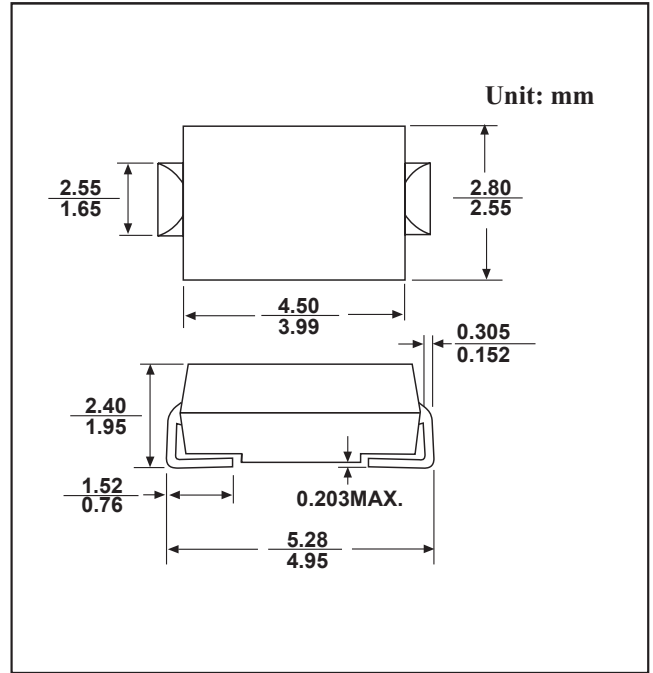


**SMA PLASTIC SILICON RECTIFIERS**
**FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing
- 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:260 °C/10 seconds at terminals
- Component in accordance to RoHS 2015/863 and WEEE 2012/19/EU

**MECHANICAL DATA**

- Case: SMA molded plastic body
- Polarity:Color band denotes cathode end
- Mounting Position:Any


**MAXIMUM RATINGS AND CHARACTERISTICS**

@ 25°C Ambient Temperature (unless otherwise noted)

TYPE NUMBER	SYMBOL	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS115	SS120	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward rectified Current 0.375"(9.5mm) lead length	$I_{F(AV)}$	1.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	30.0									A
Maximum instantaneous forward voltage at 1.0 A (Note 1)	$V_F$	0.45	0.55	0.70		0.85				V	
Maximum reverse current at rated DC blocking voltage per diode	@ $T_A=25^\circ C$	0.5									mA
	@ $T_A=100^\circ C$	6.0			5.0						
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	88.0									$^\circ C/W$
Typical junction capacitance (Note 3)	$C_j$	110			90						pF
Storage Temperature	$T_{STG}$	- 55 ---- + 150									$^\circ C$
Operation Junction Temperature	$T_j$	- 55 ---- + 125			-55 to +150						$^\circ C$

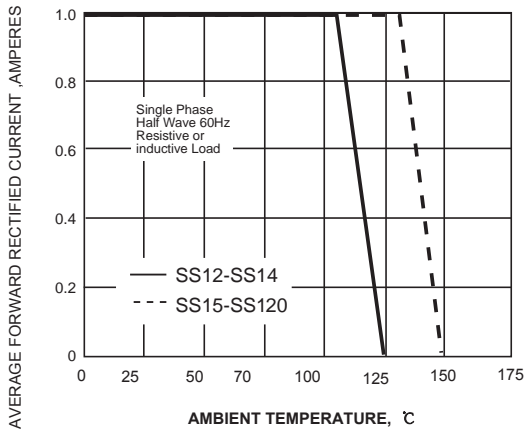
NOTE:

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

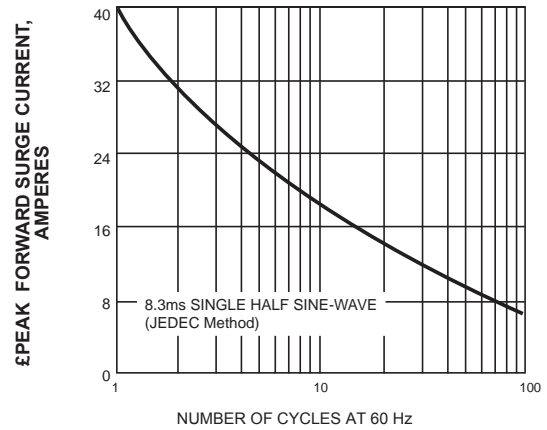
2. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

## RATINGS AND CHARACTERISTIC CURVES

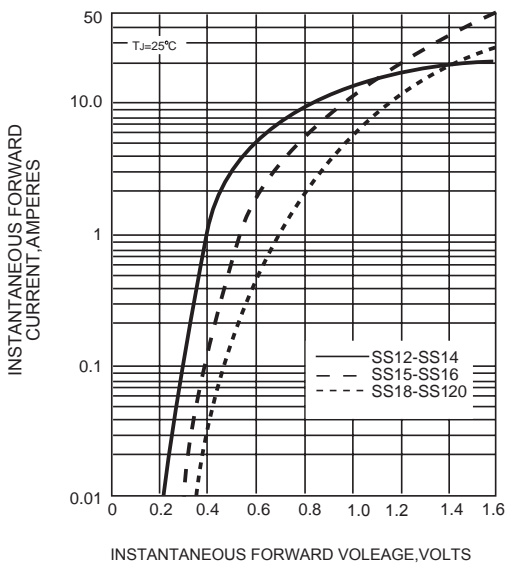
**FIG. 1- FORWARD CURRENT DERATING CURVE**



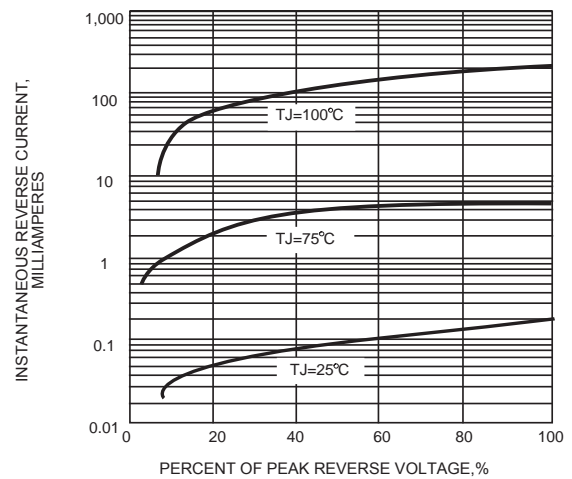
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



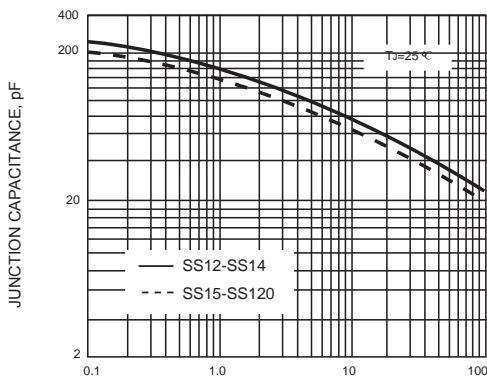
**FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4-TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5-TYPICAL JUNCTION CAPACITANCE**



**FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE**

