

Features

- For surface mounted applications
- Metal silicon junction, majority carrier conduction
- Low power loss, high efficiency
- Built-in strain relief, ideal for automated placement
- High forward surge current capability
- High temperature soldering guaranteed:
250 °C/10 seconds at terminals
- The plastic package carries Underwriters Laboratory
Flammability Classification 94V-0
- Meet IEC 61000-4-2 6kV contact.



RoHS
COMPLIANT



SMA (DO-214AC)

Mechanical Data

- **Case:** JEDEC DO-214AC molded plastic body
- **Terminals:** leads solderable per MIL-STD-750, Method 2026
- **Mounting Position:** Any
- **Polarity:** Color band denotes cathode end
- **Weight:** 0.005 ounce, 0.138 grams

Major Ratings and Characteristics

$I_{F(AV)}$	3.0 A
V_{RRM}	20 V to 100 V
I_{FSM}	100 A
V_F	0.55V, 0.70V, 0.85V
$T_j \text{ max.}$	125 °C

Maximum Ratings & Thermal Characteristics

($T_A = 25\text{ °C}$ unless otherwise noted)

Items	Symbol	SS32E	SS33E	SS34E	SS35E	SS36E	SS38E	SS310E	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum average forward rectified current	$I_{F(AV)}$	3							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	100							A
Thermal resistance from junction to ambient ⁽¹⁾	$R_{\theta JA}$	55							°C/W
Operating junction temperature range	T_J	-65 to +125							°C
Storage temperature range	T_{STG}	-65 to +125							°C

Note 1: Mounted on P.C.B. with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas.

Electrical Characteristics ($T_A = 25\text{ °C}$ unless otherwise noted)

Items	Test conditions		Symbol	SS32E~ SS34E	SS35E~ SS36E	SS38E~ SS310E	UNIT
Maximum Instantaneous forward voltage	$I_F=3.0A^{(2)}$		V_F	0.55	0.70	0.85	V
Maximum reverse current	$V_R=V_{DC}$	$T_A=25^{\circ}C$	I_R	0.5			mA
		$T_A=100^{\circ}C$		20	10		
Typical junction capacitance	4.0 V ,1MHz		C_J	500	300		pF

Note 2: Pulse test:300μs pulse width,1% duty cycle.

Characteristic Curves ($T_A=25\text{ }^{\circ}\text{C}$ unless otherwise noted)

Fig.1 Forward Current Derating Curve

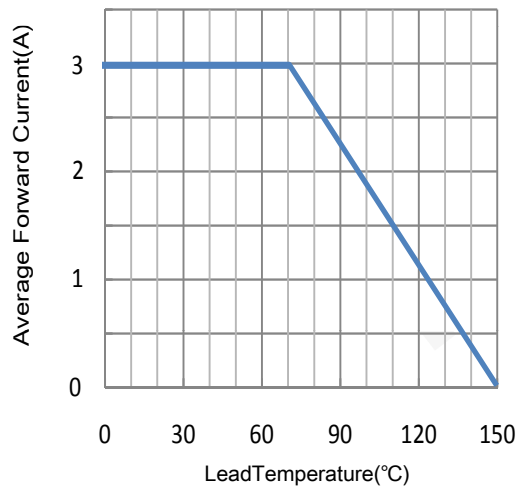


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

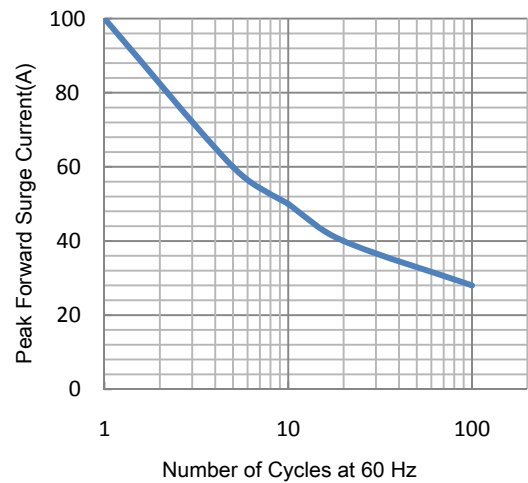


Fig.3 Typical Instantaneous Forward Characteristics

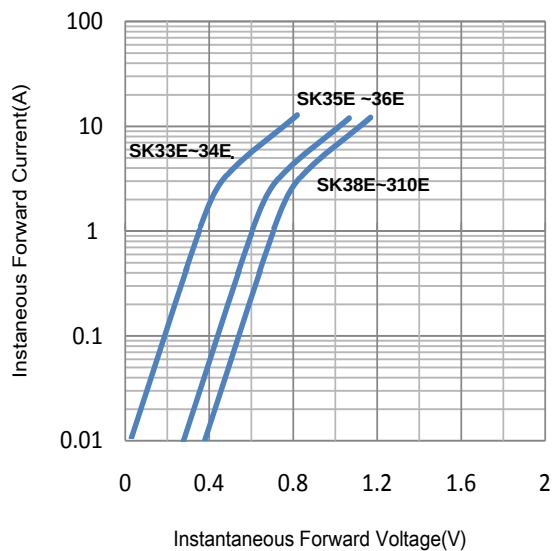
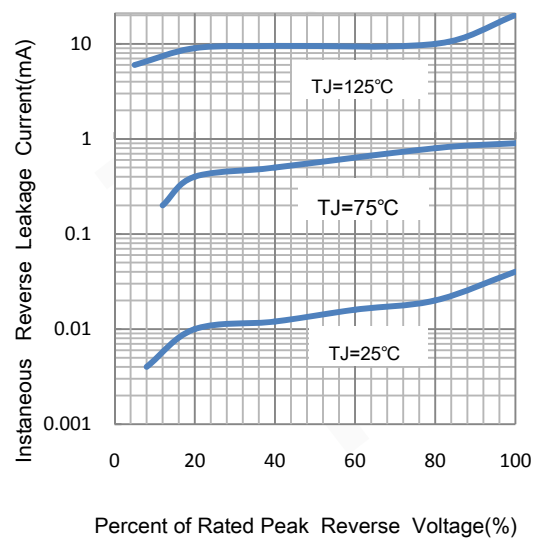
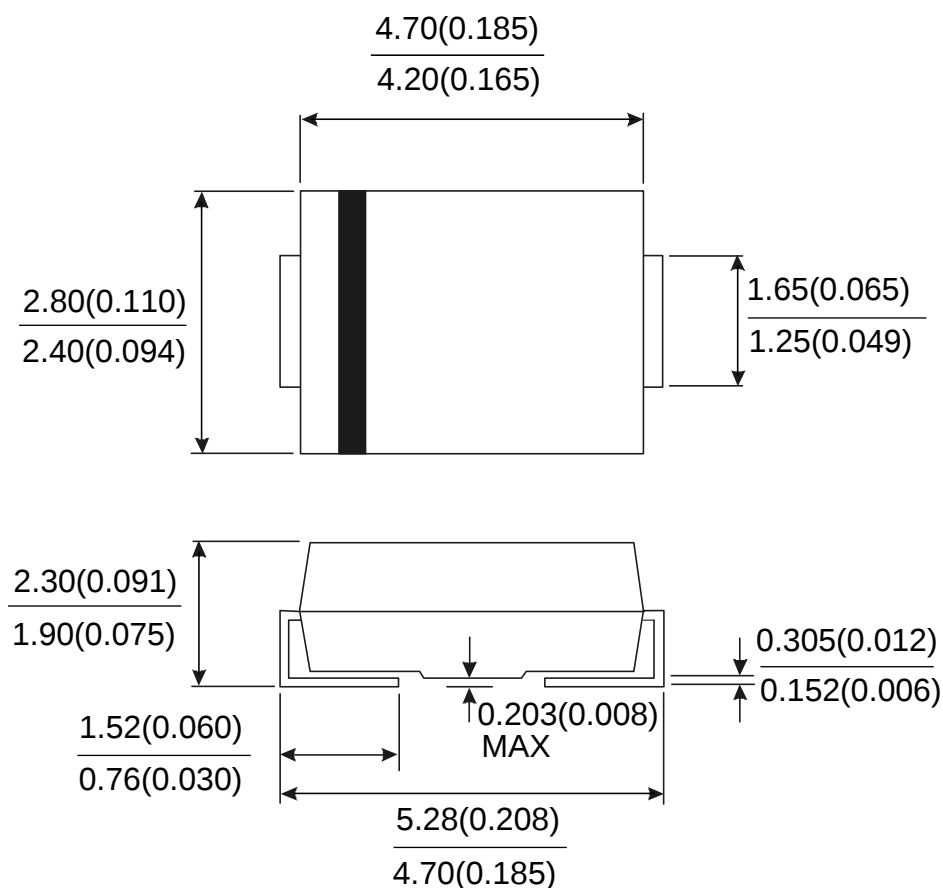


Fig.4 Typical Reverse Leakage Characteristics



Package Outline

SMA



- TRR is registered trademark of Zhejiang TRR Microelectronics Inc.. Zhejiang TRR Microelectronics Inc. reserves the right to make changes to any product in this specification without notice.
- Zhejiang TRR Microelectronics Inc. does not assure any liability arising out of the applications or use of any product described in this specification.
- Zhejiang TRR Microelectronics Inc. advises customers to obtain the latest version of the device information before placing orders to verify that the required information is current.