



GS1A~GS1M

SURFACE MOUNT RECTIFIER

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

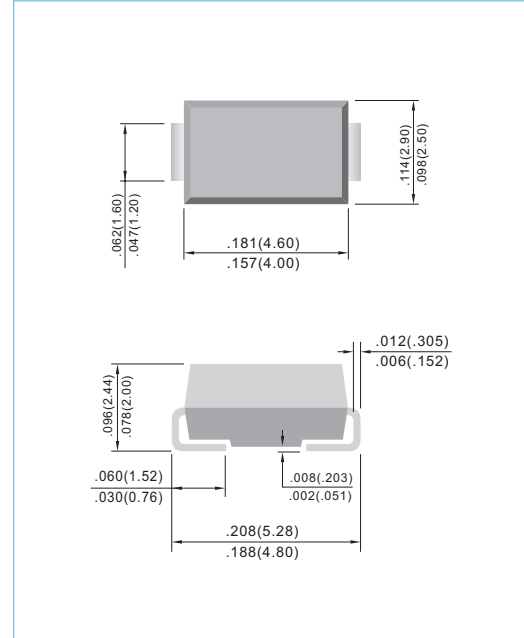
SMA/DO-214AC Unit: inch (mm)

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
- In compliance 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: 0.002 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 | 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 Current .375" (9.5mm) lead length at $T_c=100^\circ\text{C}$ | $I_{F(AV)}$ | 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 | 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

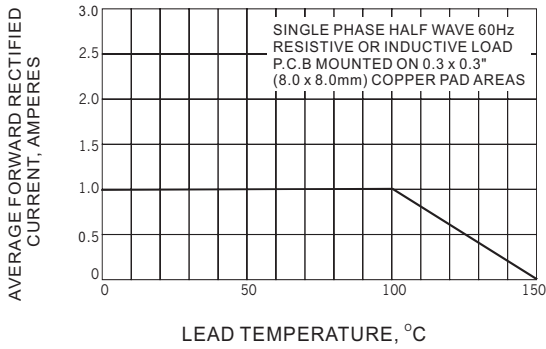


Fig.1 FORWARD CURRENT DERATING CURVE

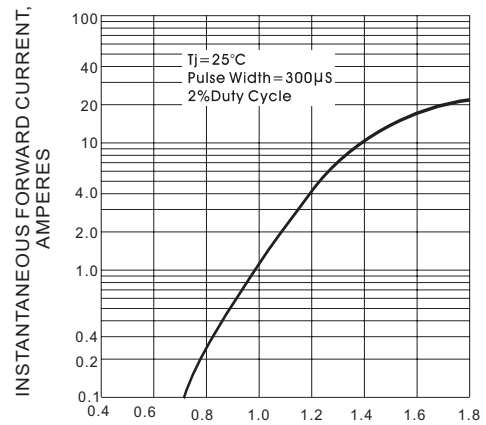


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

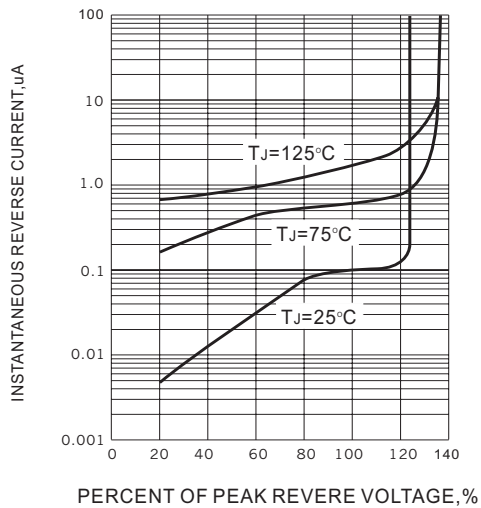


Fig.3 TYPICAL REVERSE CHARACTERISTICS

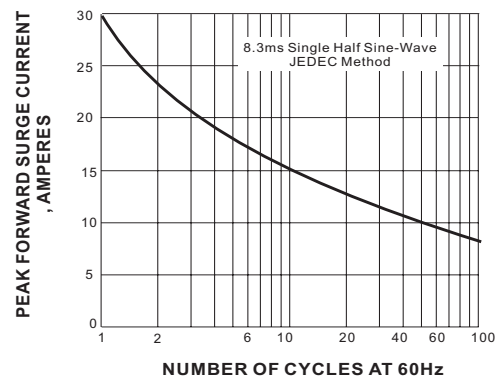


Fig.4-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

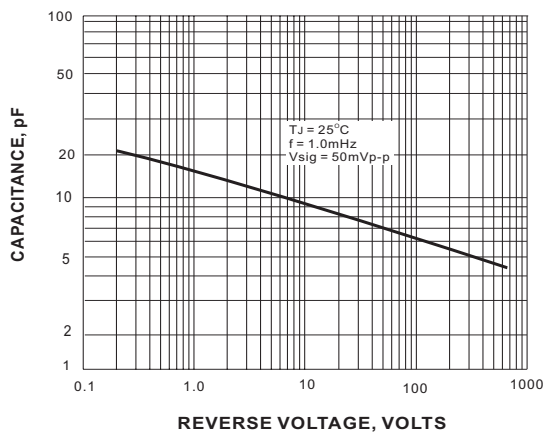


Fig.5 TYPICAL JUNCTION CAPACITANCE

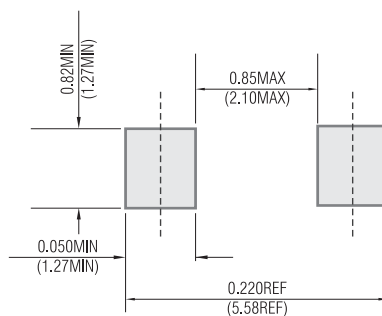


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MOUNTING PAD LAYOUT

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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