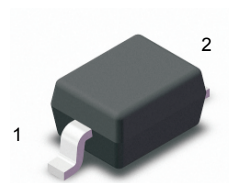


Surface Mount General Purpose Silicon Rectifiers

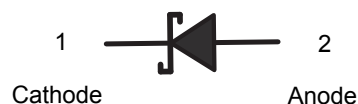
FEATURES

- 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

SOD-323



CIRCUIT DIAGRAM



MECHANICAL DATA

- Case: SOD-323
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx.Weight: 5.48mg / 0.00019oz

MARKING

| Type number | Marking code |
|-------------|--------------|
| S08JWS | 08J |

Maximum Ratings and Electrical characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

| Parameter | Symbols | S08JWS | Units |
|--|-----------------|------------|----------------------|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 600 | V |
| Maximum RMS voltage | V_{RMS} | 420 | V |
| Maximum DC Blocking Voltage | V_{DC} | 600 | V |
| Maximum Average Forward Rectified Current at $T_c = 125\text{ °C}$ | $I_{F(AV)}$ | 1 | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load | I_{FSM} | 7.5 | A |
| Maximum Instantaneous Forward Voltage at 1 A | V_F | 1.1 | V |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 5 50 | μA |
| Typical Thermal Resistance ⁽¹⁾ | $R_{\theta JA}$ | 357 | $^{\circ}\text{C/W}$ |
| Operating and Storage Temperature Range | T_j, T_{stg} | -55 ~ +150 | $^{\circ}\text{C}$ |

(1) P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

TYPICAL CHARACTERISTICS

Fig.1 Forward Current Derating Curve

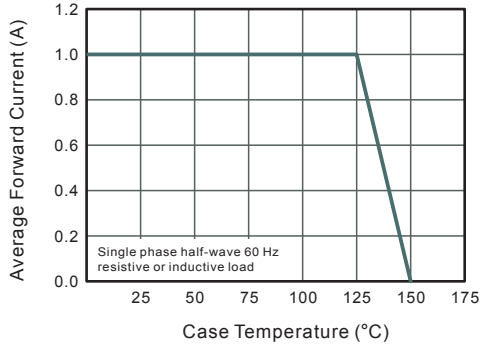


Fig.2 Typical Instantaneous Reverse Characteristics

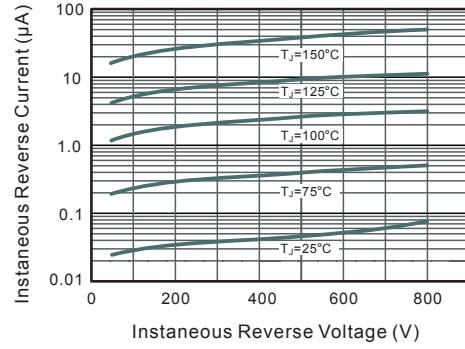


Fig.3 Typical Forward Characteristic

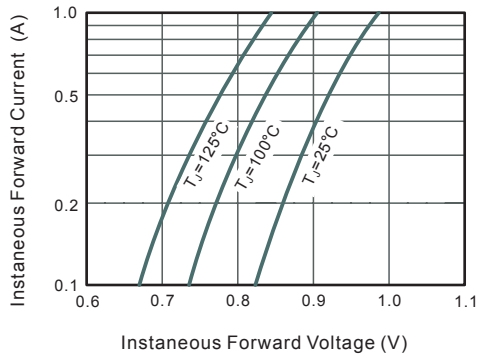


Fig.4 Typical Junction Capacitance

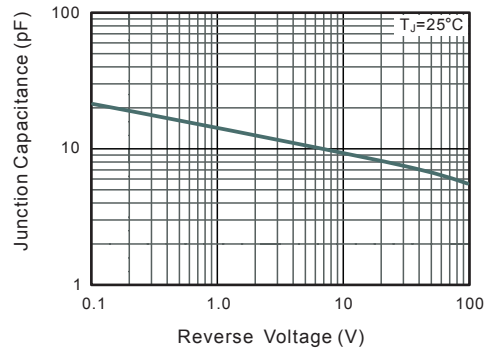
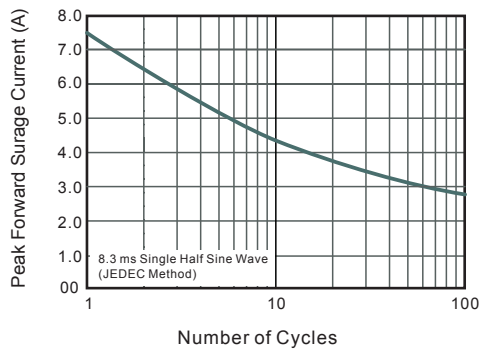
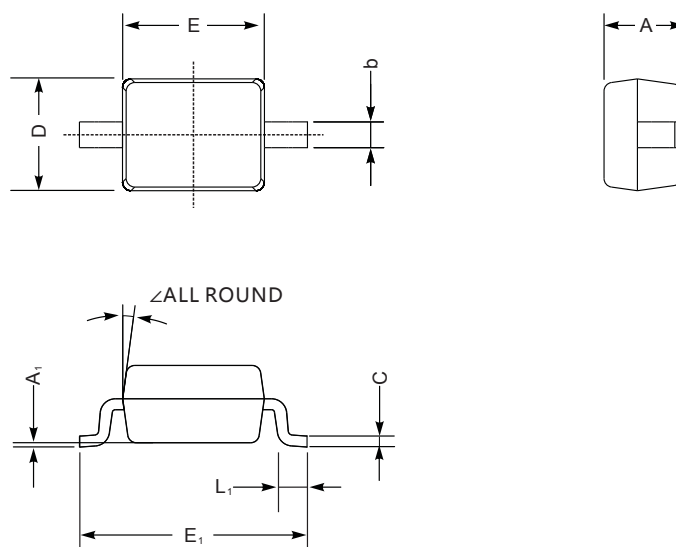


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



SOD-323 PACKAGE OUTLINE DRAWING



| SYM | MILLIMETERS | | INCHES | |
|----------|-------------|------|--------|--------|
| | MIN | MAX | MIN | MAX |
| A | 0.80 | 1.10 | 0.032 | 0.043 |
| C | 0.08 | 0.15 | 0.0031 | 0.0059 |
| D | 1.20 | 1.40 | 0.047 | 0.055 |
| E | 1.40 | 1.80 | 0.063 | 0.070 |
| E_1 | 2.55 | 2.75 | 0.100 | 0.108 |
| b | 0.25 | 0.40 | 0.0098 | 0.016 |
| L_1 | 0.20 | 0.45 | 0.0079 | 0.016 |
| A_1 | --- | 0.20 | --- | 0.008 |
| \angle | 9° | | 9° | |