



GS1AW~GS1MW

SURFACE MOUNT GENERAL PURPOSE RECTIFIER

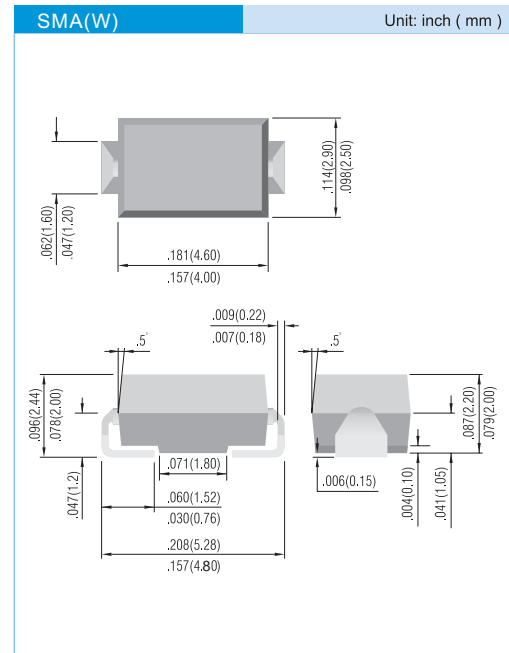
VOLTAGE 50 to 1000 Volts **CURRENT** 1.0 Amperes

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 at $T_L=50^\circ\text{C}$ | $I_{F(AV)}$ | 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 $T_J=100^\circ\text{C}$ | I_R | 50 | | | | | | | μA |
| Typical Junction capacitance (Note 1) | C_J | 12 | | | | | | | pF |
| Typical Junction Resistance(Note 2) | $R_{\theta JL}$ | 30 | | | | | | | $^\circ\text{C} / \text{W}$ |
| Operating and Storage Temperature Range | T_J, T_{STG} | -55 to +150 | | | | | | | $^\circ\text{C}$ |

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

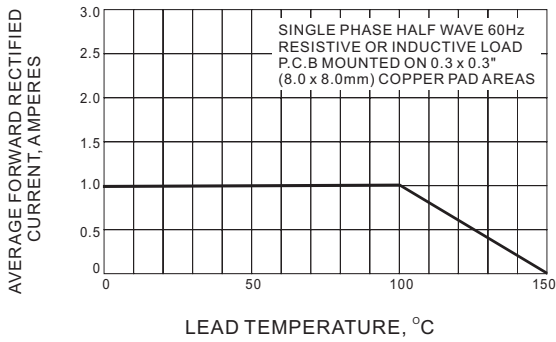


Fig. 1 FORWARD CURRENT DERATING CURVE

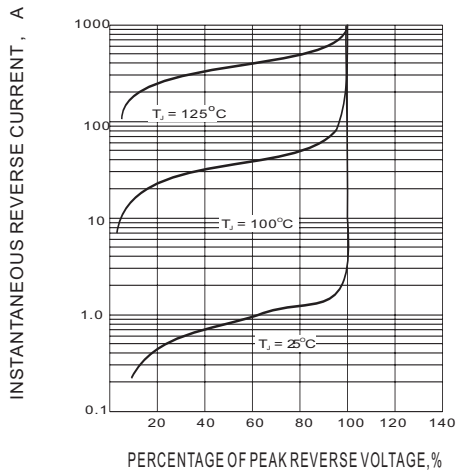


Fig. 3-TYPICAL REVERSE CHARACTERISTIC

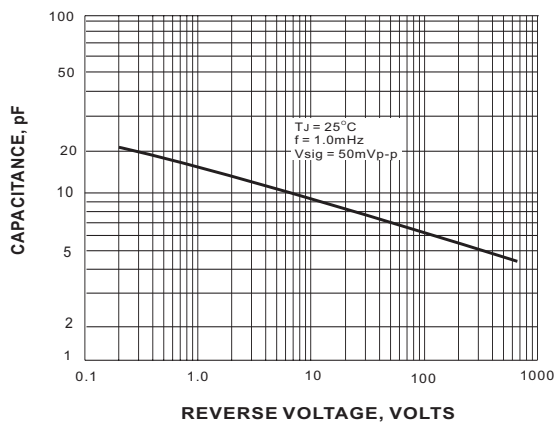


Fig. 5 TYPICAL JUNCTION CAPACITANCE

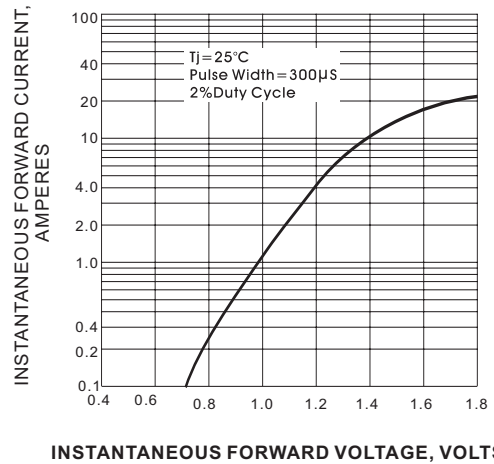


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

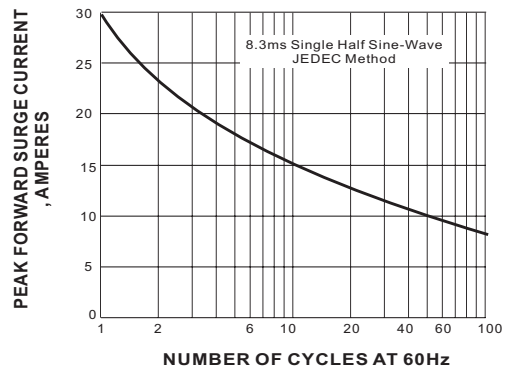
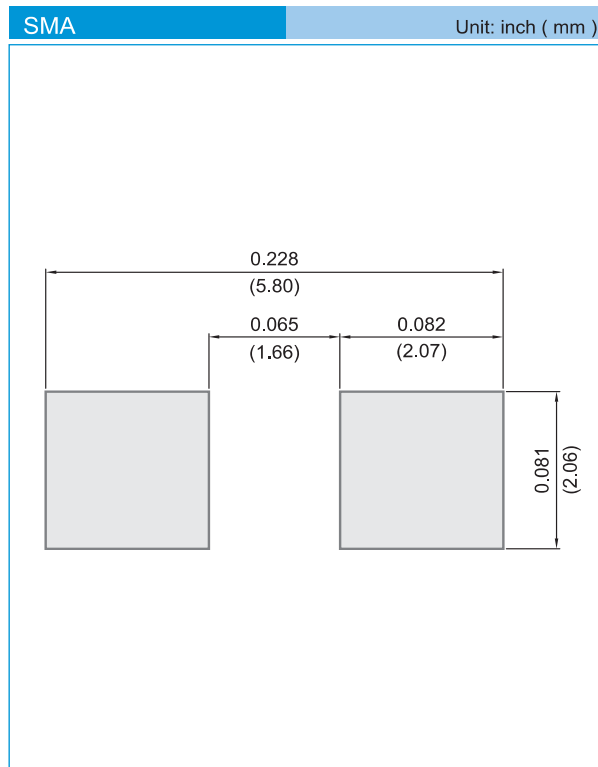


Fig. 4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



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MOUNTING PAD LAYOUT



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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