

## PLASTIC SILICON RECTIFIERS

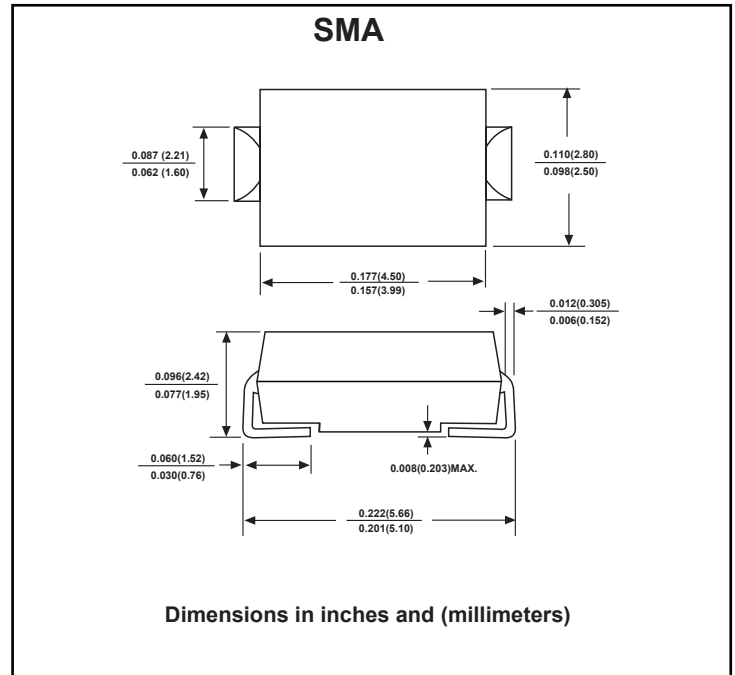
VOLTAGE RANGE: 50 --- 1000 V  
CURRENT: 1.0 A

### FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- For surface mounted applications
- Built-in strain relief,ideal for automated placement
- High temperature soldering guaranteed:260°C/10 seconds at Terminals
- Component in accordance to RoHs 2002/95/EC and WEEE 2002/96/EC

### MECHANICAL DATA

- Case:SMA molded plastic body
- Terminals:Lead solderable per MIL-STD-750,method 2026
- Polarity:Color band denotes cathode end
- Mounting Position:Any



### MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate by 20%.

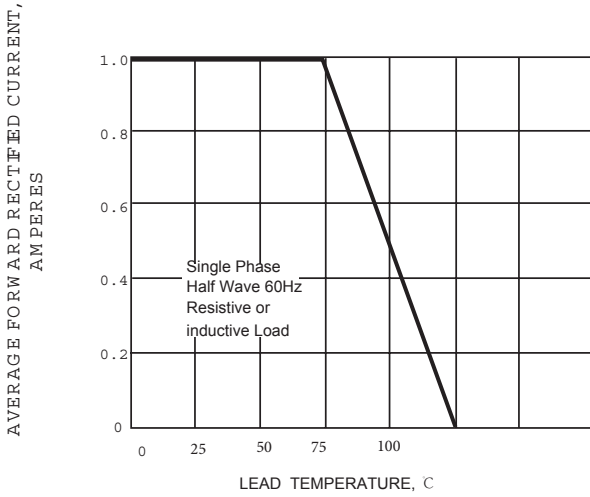
Characteristic	SYMBOLS	S1A	S1B	S1D	S1G	S1J	S1K	S1M	UNITS
Maximum recurrent peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum DC blocking voltage	$V_{DC}$								
Maximum RMS Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average rectified output current(Note 1)@TA=75°C	$I_{(AV)}$	1.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDECmethod)	$I_{FSM}$	30.0							A
Maximum instantaneous forward voltage at 1.0A	$V_F$	1.0							V
Maximum DC reverse current at rated DC blocking voltage	@TA=25	5.0							μA
	@TA=100	50.0							
Typical Junction Capacitance(Note 1)	$C_J$	15							pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	85							°C/W
Operating junction and storage temperature range	$T_j$	-65 to+175							°C

#### Note:

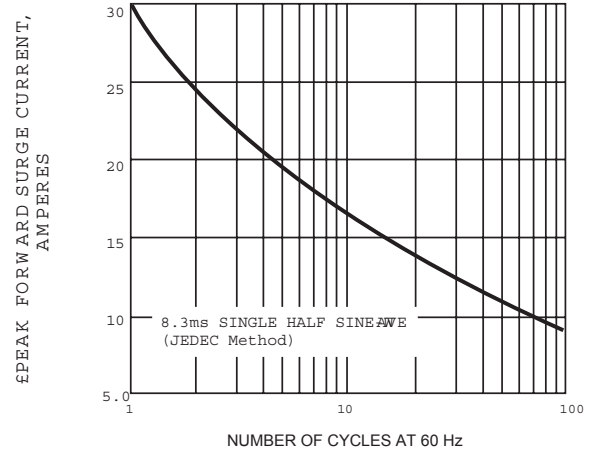
- 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- 2.Thermal resistance junction to ambient,P.C.B. mounted with 0.2x0.2”(5.0x5.0mm) copper pad areas

# RATINGS AND CHARACTERISTIC CURVES

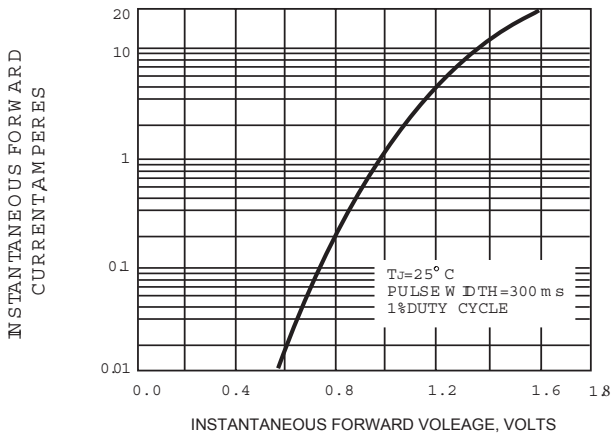
**FIG. 1- FORWARD CURRENT DERATING CURVE**



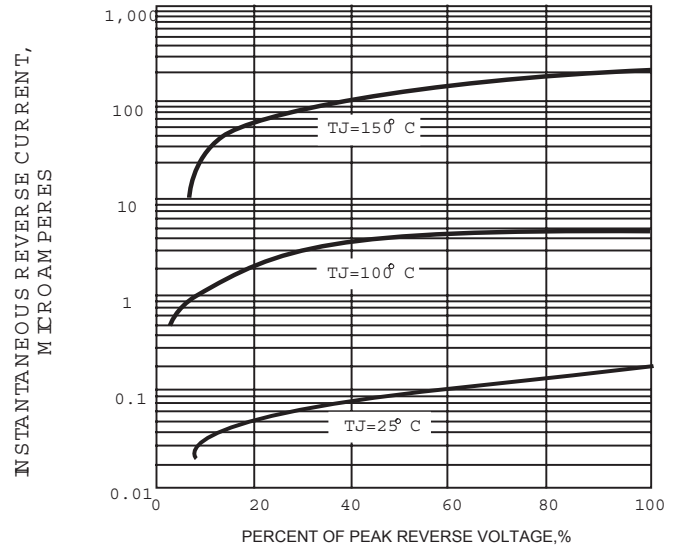
**FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



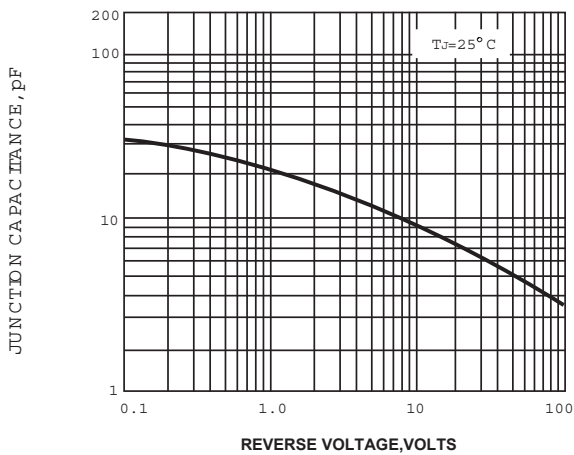
**FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG. 4-TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5-TYPICAL JUNCTION CAPACITANCE**



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

