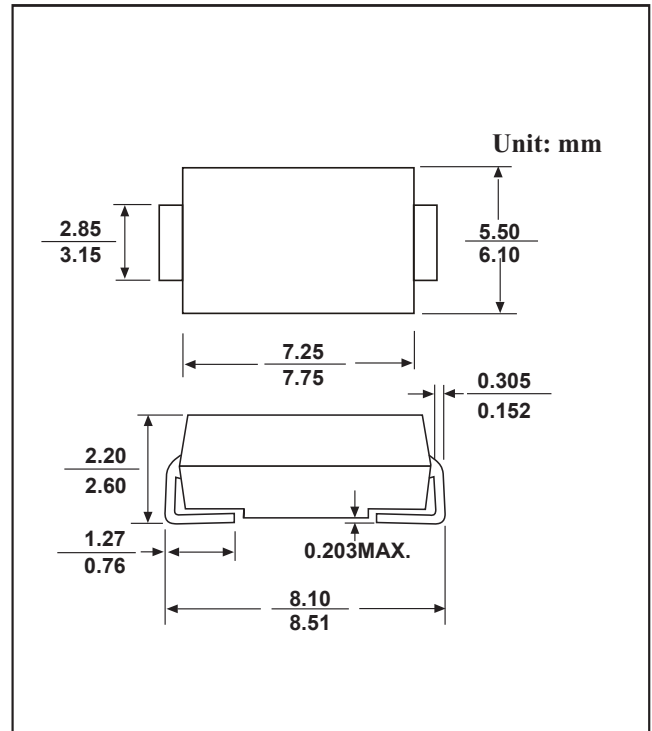


**SMC PLASTIC SILICON RECTIFIERS**
**FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O Utilizing
- Metal silicon junction ,majority carrier conduction
- Built-in strain relief
- For surface mounted applications
- Low power loss ,high efficiency,High surge capability
- High current capability ,Low forward voltage drop
- For use in low voltage ,high frequency inverters, free wheeling ,and polarity protection applications
- 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: SMC molded plastic body
- Terminals:Lead solderable per MIL-STD-750,method 2026
- Polarity:Color band denotes cathode end


**MAXIMUM RATINGS AND CHARACTERISTICS**

@ 25°C Ambient Temperature (unless otherwise noted)

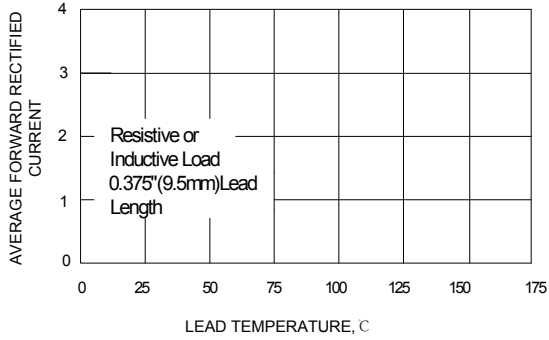
TYPE NUMBER		SYMBOL	SS32	SS33	SS34	SS35	SS36	SS38	SS310	SS315	SS320	UNITS
Maximum recurrent peak reverse voltage		$V_{RRM}$	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage		$V_{RMS}$	14	21	28	42	56	63	70	105	140	V
Maximum DC blocking voltage		$V_{DC}$	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward rectified Current 0.375"(9.5mm) lead length		$I_{F(AV)}$	3.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load		$I_{FSM}$	100.0									A
Maximum instantaneous forward voltage at 3.0 A(Note1)		$V_F$	0.50			0.75		0.85		0.90		V
Maximum reverse current at rated DC blocking voltage per diode	@ $T_A=25^\circ C$	$I_R$	0.5									mA
	@ $T_A=100^\circ C$		20.0			10.0						
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	17.0									°C/W
Storage Temperature		$T_{STG}$	- 55 ---- + 150									°C
Operation Junction Temperature		$T_j$	- 55 ---- + 125									°C

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

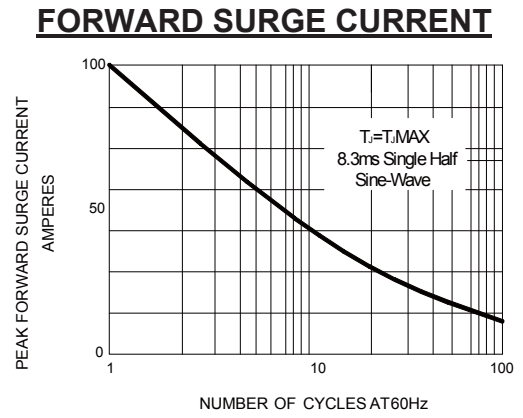
2. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

## 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**

