



GS1AW~GS1MW

SURFACE MOUNT GENERAL PURPOSE RECTIFIER

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

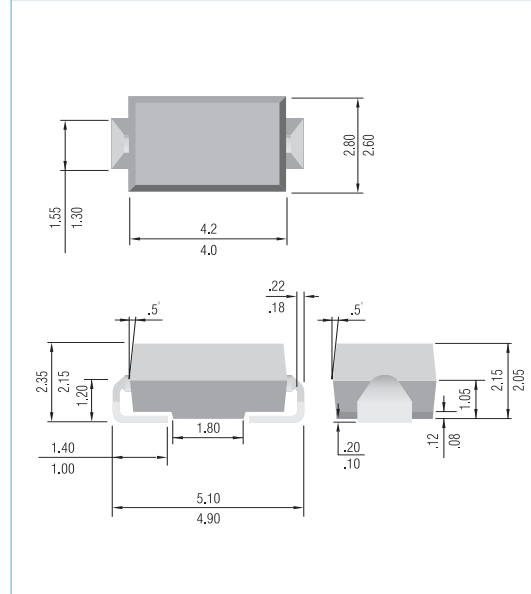
SMA -W Unit: mm

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
- Plastic Silicon Passivated
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: SMA-W molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: Indicated by cathode band
- Standard packaging: 12 mm tape (EIA-481)
- Weight: 0.002 ounce, 0.064 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	GS1AW	GS1BW	GS1DW	GS1GW	GS1JW	GS1KW	GS1MW	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 Current .375"(9.5mm) lead length at $T_J=50^\circ\text{C}$	$I_{F(AV)}$	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 DC	V_F	1.1							V
Maximum DC Reverse Current at $T_J=25^\circ\text{C}$ Rated DC Blocking Voltage $T_J=125^\circ\text{C}$	I_R	5.0 50							uA
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 mm² (.013mm thick) land areas.



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RATING AND CHARACTERISTIC CURVES

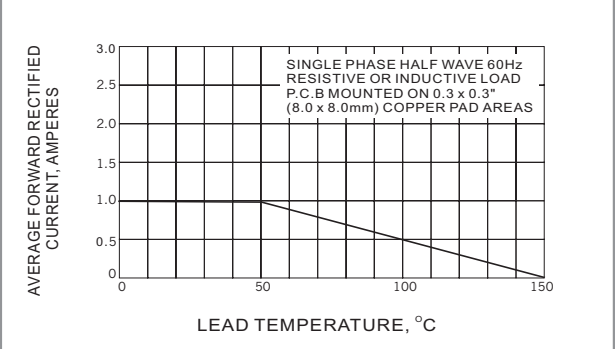


Fig.1 FORWARD CURRENT DERATING CURVE

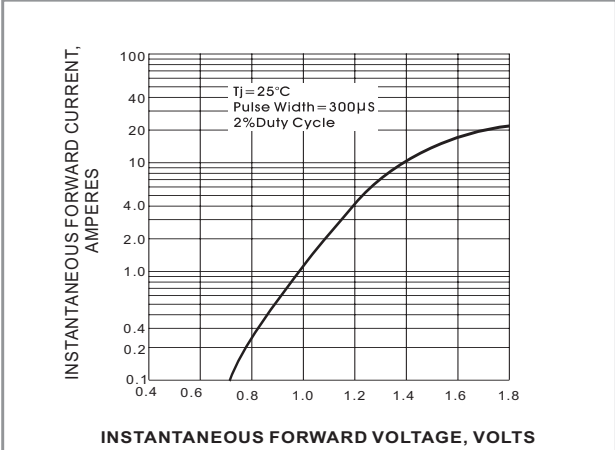


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

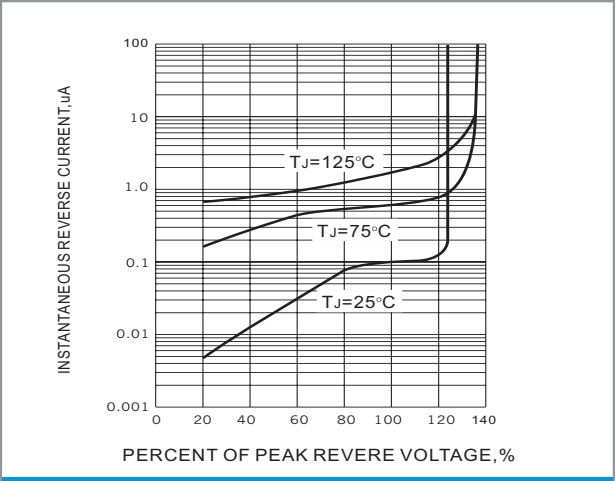


Fig.3 TYPICAL REVERSE CHARACTERISTICS

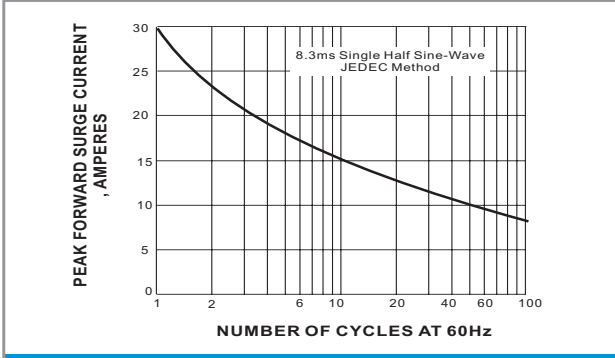


Fig.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

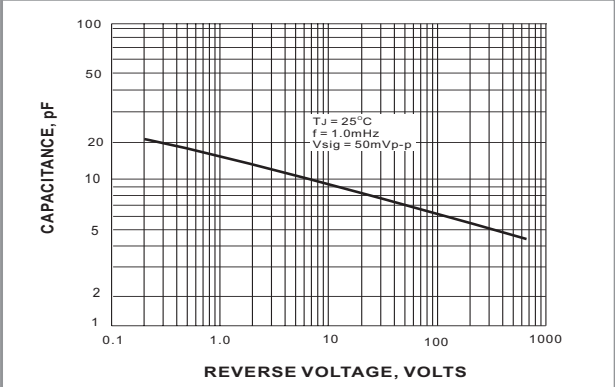


Fig.5 TYPICAL JUNCTION CAPACITANCE

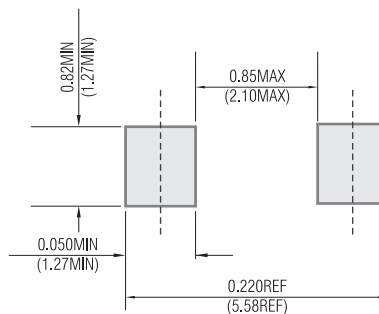


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MOUNTING PAD LAYOUT

SMA/DO-214AC

Unit: inch (mm)



ORDER INFORMATION

- Packing information
 - T/R - 7.5K per 13" plastic Reel
 - T/R - 1.8Kper 7" plastic Reel

LEGAL STATEMENT

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