

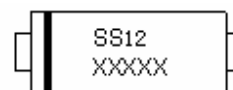
## SS12 THRU SS110 SCHOTTKY RECTIFIER

### Features:

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- 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
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

### Mechanical Data:

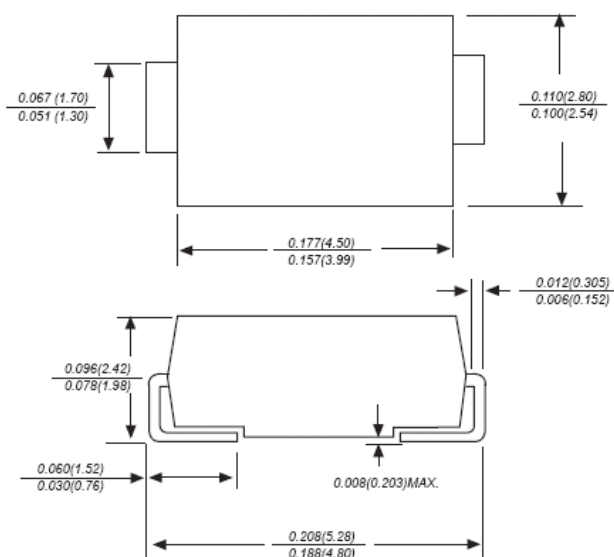
- Case: JEDEC SMA molded plastic body
- Terminals: leads solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.003 ounce, 0.093 grams
- Mounting Position: Any



SS12

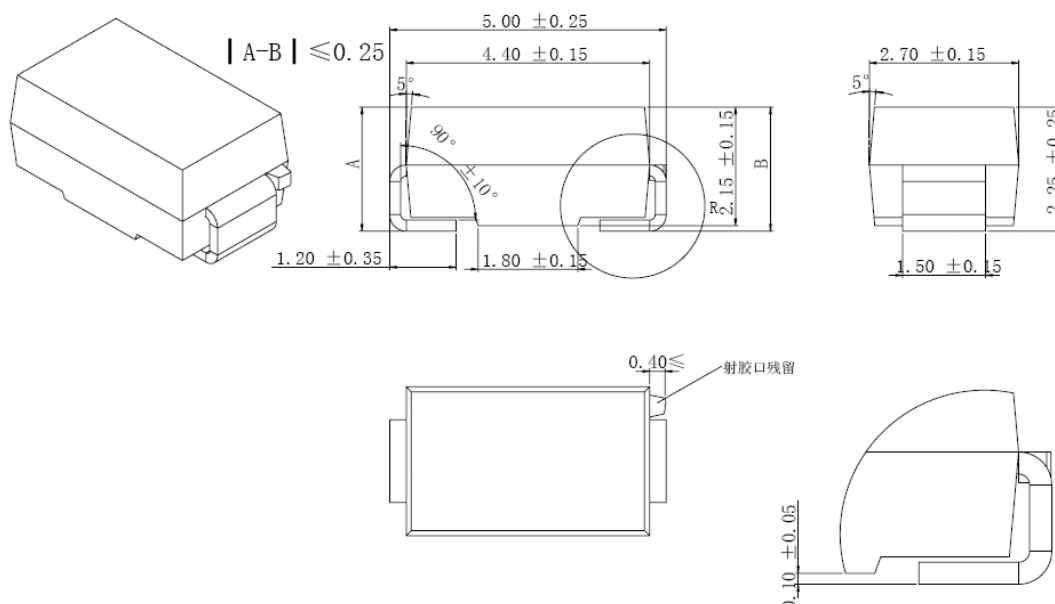
### Mechanical Dimensions (In mm / Inches)

#### DO-214AC/SMA



Dimensions in inches and (millimeters)

#### OPTION 1



## OPTION 2(JK)

## SMA

### MARKING, MOLDING RESIN

Marking for SS12/13/14/15/16/18/110, 1<sup>st</sup> row SS12/13/14/15/16/18/110, 2<sup>nd</sup> row YYWWL

Where YY is the manufacture year

WW is the manufacture week code

L is the wafer's Lot Number



## Ordering Information:

Device	Package	Shipping
SS12 THRU SS110	SMA (Pb-Free)	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

## 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%.

	SYMBOLS	SS12	SS13	SS14	SS15	SS16	SS18	SS110	UNITS
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	VOLTS
Maximum RMS voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	VOLTS
Maximum DC blocking voltage	V <sub>DC</sub>	20	30	40	50	60	80	100	VOLTS
Maximum average forward rectified current at T <sub>L</sub> (see fig.1)	I <sub>(AV)</sub>	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30.0							Amps
Maximum instantaneous forward voltage at 1.0A	V <sub>F</sub>	0.45	0.55		0.70		0.85		Volts
Maximum DC reverse current    T <sub>A</sub> =25 C at rated DC blocking voltage    T <sub>A</sub> =100 C	I <sub>R</sub>	0.5						mA	
		10.0				5.0			
Typical junction capacitance (NOTE 1)	C <sub>J</sub>	110			90			pF	
Typical thermal resistance (NOTE 2)	R <sub>θJA</sub>	88.0							C/W
Operating junction temperature range	T <sub>J</sub>	-65 to +125					-65 to +150		C
Storage temperature range	T <sub>STG</sub>	-65 to +150							C

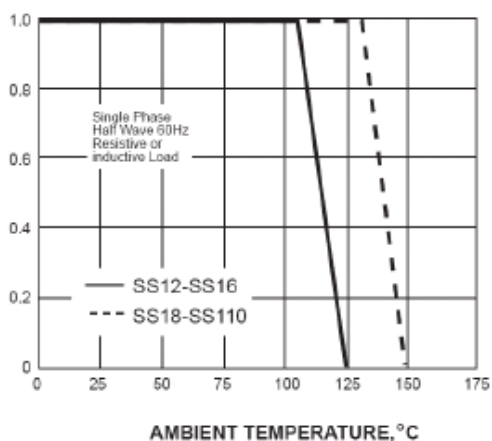
**Note:** 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas



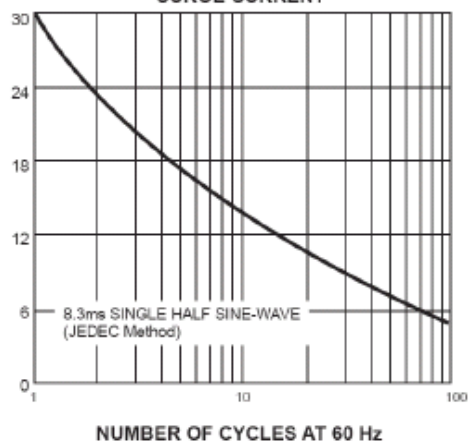
AVERAGE FORWARD RECTIFIED CURRENT,  
AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



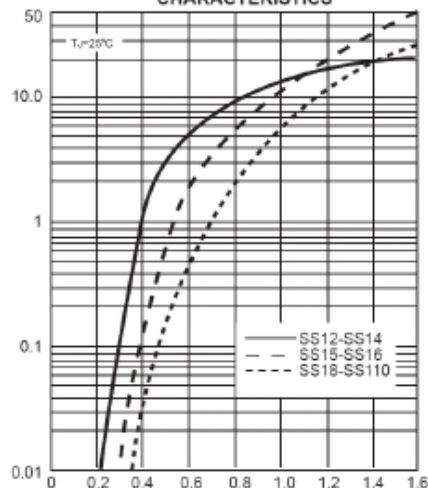
PEAK FORWARD SURGE CURRENT,  
AMPERES

FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



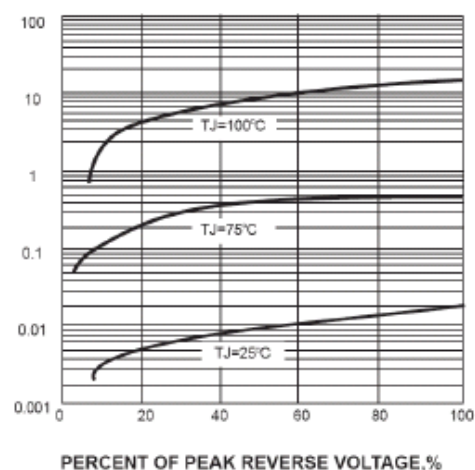
INSTANTANEOUS FORWARD  
CURRENT,AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



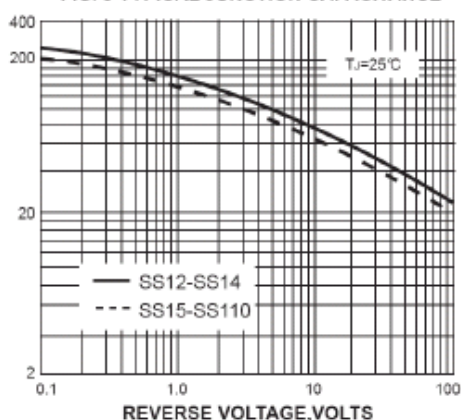
INSTANTANEOUS REVERSE CURRENT,  
MILLIAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



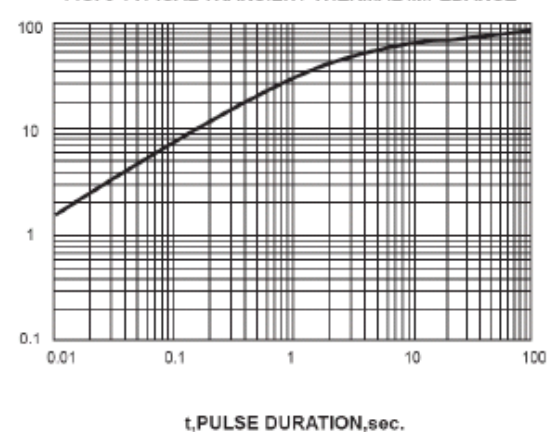
JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE  
°C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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