



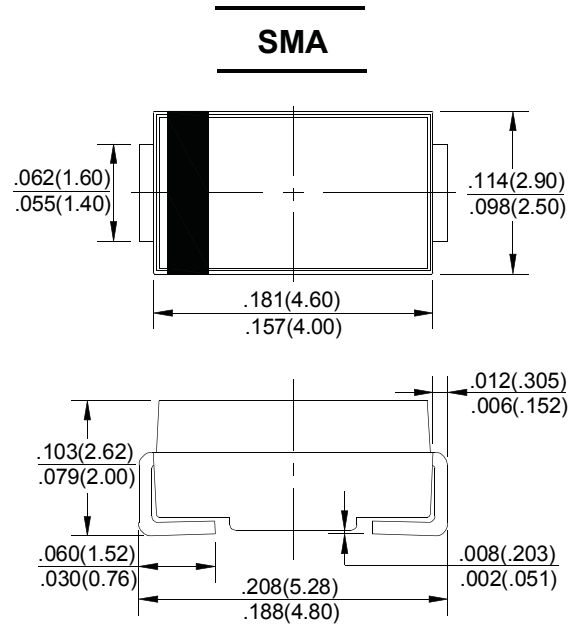
Glass/Silicon Passivated Rectifiers  
 Type PR - Series S1  
 Reverse Voltage - 50 to 1000 Volts  
 Forward Current - 1.0 Amperes

**△ Features**

- Glass/Silicon Passivated Chip
- For surface mounted applications
- Low forward voltage drop
- Low reverse leakage current
- High current capability
- The plastic material carries UL flammability classification 94V-0

**△ Mechanical Data**

- Case: Molded plastic
- Polarity: Indicated by cathode band
- Weight: 0.002 ounces , 0.064 grams
- Mounting position: Any



**△ Maximum Ratings and Electrical Characteristics**

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitance load, derate current by 20%

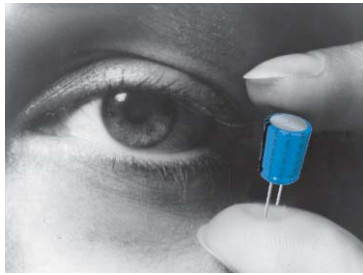
Dimensions in inches and (millimeters)

CHARACTERISTICS	SYMBOL	S1A	S1B	S1D	S1G	S1J	S1K	S1M	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>L</sub> =100 °C	I <sub>(AV)</sub>	1.0							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I <sub>FSM</sub>	30							A
Maximum Forward Voltage at 1.0A DC	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =100°C	I <sub>R</sub>	5.0							uA
		100							
Typical Junction Capacitance (Note1)	C <sub>J</sub>	10							pF
Typical Thermal Resistance (Note2)	R <sub>θJC</sub>	30							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150							°C

NOTES:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance junction to lead.

Surface Mount Diodes



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Δ Rating and Characteristics Curves

FIG. 1 - FORWARD CURRENT DERATING CURVE

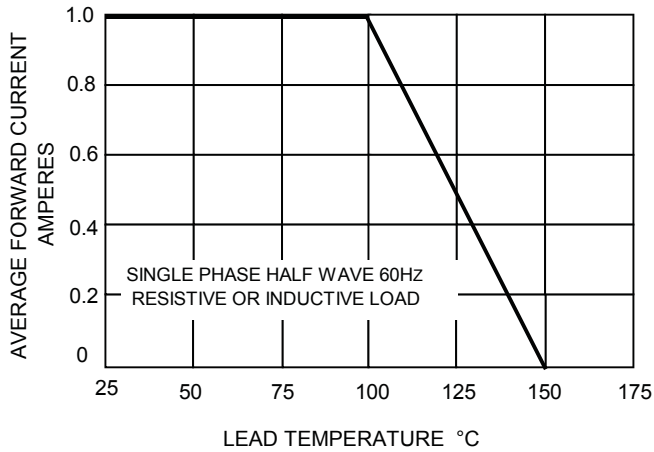


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

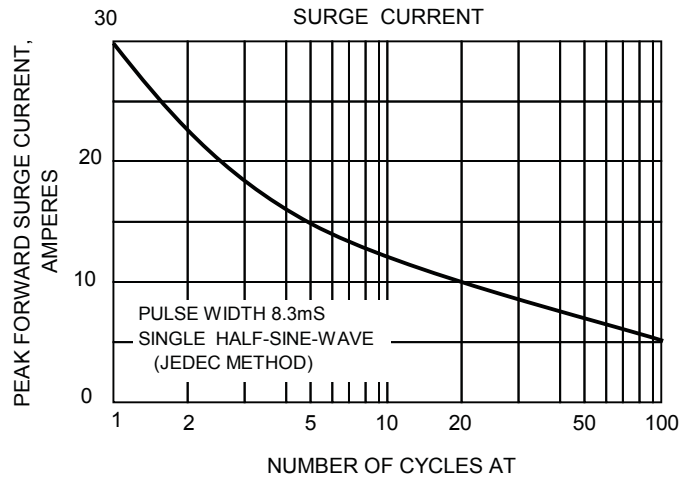


FIG.3-TYPICAL FORWARD CHARACTERISTICS

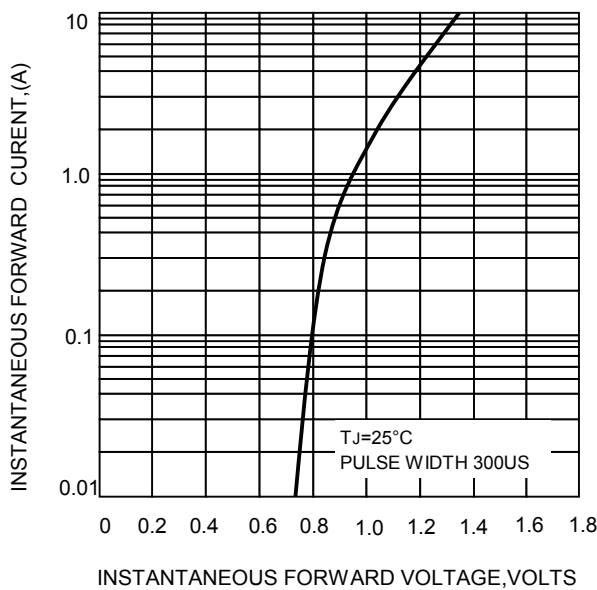


FIG.4-TYPICAL REVERSE CHARACTERISTICS

