



GS2AN THRU GS2MN

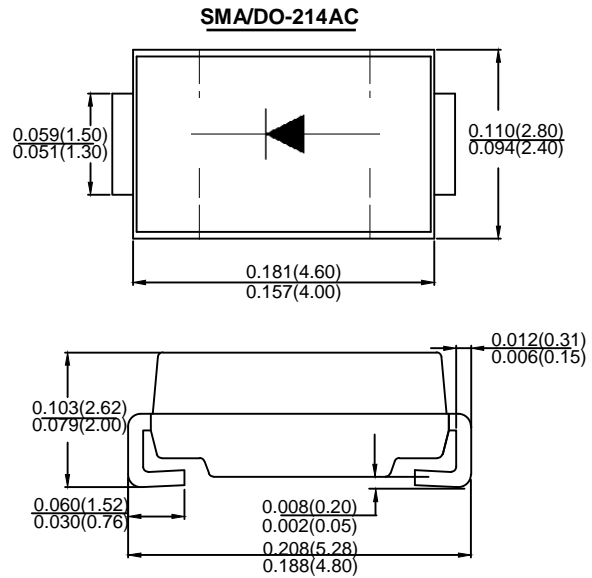
2.0AMP SURFACE MOUNT GLASS RECOVERY RECTIFIER

Features

- For surface mounted application
- Low forward voltage drop
- High current capability
- High reliability
- Plastic Case Material has UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: Molded plastic SMA
- Terminals: Plated leads solderable per MIL-STD-750, Method 2026 guaranteed
- Polarity: Color band dented cathode end
- Mounting Position: Any
- Making: Type Number



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load

For capacitive load derate current by 20%

| Type Number | SYMBOL | GS2AN | GS2BN | GS2DN | GS2GN | GS2JN | GS2KN | GS2MN | 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 |
| Average Rectified Output Current @ $T_L = 100^\circ C$ | $I_{F(AV)}$ | 2.0 | | | | | | | A |
| Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I_{FSM} | 50 | | | | | | | A |
| Rating for fusing ($t < 8.3ms$) | $I^2 t$ | 10.38 | | | | | | | $A^2 s$ |
| Forward Voltage @ $I_F = 2.0A$ | V_{FM} | 1.1 | | | | | | | V |
| Peak Reverse Current @ $T_A = 25^\circ C$ | I_R | 5.0 | | | | | | | uA |
| At Rated DC Blocking Voltage @ $T_A = 125^\circ C$ | | 200 | | | | | | | |
| Typical Junction Capacitance (Note 1) | C_J | 12 | | | | | | | pF |
| Typical Thermal Resistance Junction to Ambient (Note 2) | $R_{\theta JA}$ | 50 | | | | | | | $^\circ C/W$ |
| Operating Temperature Range | T_J | -55 to +150 | | | | | | | $^\circ C$ |
| Storage Temperature Range | T_{STG} | -55 to +150 | | | | | | | $^\circ C$ |

Note: 1. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

2. Device mounted on FR-4 substrate, 1" * 1", 2oz, single-sided, PC boards with 0.1" * 0.15" copper pad.



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FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

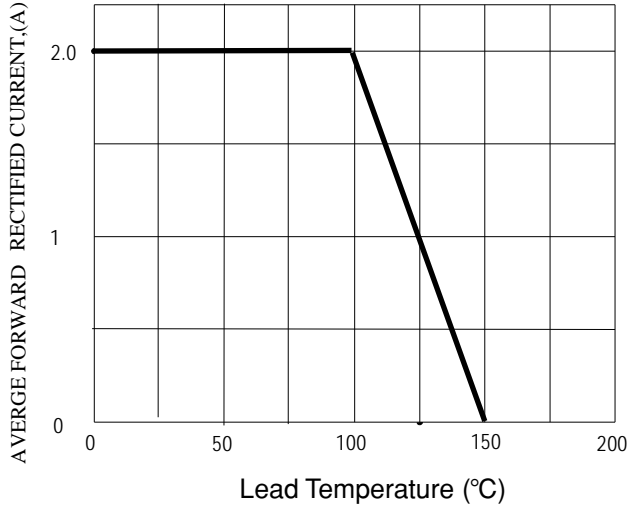


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

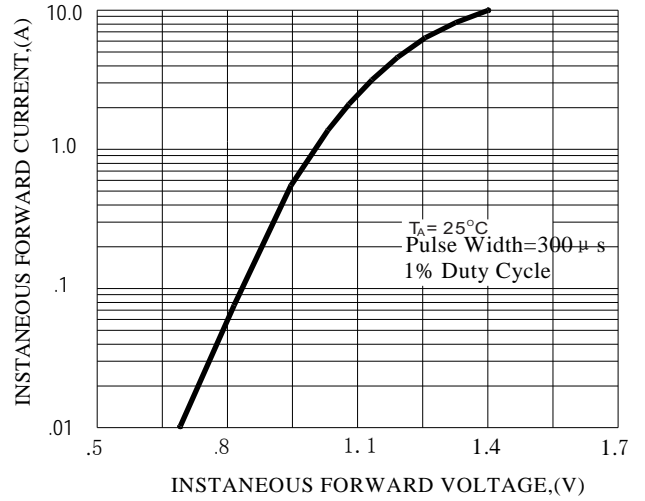


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

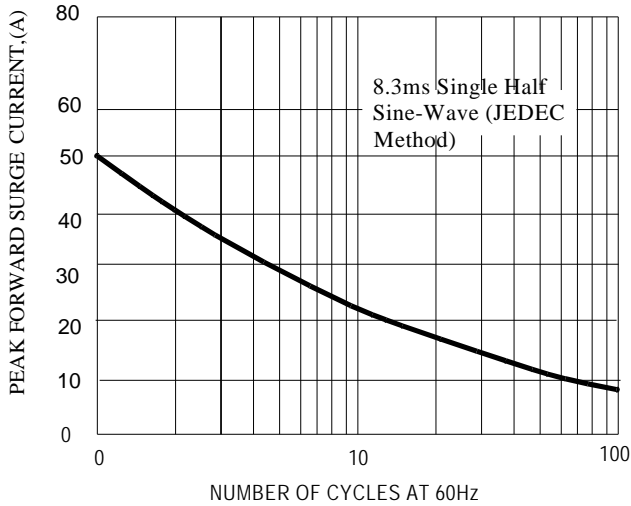
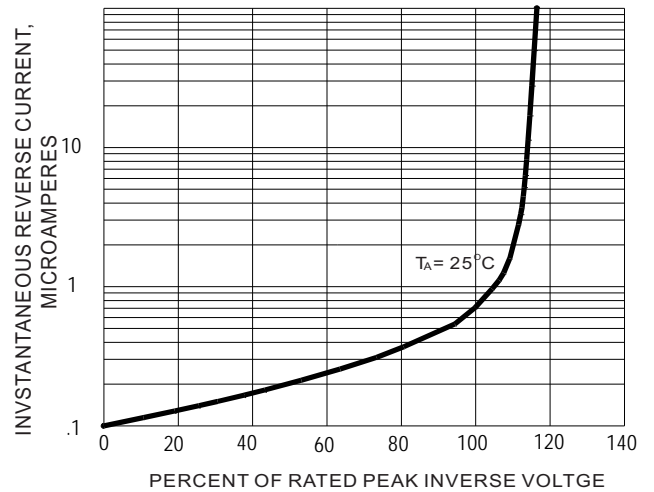
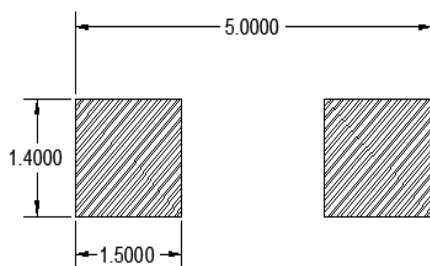


FIG.4-TYPICAL REVERSE CHARACTERISTICS



SMA PAD LAYOUT





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