

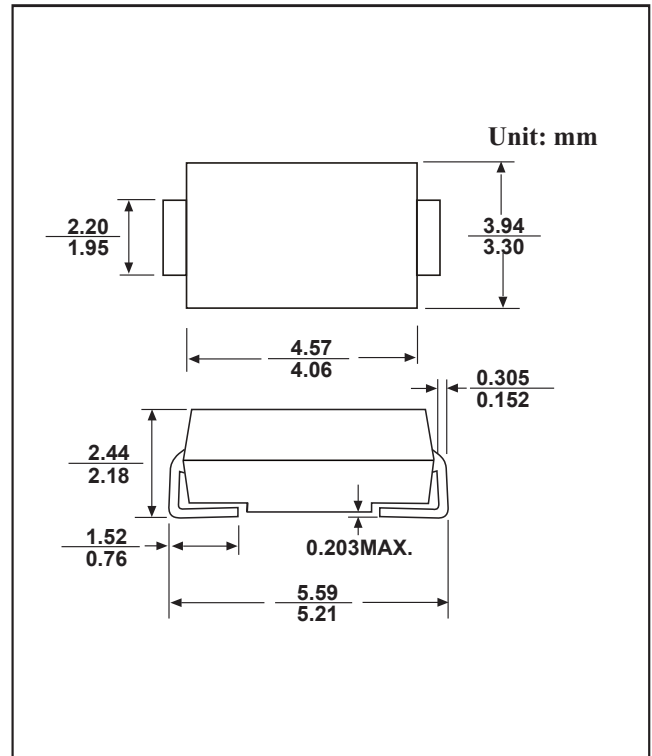
## SMB PLASTIC SILICON RECTIFIERS

### 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: SMB 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	SS39	SS310	SS320	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	100	200	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	63	70	140	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40		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	$I_{FSM}$	80.0									A
Maximum instantaneous forward voltage at 3.0 A (Note1)	$V_F$	0.55		0.70		0.85		0.95			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)	$R_{\theta JA}$	55.0									°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

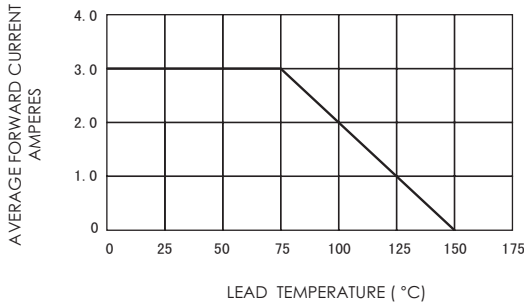


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

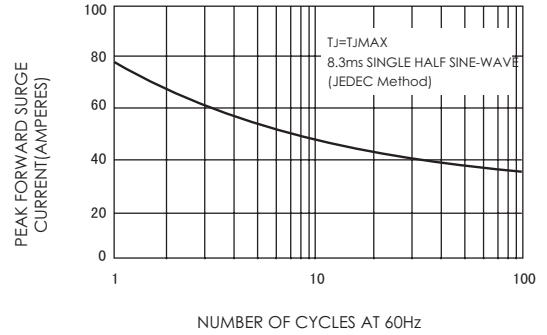


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

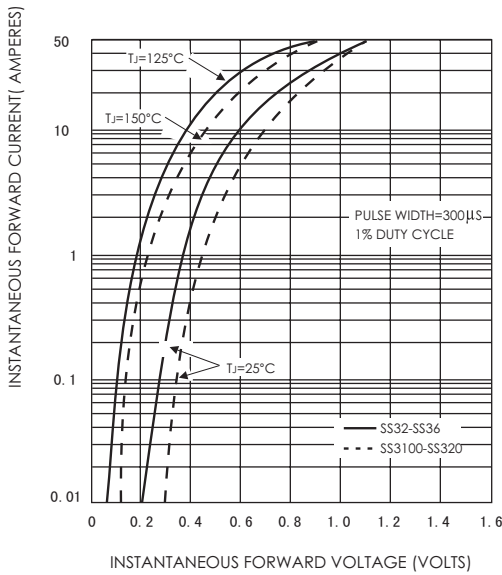


FIG.4-TYPICAL REVERSE CHARACTERISTICS

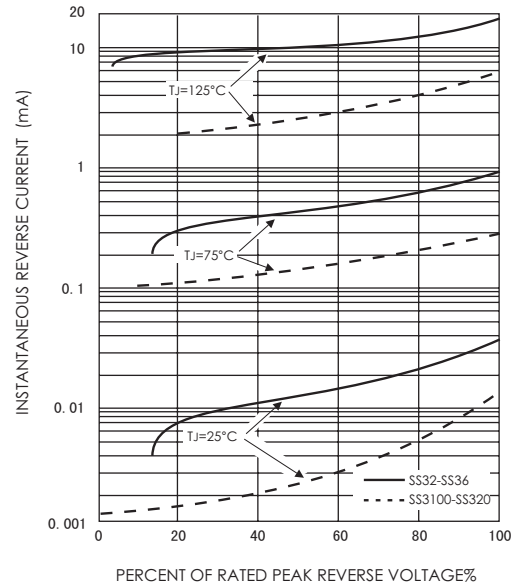


FIG.5-TYPICAL JUNCTION CAPACITANCE

