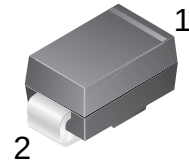


S1A-S1M

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

DO-214AC (SMA)



1. Cathode 2. Anode

Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	S1A	S1B	S1D	S1G	S1J	S1K	S1M	Units
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	$I_{F(AV)}$	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1 A	V_F	1.1							V
Maximum DC Reverse Current $T_a = 25\text{ }^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_a = 125\text{ }^{\circ}\text{C}$	I_R	5 50							μA
Typical Junction Capacitance ⁽¹⁾	C_j	15							pF
Typical Thermal Resistance ⁽²⁾	$R_{\theta JA}$	75							$^{\circ}\text{C/W}$
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 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Typical Characteristics

Fig.1 Forward Current Derating Curve

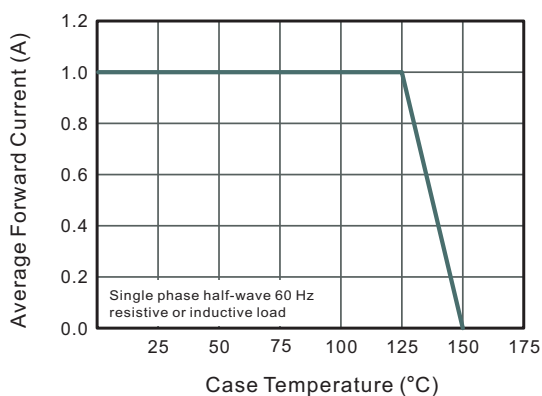


Fig.2 Typical Reverse Characteristics

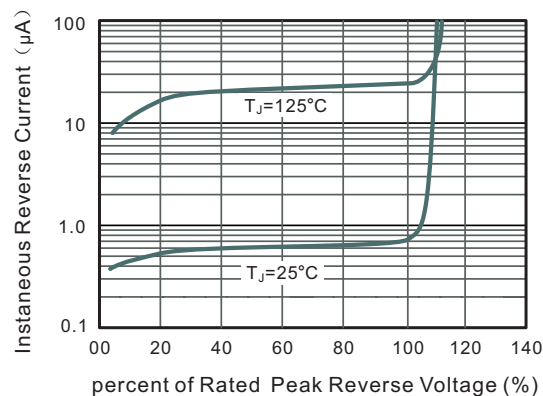


Fig.3 Typical Forward Characteristic

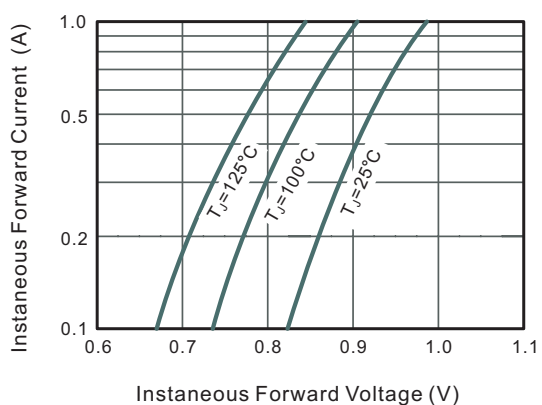


Fig.4 Typical Junction Capacitance

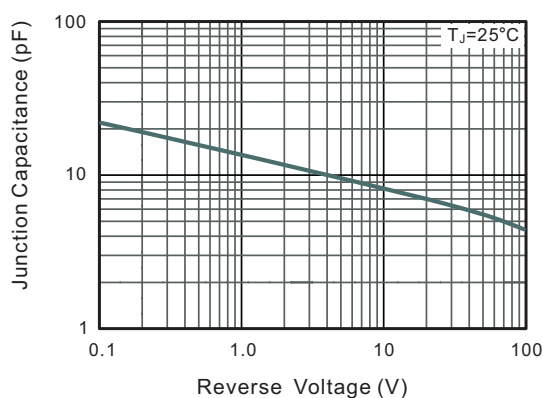
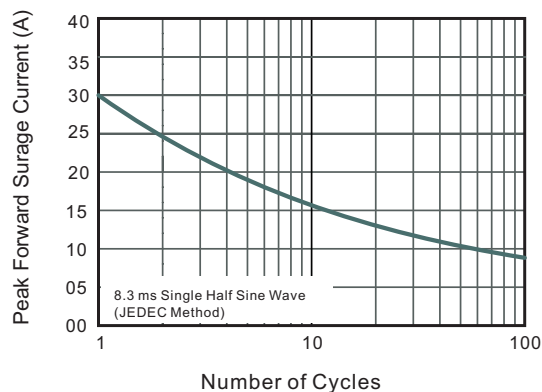
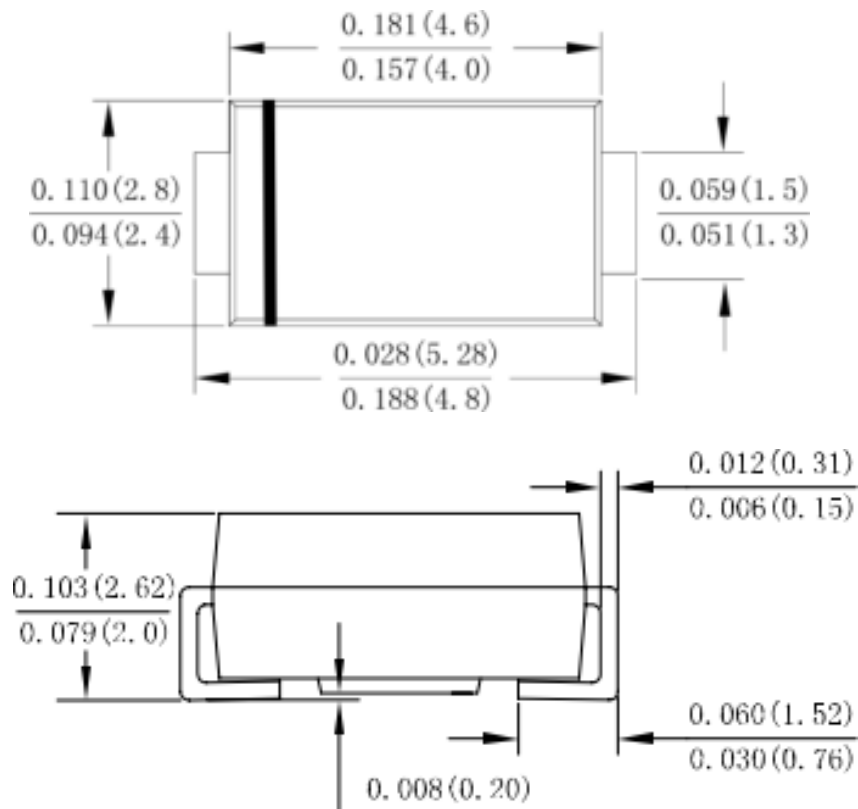


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



**Package Dimension****SMA**

Unit: mm

**Dimensions in inches and (millimeters)**