

# SS12-SS110

Surface Mount Schottky Barrier Rectifiers

**REVERSE VOLTAGE: 20 - 100 V**

**FORWARD CURRENT: 1.0 A**



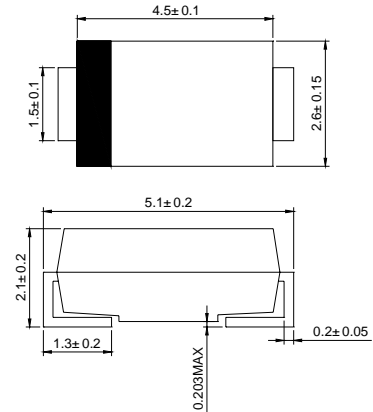
**(DO-214AC)SMA**

## Features

- ◇ Schottky barrier rectifier
- ◇ Guardring protection
- ◇ Low forward voltage
- ◇ Reverse energy tested
- ◇ High current capability
- ◇ Extremely low thermal resistance

## Mechanical Data

- ◇ Case: SMA molded plastic body
- ◇ Polarity: Color band denotes cathode end
- ◇ Mounting position: ANY
- ◇ Weight: 0.002 ounces, 0.064 gram



Dimensions in millimeters

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

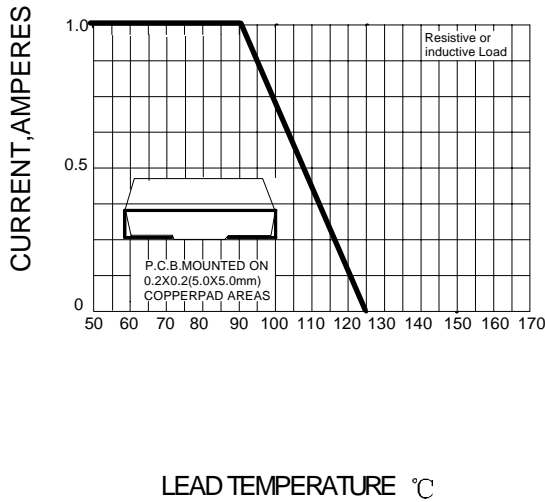
Ratings at 25°C ambient temperature unless otherwise specified

Device marking code		SS12	SS13	SS14	SS15	SS16	SS18	SS19	SS110	UNITS	
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 $T_L=90^\circ\text{C}$	$I_{F(AV)}$	1.0								A	
Peak forward surge current 8.3ms single half-sine-wave	$I_{FSM}$	40								A	
Maximum instantaneous forward voltage at $I_{FM}=1.0\text{A}$ (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 $T_J=125^\circ\text{C}$	$I_R$	0.2					0.5				m A
		6.0			5.0						
Maximum thermal resistance	$R_{\theta JL}$	28								$^\circ\text{C/W}$	
Operating temperature range	$T_J$	-55 ---- +125								$^\circ\text{C}$	
Storage temperature range	$T_{STG}$	-55 ---- +150								$^\circ\text{C}$	

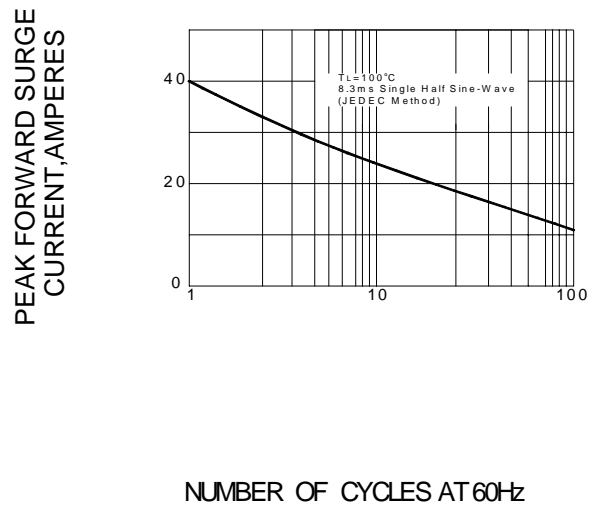
NOTE: 1.Pulse test: Pulse width 300us,duty cycle 1 %

### Ratings AND Characteristic Curves

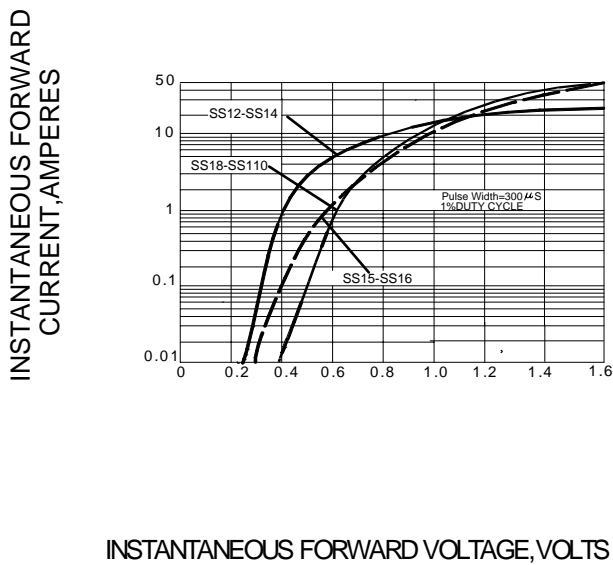
**FIG.1 – FORWARD DERATING CURVE**



**FIG.2– PEAK FORWARD SURGE CURRENT**



**FIG.3 – TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**

