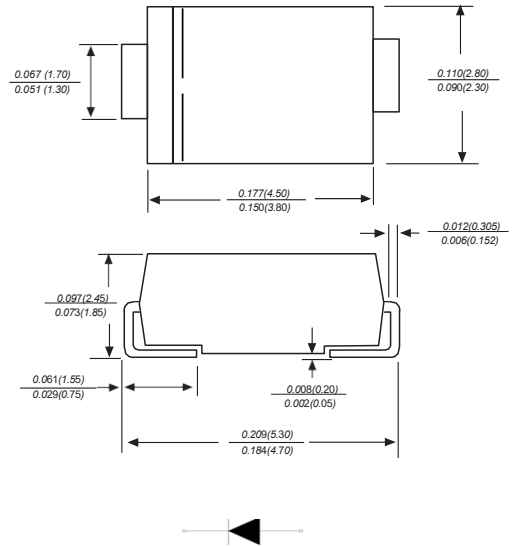


## SURFACE MOUNT GENERAL RECTIFIER

### Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Idea for printed circuit board
- ◆ Glass Passivated Pellet Junction Chip
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed 250°C/10 seconds at terminals

### DO-214AC/SMA



Dimensions in inches and (millimeters)

### 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 current derate by 20%.

| Parameter                                                                                              | SYMBOLS         | S2A         | S2B | S2D | S2G | S2J | S2K | S2M  | UNITS         |
|--------------------------------------------------------------------------------------------------------|-----------------|-------------|-----|-----|-----|-----|-----|------|---------------|
| Marking Code                                                                                           |                 |             |     |     |     |     |     |      |               |
| Maximum repetitive 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 rectified current at $T_L=110^{\circ}C$                                        | $I_{(AV)}$      | 2.0         |     |     |     |     |     |      | A             |
| Peak forward surge current<br>8.3ms single half sine-wave<br>superimposed on rated load (JEDEC Method) | $I_{FSM}$       | 50          |     |     |     |     |     |      | A             |
| Maximum instantaneous forward voltage at 2.0A                                                          | $V_F$           | 1.10        |     |     |     |     |     |      | V             |
| Maximum DC reverse current<br>$T_A=25^{\circ}C$<br>at rated DC blocking voltage<br>$T_A=125^{\circ}C$  | $I_R$           | 5.0<br>100  |     |     |     |     |     |      | $\mu A$       |
| Typical junction capacitance (NOTE 1)                                                                  | $C_J$           | 25.0        |     |     |     |     |     |      | pF            |
| Typical thermal resistance (NOTE 2)                                                                    | $R_{\theta JA}$ | 65.0        |     |     |     |     |     |      | $^{\circ}C/W$ |
| Operating junction and storage temperature range                                                       | $T_J, T_{STG}$  | -55 to +150 |     |     |     |     |     |      | $^{\circ}C$   |

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

2. P.C.B. mounted with 2.0"x2.0" (5.0x5.0cm) copper pad areas

## Ratings And Characteristic Curves

Fig.1 Forward Current Derating Curve

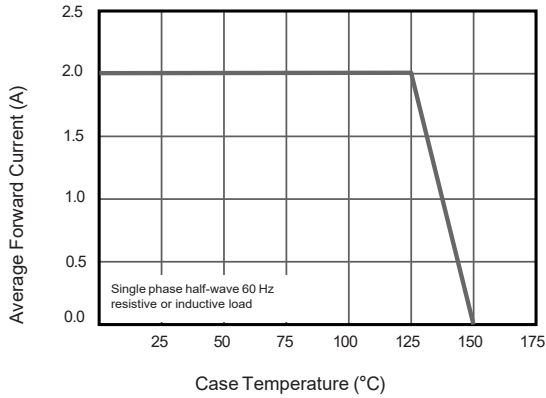


Fig.2 Typical Reverse Characteristics

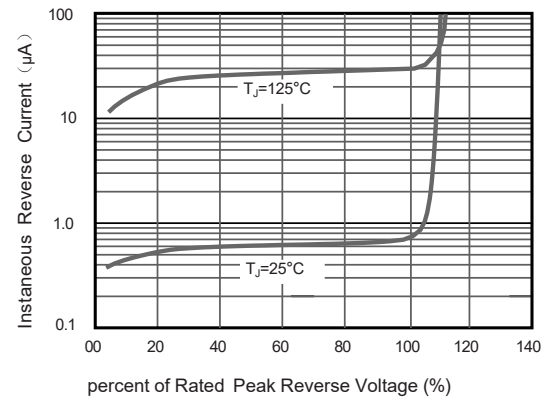


Fig.3 Typical Forward Characteristic

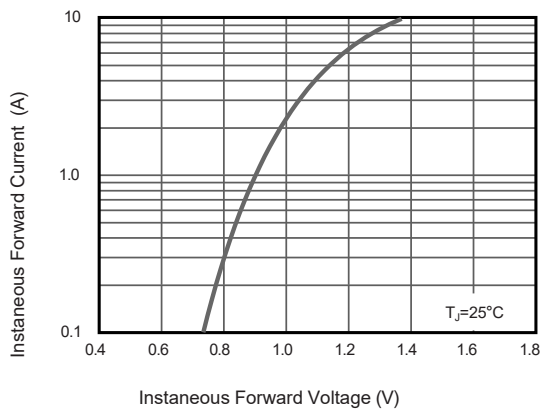


Fig.4 Typical Junction Capacitance

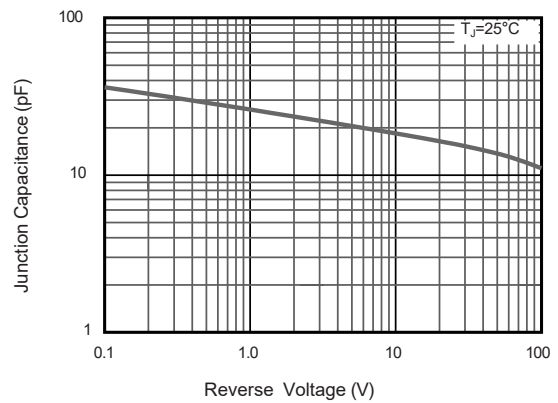
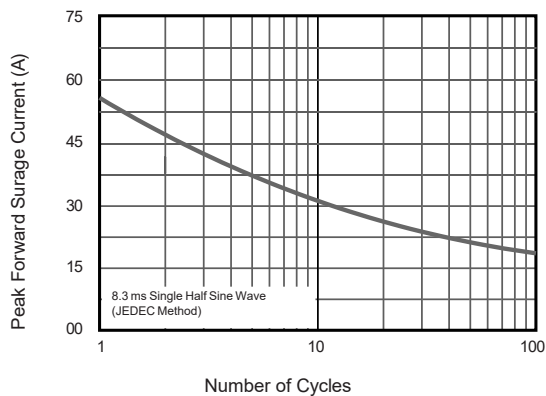


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



The curve above is for reference only.