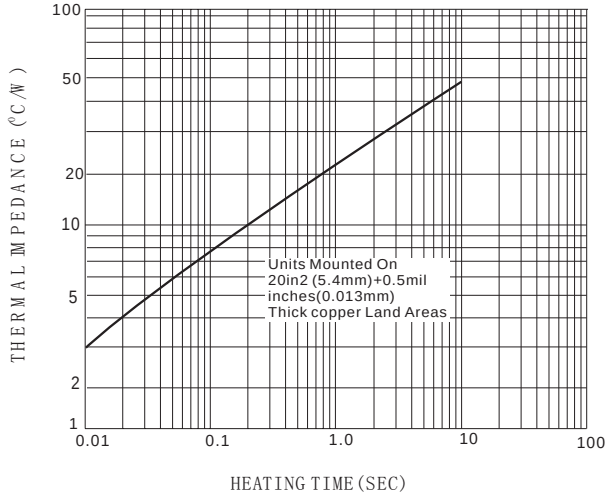


Fig. 5-TRANSIENT THERMAL IMPEDANCE

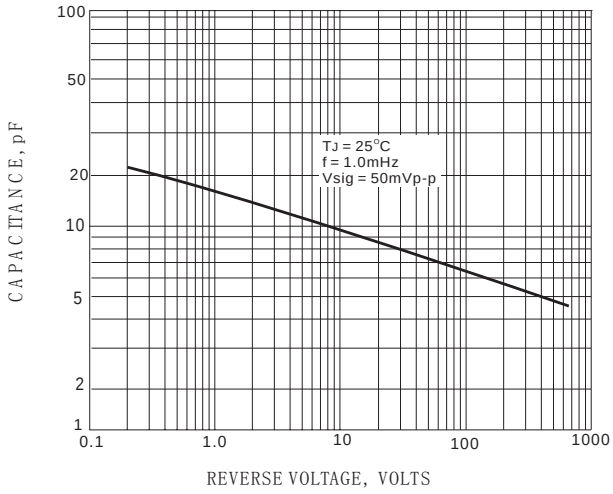


Fig. 6-TYPICAL JUNCTION CAPACITANCE