

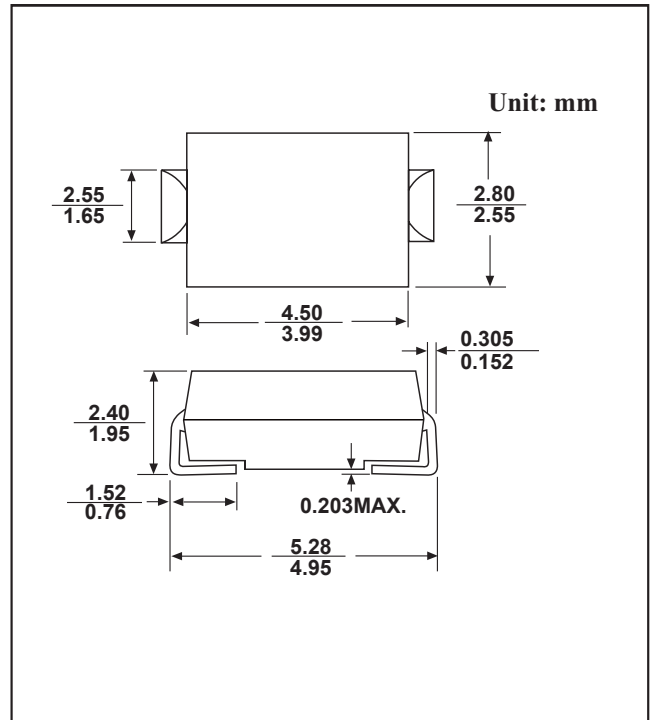
SMA PLASTIC SILICON RECTIFIERS
FEATURES

- 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: SMA 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)

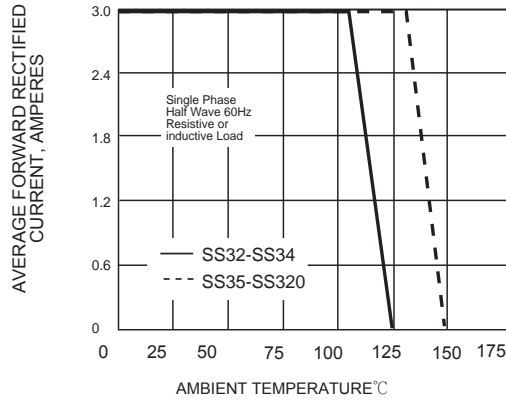
TYPE NUMBER	SYMBOL	SS32	SS33	SS34	SS35	SS36	SS38	SS310	SS315	SS320	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward rectified Current 0.375"(9.5mm) lead length	$I_{F(AV)}$	3.0									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	75.0									A
Maximum instantaneous forward voltage at 3.0 A(Note1)	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
	@ $T_A=100^\circ C$	20.0			10.0						
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	17.0									°C/W
Typical junction capacitance (NOTE 1)	C_J	500			300						PF
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**



FORWARD SURGE CURRENT

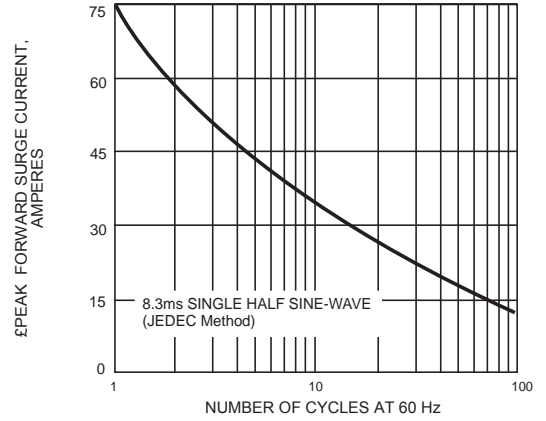


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

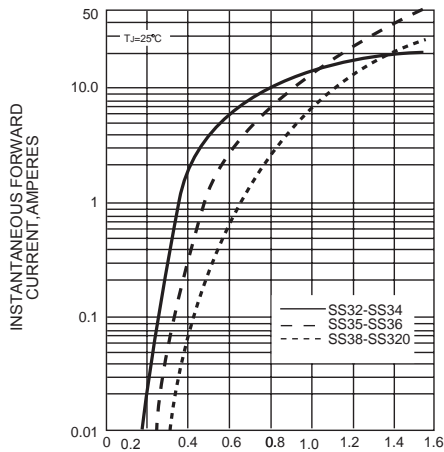


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

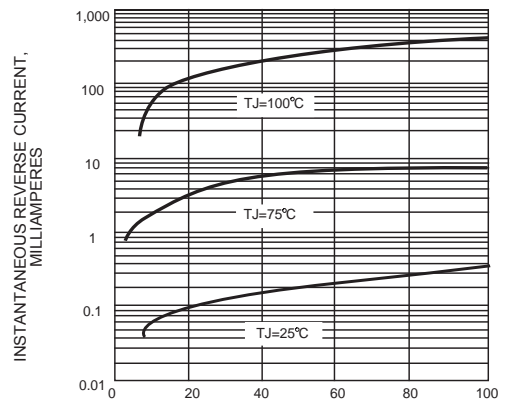


FIG. 5-TYPICAL JUNCTION CAPACITANCE

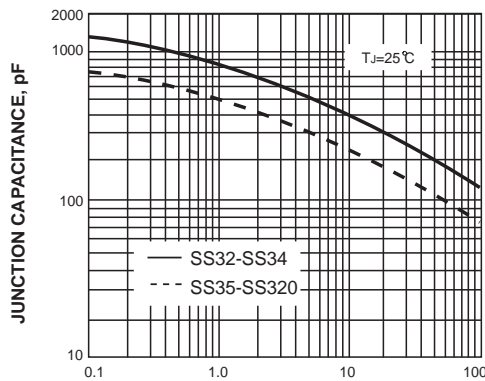


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

