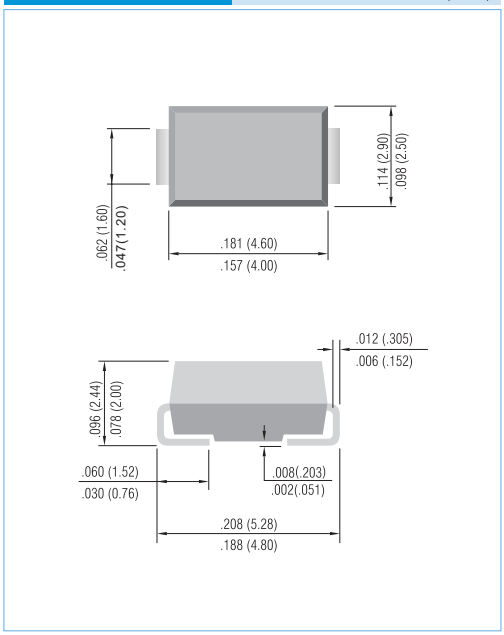
PANJIT SEMI CONDUCTOR

GS1A~GS1M

SURFACE MOUNT RECTIFIER

VOLTAGE 50 to 1000 Volts **CURRENT** 1.0 Amperes

SMA / DO-214AC 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
- Glass Passivated Chip Junction
- Lead free in comply with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: Indicated by cathode band
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.0023 ounce, 0.0679 gram

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	SYMBOL	GS1A	GS1B	GS1D	GS1G	GS1J	GS1K	GS1M	UNITS
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 Currenth at T_L=100 °C	$I_{F(AV)}$	1.0							A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	30							A
Maximum Forward Voltage at 1.0A	V_F	1.1							V
Maximum DC Reverse Current at T_J=25°C Rated DC Blocking Voltage T_J=125°C	I_R	1.0 50							μA
Typical Junction capacitance (Note 1)	C_J	12							pF
Typical Junction Resistance(Note 2)	$R_{\theta JL}$	30							°C / W
Operating and Storage Temperature Range	T_J,T_{STG}	-55 to +150							°C

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

GS1A~GS1M

RATING AND CHARACTERISTIC CURVES

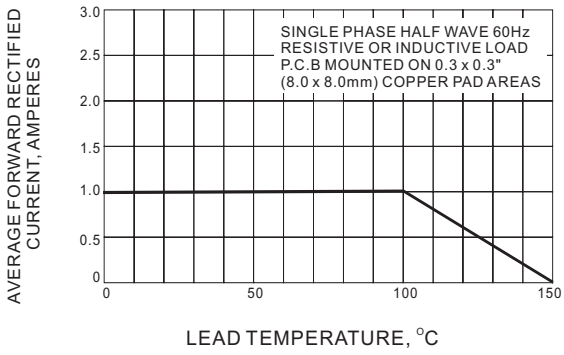


Fig.1 FORWARD CURRENT DERATING CURVE

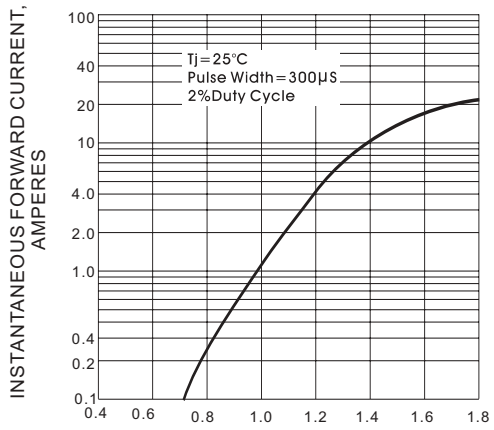


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

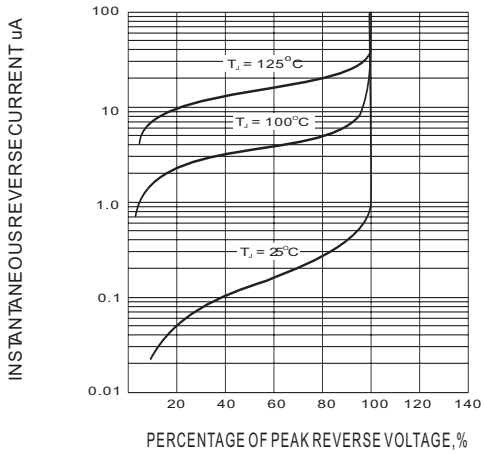


Fig.3-TYPICALREVERSECHARACTERISTIC

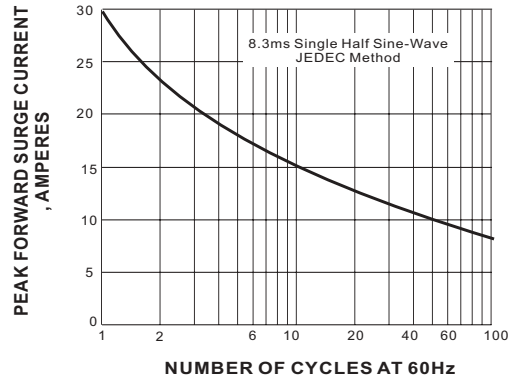


Fig.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

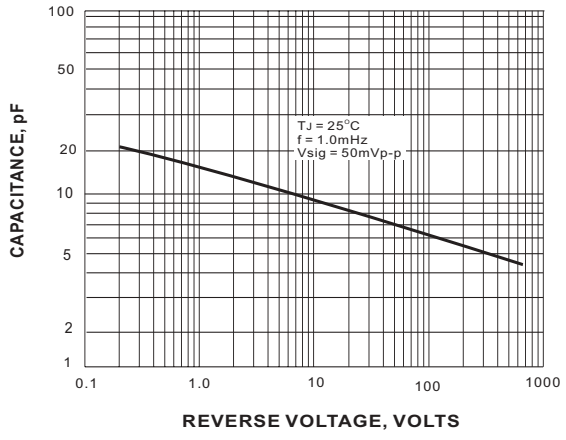
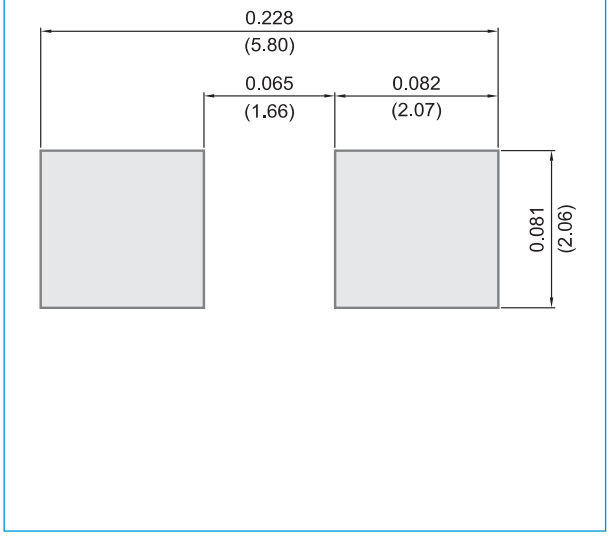


Fig.5 TYPICAL JUNCTION CAPACITANCE

GS1A~GS1M

MOUNTING PAD LAYOUT

SMA Unit: inch (mm)



ORDER INFORMATION

- Packing information

  T/R - 7.5K per 13" plastic Reel

  T/R - 1.8Kper 7" plastic Reel

GS1A~GS1M

For example :

RB500V-40_R2_00001

Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
T/B	A	N/A	0	HF	0	serial number
T/R	R	7"	1	RoHS	1	serial number
B/P	B	13"	2			
T/P	T	26mm	X			
TRR	S	52mm	Y			
TRL	L	PBCU	U			
FORMING	F	PBCD	D			

Part No_packing code_Version

GS1A_R1_00001
GS1A_R1_10001
GS1A_R2_00001
GS1A_R2_10001

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