

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

20V-100V 2.0A

**FEATURES**

- Ideal for automated placement
- Guardring for overvoltage protection
- Low power losses, high efficiency
- Low forward voltage drop
- High surge capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C
- Solder dip 260 °C, 40 s
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC

**MECHANICAL DATA**
**Case:** DO-214AC (SMA)

Epoxy meets UL 94V-0 flammability rating

**Terminals:** Matte tin plated leads, solderable per J-STD-002 and JESD22-B102

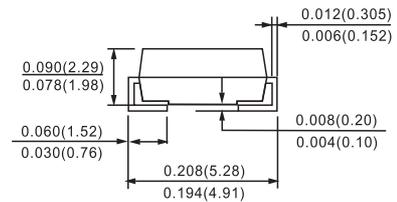
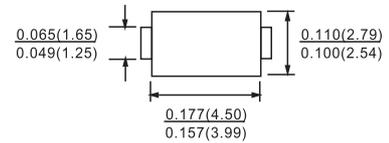
E3 suffix for consumer grade, meets JESD 201 class

1A whisker test, HE3 suffix for high reliability grade

(AEC Q101 qualified), meets JESD 201 class 2 whisker test

**Polarity:** Color band denotes cathode end

DO-214AC(SMA)



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified

		SS22	SS23	SS24	SS25	SS26	SS28	SS29	SS210	UNITS
		SS22	SS23	SS24	SS25	SS26	SS28	SS29	SS210	
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	90	100	V
Maximum RMS voltage	$V_{RWS}$	14	21	28	35	42	56	63	70	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	90	100	V
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	2.0								A
Peak forward surge current 8.3ms single half-sine-wave	$I_{FSM}$	75								A
Maximum instantaneous forward voltage at $I_{FM}=2.0\text{A}$ (NOTE1)	$V_F$	0.50			0.75		0.85			V
Maximum DC reverse current $T_J=25^\circ\text{C}$ at rated DC blocking voltage $T_J=125^\circ\text{C}$	$I_R$	0.4			0.03			m A		
Maximum thermal resistance	$R_{\theta JL}$	28								°C/W
Operating temperature range	$T_J$	-55 ---- +125								°C
Storage temperature range	$T_{STG}$	-55 ---- +150								°C

## RATINGS AND CHARACTERISTIC CURVES SS22 THRU SS210

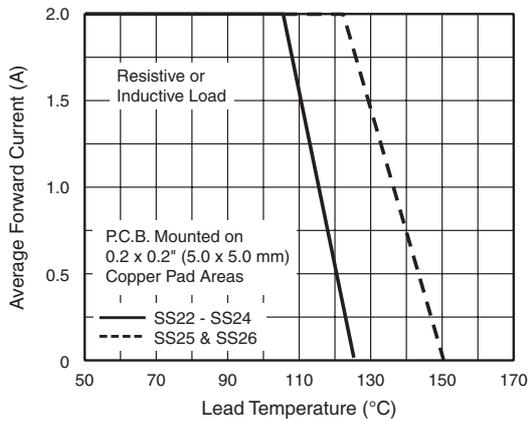


Figure 1. Forward Current Derating Curve

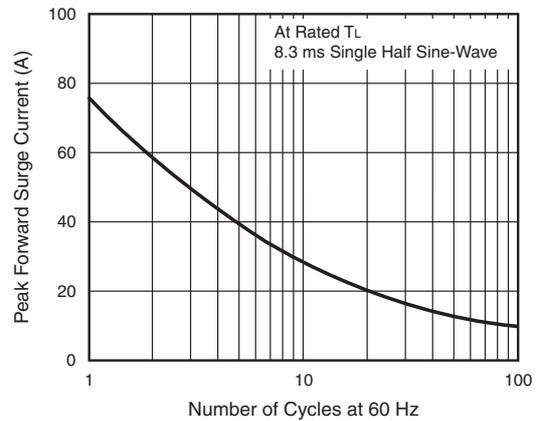


Figure 2. Maximum Non-Repetitive Surge Current

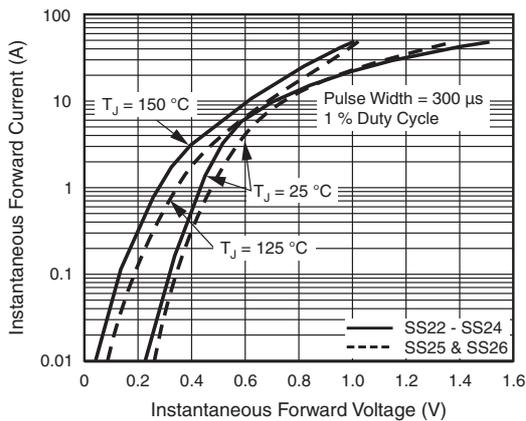


Figure 3. Typical Instantaneous Forward Characteristics

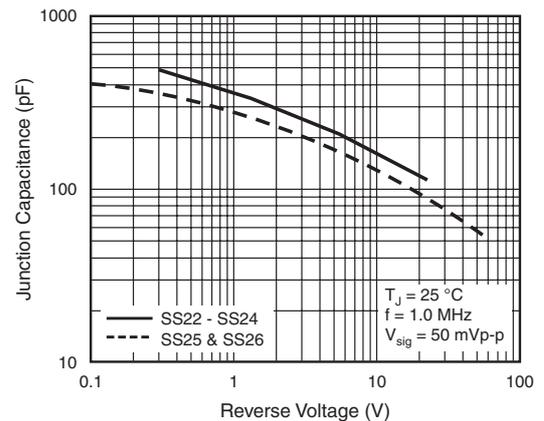


Figure 5. Typical Junction Capacitance

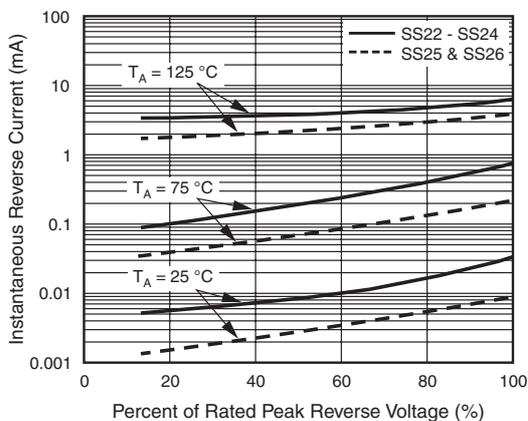


Figure 4. Typical Reverse Current Characteristics