

S2A-AU~S2M-AU

SURFACE MOUNT RECTIFIER

VOLTAGE 50 to 1000 Volt **CURRENT** 2 Ampere

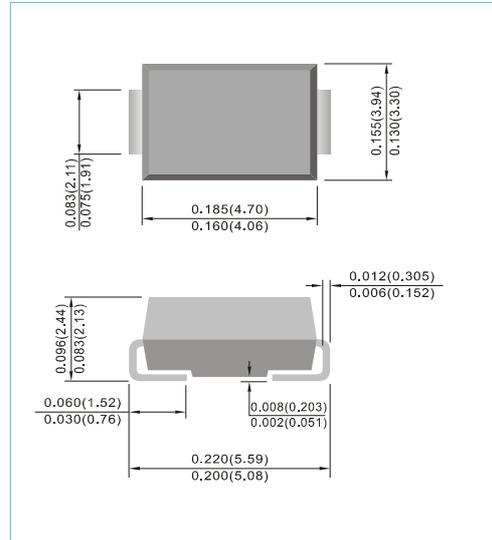
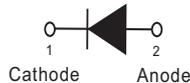
SMB / DO-214AA Unit : inch(mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications in order to optimize board space
- Easy pick and place
- Glass passivated junction
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: JEDEC DO-214AA molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 12mm tape (EIA-481)
- Weight: 0.003 ounces, 0.092 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase , half wave ,60Hz, resistive or inductive load.
For capacitive load , derate current by 20%.

| PARAMETER | SYMBOL | S2A-AU | S2B-AU | S2D-AU | S2G-AU | S2J-AU | S2K-AU | S2M-AU | 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 $T_L=110^{\circ}C$ | $I_{F(AV)}$ | 2 | | | | | | | A |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 60 | | | | | | | A |
| Maximum Forward Voltage at 2A | V_F | 1.1 | | | | | | | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J=25^{\circ}C$ $T_J=125^{\circ}C$ | I_R | 1 125 | | | | | | | μA |
| Maximum Junction Capacitance (Note 1) | C_J | 30 | | | | | | | pF |
| Typical Junction Resistance (Note 2) | $R_{\theta JL}$ | 16 | | | | | | | $^{\circ}C / W$ |
| Operating Junction and Storage Temperature Range | T_J, T_{STG} | -55 to +150 | | | | | | | $^{\circ}C$ |

NOTES :

1. Measured at 1 MHz and applied $V_r=4$ volts.
2.8 x 8mm² pads.

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RATING AND CHARACTERISTIC CURVES

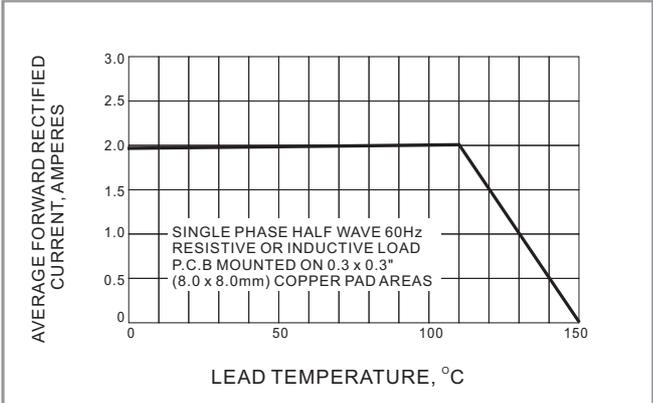


Fig.1 FORWARD CURRENT DERATING CURVE

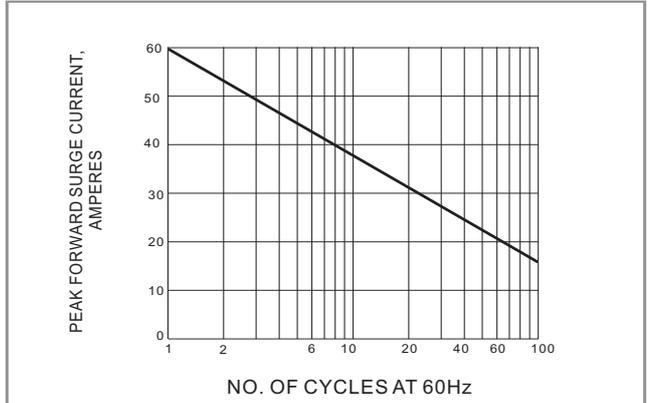


Fig.2 MAXIMUM NON REPETITIVE PEAK SURGE CURRENT

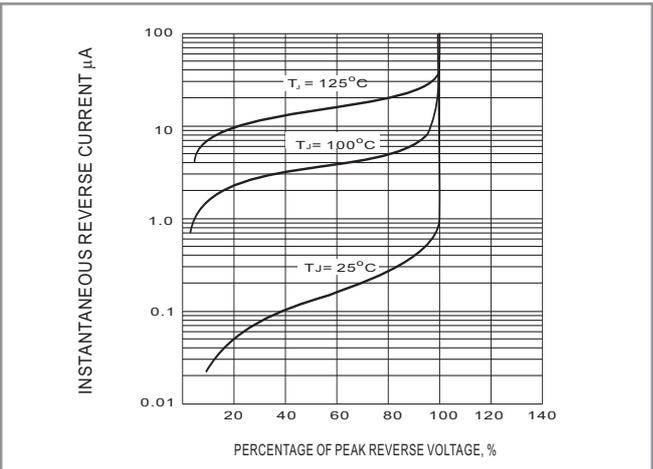


Fig.3 TYPICAL REVERSE CHARACTERISTIC

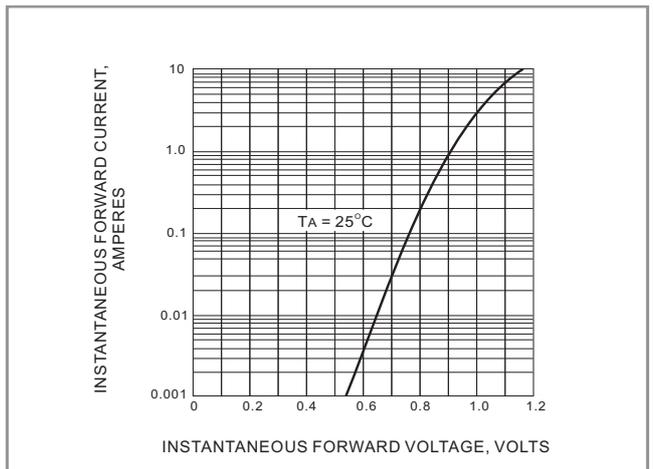


FIG.2 TYPICAL FORWARD CHARACTERISTICS

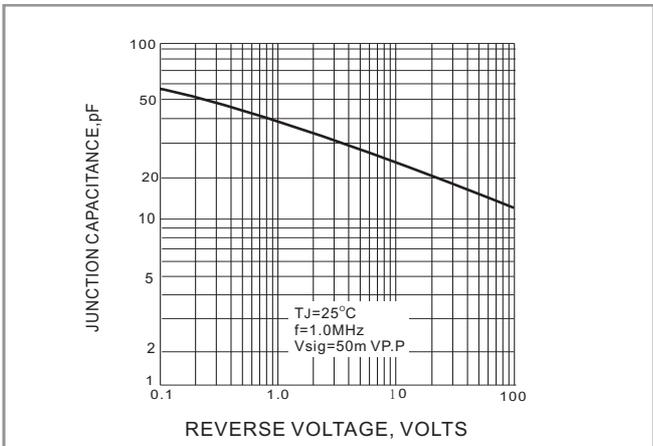


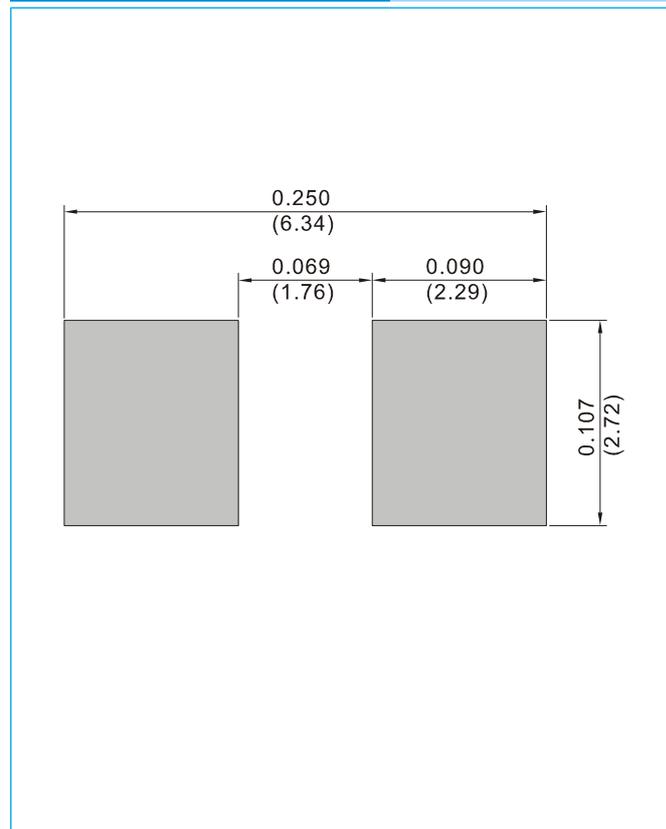
Fig.5 TYPICAL JUNCTION CAPACITANCE

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MOUNTING PAD LAYOUT

SMB / DO-214AA

Unit : inch(mm)



ORDER INFORMATION

- Packing information
T/R - 3K per 13" plastic Reel
T/R - 0.8K per 7" plastic Reel

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