

## PLASTIC SILICON RECTIFIERS

VOLTAGE RANGE: 50 --- 1000 V CURRENT: 6.0 A

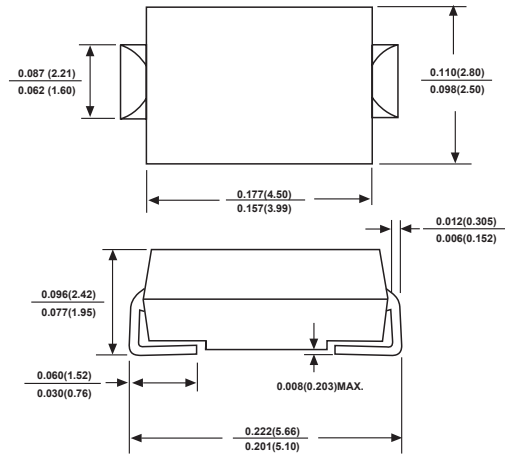
### FEATURES

- 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°C/10 seconds at
- Component in accordance to RoHs 2002/95/EC andWEEE 2002/96/EC

### 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

### SMA



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase,half wave,60 Hz,resistive or inductive load.

For capacitive load,derate by 20%.

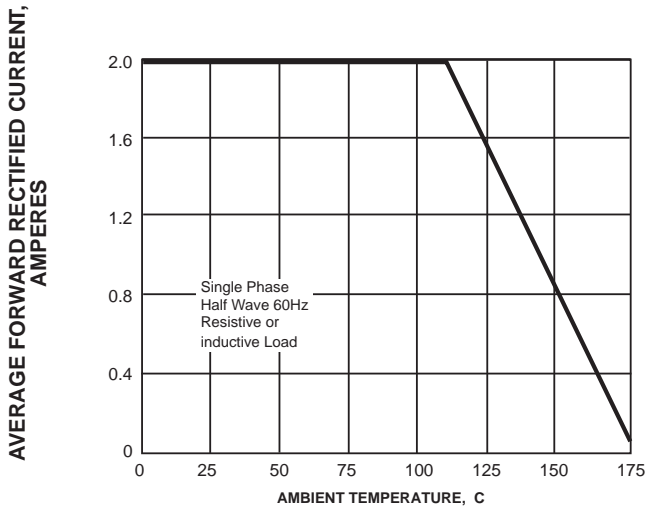
| Characteristic   | SYMBOLS         | S2A         | S2B | S2D | S2G | S2J | S2K | S2M  | UNITS   |
|--|-----------------|-------------|-----|-----|-----|-----|-----|------|---------|
| Maximum repetitive peak reverse voltage  | $V_{RRM}$       | 50          | 100 | 200 | 400 | 600 | 800 | 1000 | V       |
| Maximum DC blocking voltage  | $V_{DC}$        |             |     |     |     |     |     |      |         |
| Maximum RMS Voltage  | $V_{R(RMS)}$    | 35          | 70  | 140 | 280 | 420 | 560 | 700  | V       |
| Maximum average forward rectified current at TL=110°C  | $I_{(AV)}$      | 2.0         |     |     |     |     |     |      | A       |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDECmethod) | $I_{FSM}$       | 60.0        |     |     |     |     |     |      | A       |
| Maximum instantaneous forward voltage at 1.0A  | $V_F$           | 1.0         |     |     |     |     |     |      | V       |
| Maximum DC reverse current at rated DC blocking voltage  | @ $T_A=25$      | 5.0         |     |     |     |     |     |      | $\mu A$ |
|  | @ $T_A=100$     | 50.0        |     |     |     |     |     |      |         |
| Typical junction capacitance (NOTE 1)  | $C_J$           | 30          |     |     |     |     |     |      | pF      |
| Typical thermal resistance (NOTE 2)  | $R_{\theta JA}$ | 50          |     |     |     |     |     |      | °C/W    |
| Operating junction and storage temperature range   | $T_j$           | -65 to +150 |     |     |     |     |     |      | °C      |

### Note:

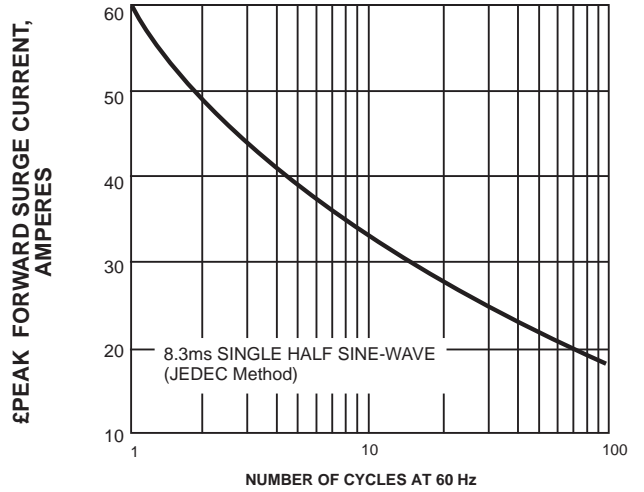
- 1.Measured at 1MHz and applied reverse voltage of 4.0V DC.
- 2.P.C.B. mounted with 0.4x0.4"(10x10mm) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES

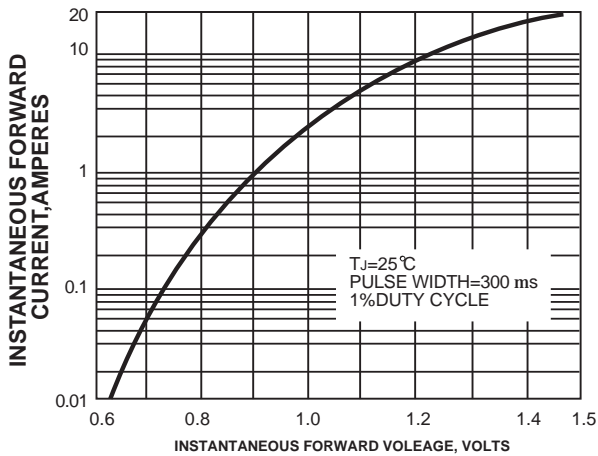
**FIG. 1- FORWARD CURRENT DERATING CURVE**



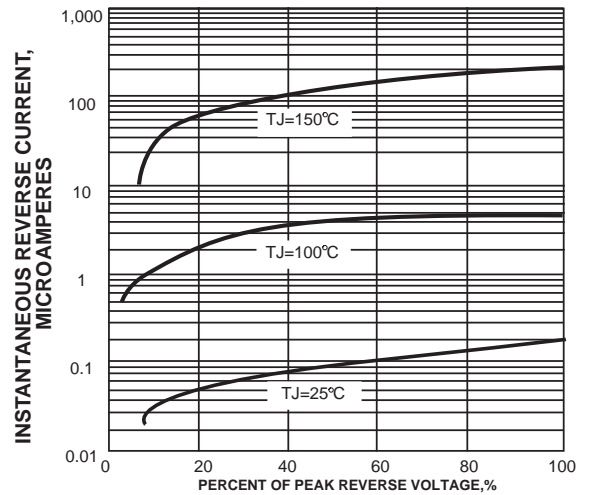
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



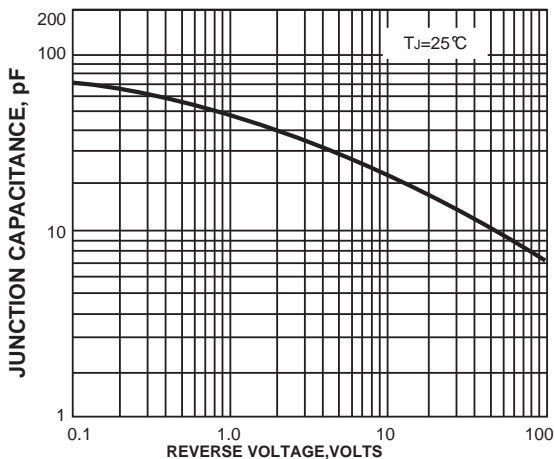
**FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4-TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5-TYPICAL JUNCTION CAPACITANCE**



**FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE**

