

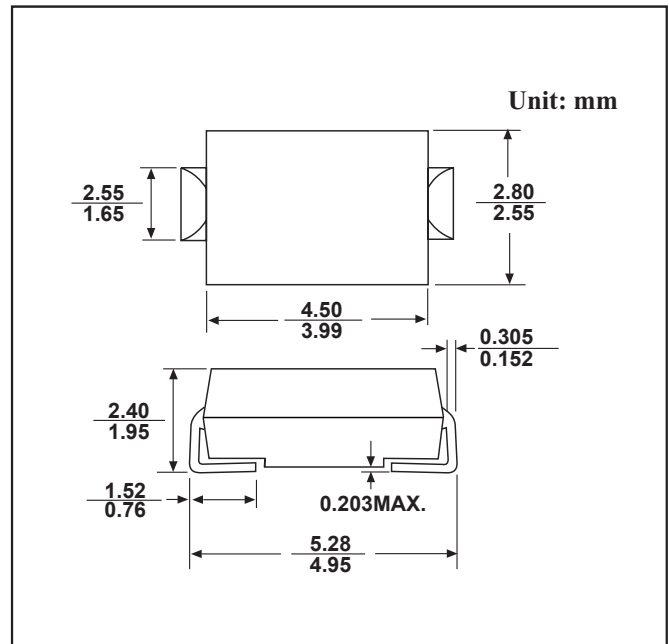
SMA PLASTIC SILICON RECTIFIERS

FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- For surface mounted applications
- Built-in strain relief,ideal for automated placement
- High temperature soldering guaranteed:260℃/10 seconds at Terminals
- Component in accordance to RoHs 2015/863 and WEEE 2012/19/EU

MECHANICAL DATA

- Case:SMA molded plastic body
- Terminals:Lead solderable per MIL-STD-750,method 2026
- Polarity:Color band denotes cathode end
- Mounting Position:Any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

| Characteristic | SYMBOLS | S1A | S1B | S1D | S1G | S1J | S1K | S1M | UNITS |
|---|--------------|------------|-----|-----|-----|-----|-----|------|-------|
| Maximum recurrent peak reverse voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum DC blocking voltage | V_{DC} | | | | | | | | |
| Maximum RMS Voltage | $V_{R(RMS)}$ | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average rectified output current(Note 1)@TA=75°C | $I_{(AV)}$ | 1.0 | | | | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDECmethod) | I_{FSM} | 30.0 | | | | | | | A |
| Maximum instantaneous forward voltage at 1.0A | V_F | 1.0 | | | | | | | V |
| Maximum DC reverse current at rated DC blocking voltage | @TA=25°C | 5.0 | | | | | | | μA |
| | @TA=100°C | 50.0 | | | | | | | |
| Typical Junction Capacitance(Note 1) | C_J | 15 | | | | | | | pF |
| Typical thermal resistance (NOTE 2) | $R_{θJA}$ | 85 | | | | | | | °C/W |
| Operating junction and storage temperature range | T_j | -55 to+150 | | | | | | | °C |

Note:

1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.Thermal resistance junction to ambient,P.C.B. mounted with 0.2x0.2”(5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

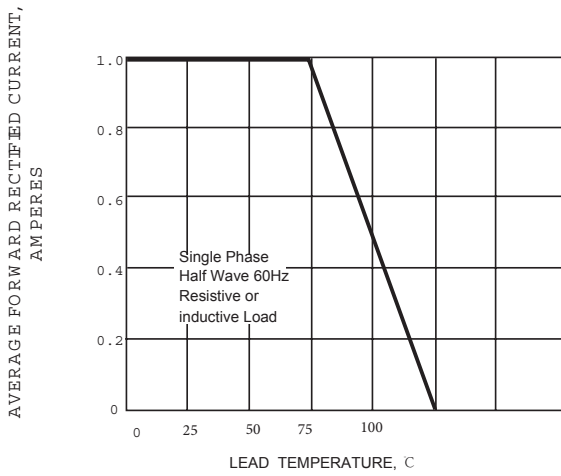


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

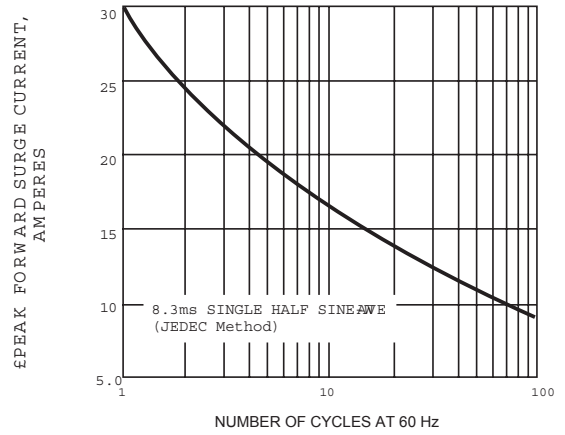


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

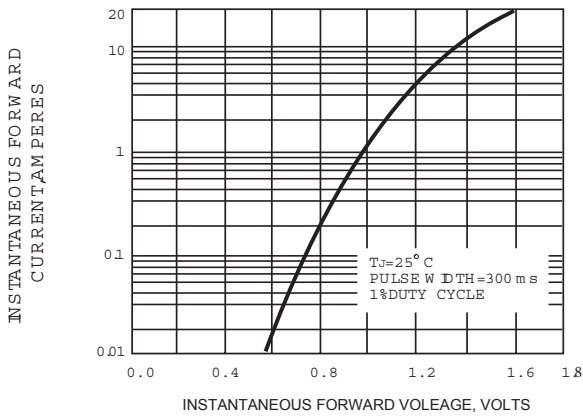


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

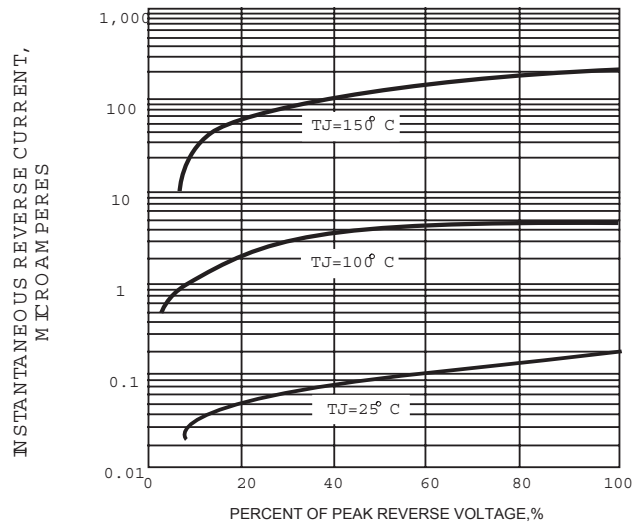


FIG. 5-TYPICAL JUNCTION CAPACITANCE

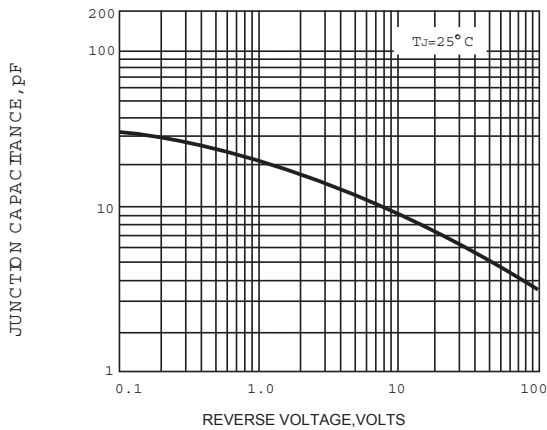


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

