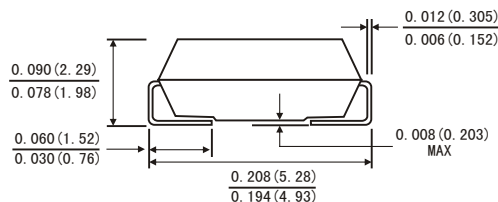
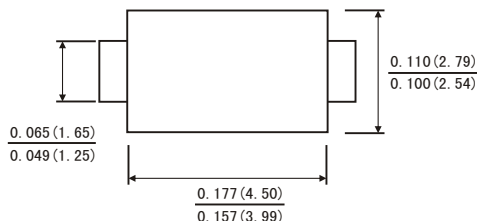


### FEATURES

- Plastic package has Underwriters 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 200/95/EC and WEEE 200/96/EC



### SMA(DO-214AC)



Dimensions in inches and (millimeters)

### MECHANICAL DATA

- Case: JEDEC DO-214AC molded plastic over glass passivated chip
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Polarity: Color band denotes cathode end
- Weight: 0.002 oz., 0.064 g

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified, Single phase, half wave 60Hz., resistive or inductive load. For capacitive load, derate by 20%.)

		Symbols	S1A	S1B	S1D	S1G	S1G	S1J	S1M	Units
Maximum Recurrent Peak Reverse Voltage		V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
Maximum average Forward Rectified Current 0.375"(9.5mm) lead length see Fig. 1		I <sub>(AV)</sub>	1.0						Amp	
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method) T <sub>A</sub> =75°C		I <sub>FSM</sub>	30.0						Amps	
Maximum Instantaneous Forward Voltage at 1.0 A		V <sub>F</sub>	1.1						Volts	
Maximum Reverse current at rated DC Blocking Voltage	T <sub>a</sub> = 25 °C	I <sub>R</sub>	5.0						μA	
	T <sub>a</sub> = 125 °C		50.0							
Typical Thermal resistance (Note 3)	R <sub>θJA</sub>	75						°C/W		
	R <sub>θJL</sub>	27								
Typical Junction Capacitance(Note 2)		C <sub>J</sub>	12						pF	
Operating and Storage temperature Range		T <sub>J</sub>	-55 to+150						°C	
		T <sub>STG</sub>	-55 to+150							

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V DC.

2. Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm) lead length, P.C.B. mounted

# RATINGS AND CHARACTERISTIC CURVES S1A THRU S1M

FIG.1-FORWARD CURRENT DERATING CURVE

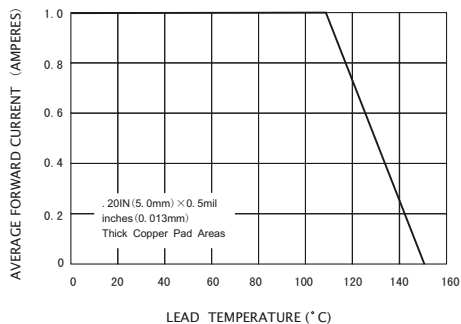


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

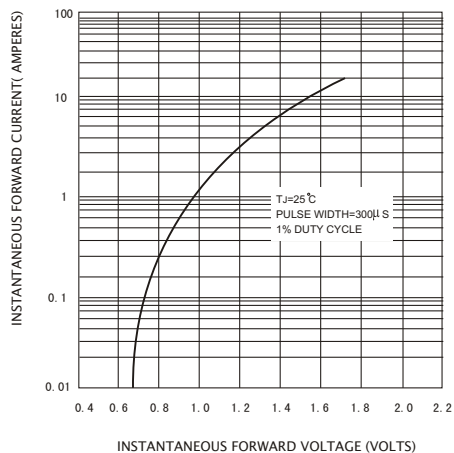


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

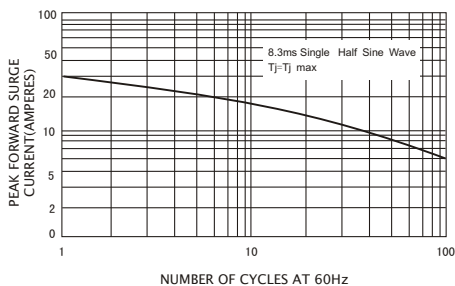


FIG.4-TYPICAL REVERSE CHARACTERISTICS

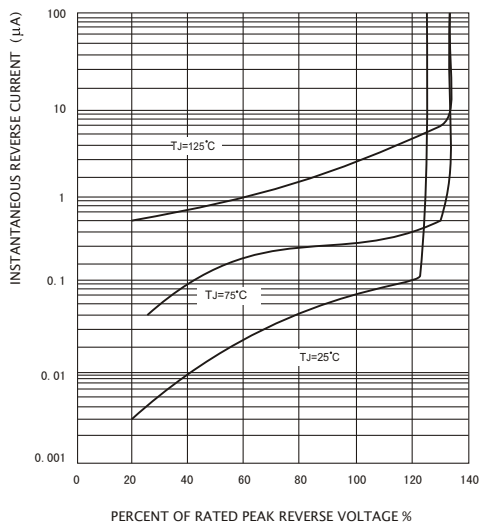


FIG.5-TYPICAL JUNCTION CAPACITANCE

