

Surface Mount General Purpose Silicon Rectifiers

Reverse Voltage - 2000 V

Forward Current - 1 A

FEATURES

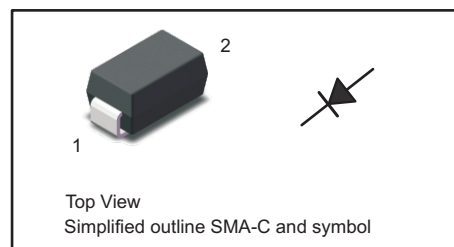
- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

- Case: SMA-C
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.055g / 0.002oz

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |



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 current derate by 20 %.

| Parameter | Symbols | M20A | Units |
|--|------------------------------------|------------|----------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 2000 | V |
| Maximum RMS voltage | V_{RMS} | 1400 | V |
| Maximum DC Blocking Voltage | V_{DC} | 2000 | V |
| Maximum Average Forward Rectified Current | $I_{F(AV)}$ | 1 | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) | I_{FSM} | 30 | A |
| Maximum Instantaneous Forward Voltage at 1 A | V_F | 1.1 | V |
| Maximum Reverse Current $T_J = 25\text{ }^{\circ}\text{C}$ $T_J = 125\text{ }^{\circ}\text{C}$ | I_R | 5 50 | μA |
| Typical Junction Capacitance ⁽¹⁾ | C_j | 6 | pF |
| Typical Thermal Resistance ⁽²⁾ | $R_{\theta JA}$ $R_{\theta JL}$ | 90 20 | $^{\circ}\text{C/W}$ |
| Operating and Storage Temperature Range | T_j, T_{stg} | -55 ~ +150 | $^{\circ}\text{C}$ |

1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

2) P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.



Fig.1 Forward Current Derating Curve

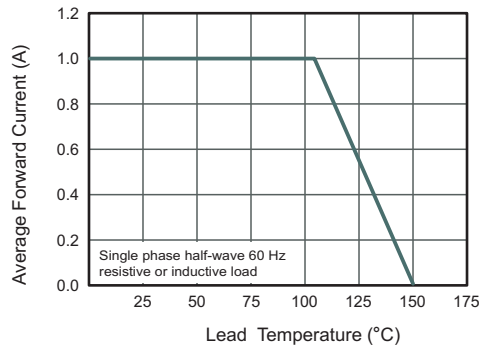


Fig.2 Typical Reverse Characteristics

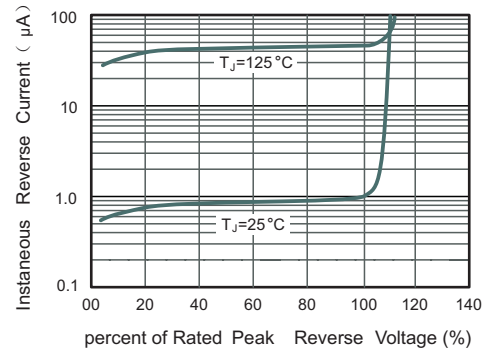


Fig.3 Typical Instantaneous Forward Characteristics

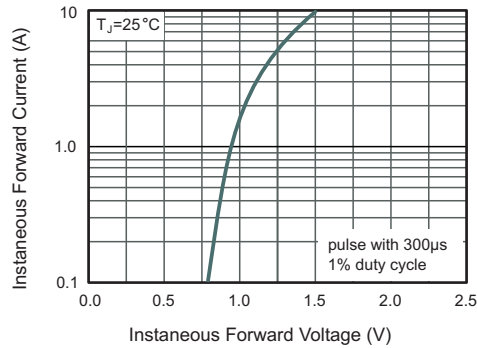


Fig.4 Typical Junction Capacitance

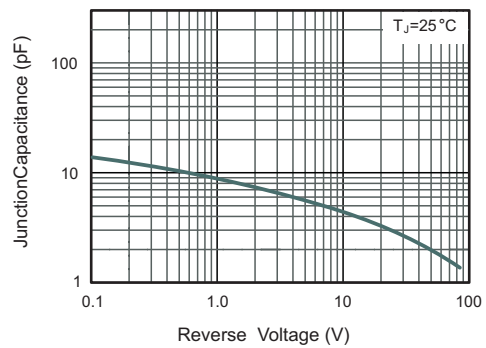
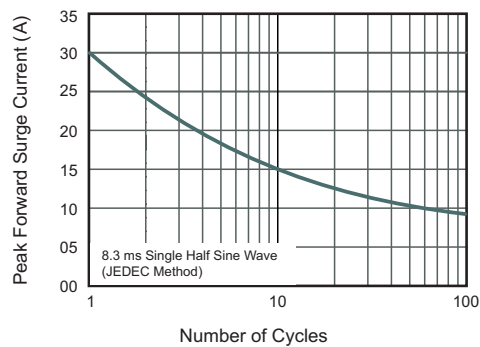


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

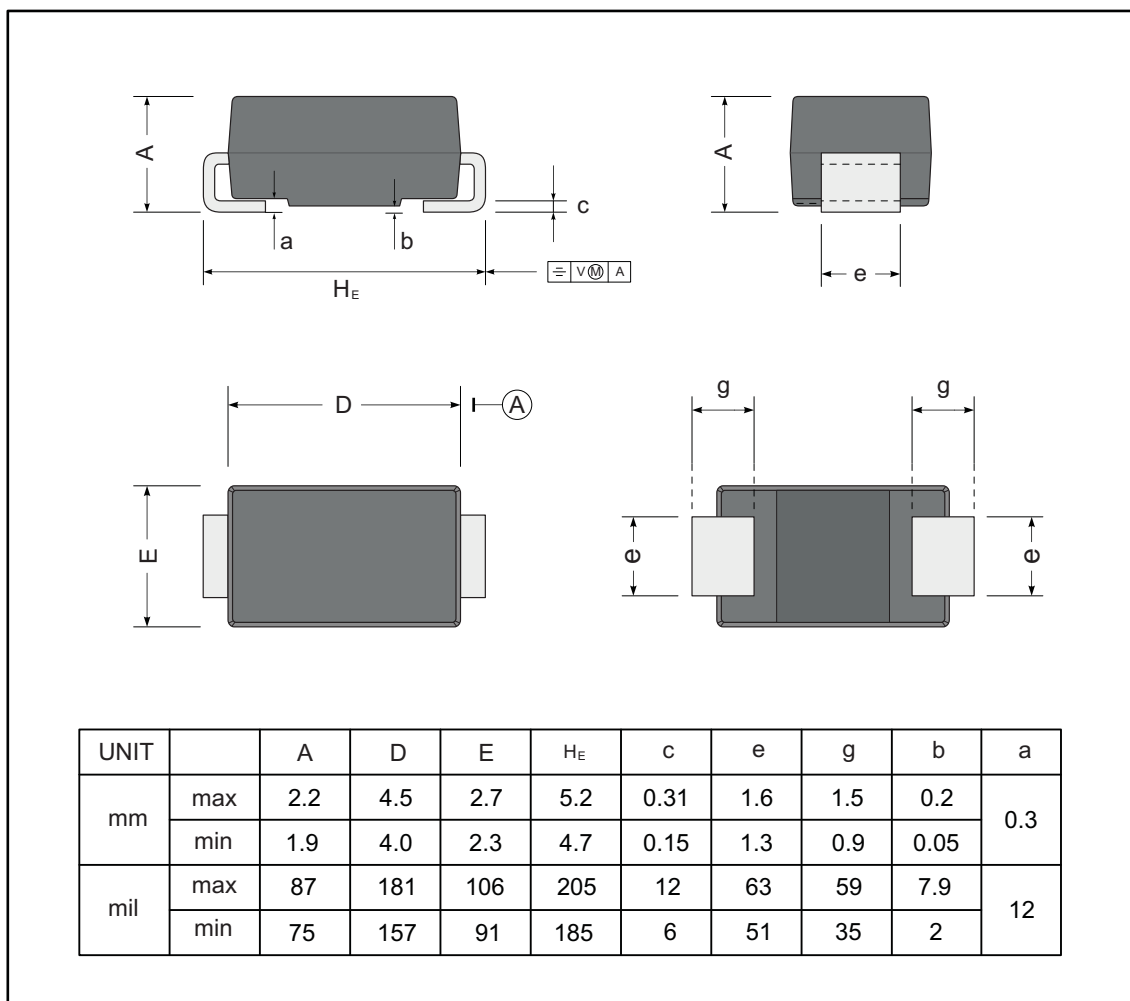




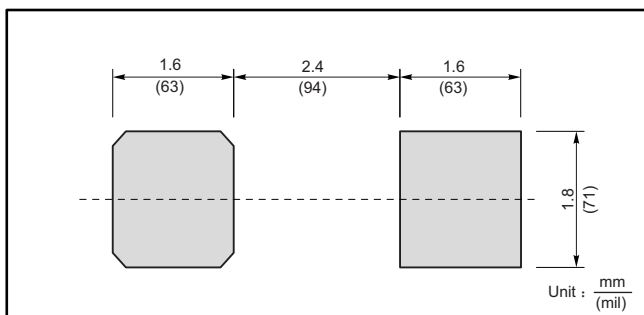
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMA-C



The recommended mounting pad size



Marking

| Type number | Marking code |
|-------------|--------------|
| M20A | M20A |



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