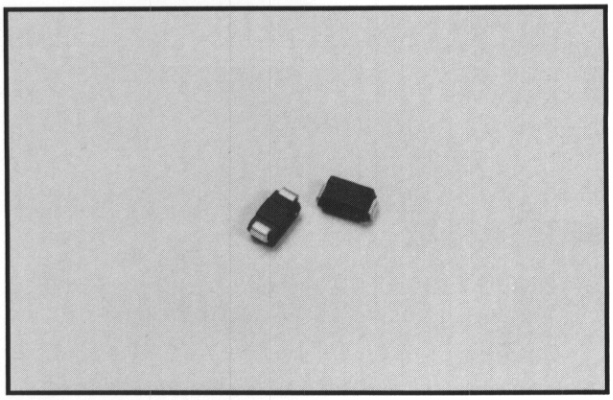
S1A Thru S1M

1 AMP SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIER



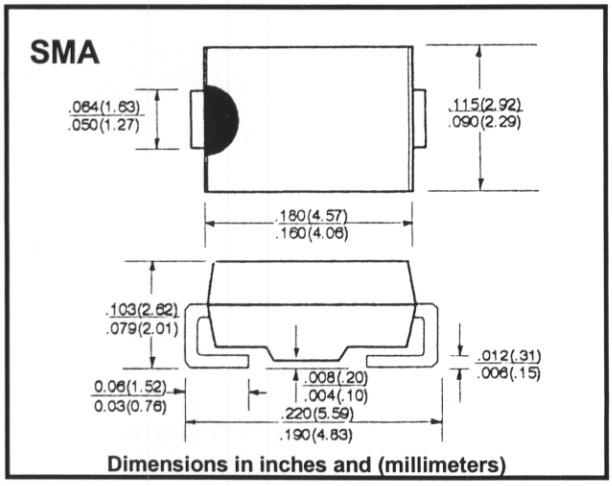
FEATURES

- Rating to 1000V PRV
- For surface mount applications
- Reliable low cost construction utilizing molded plastic technique
- UL recognized 94V-O plastic material
- Lead solderable per MIL-STD-202 Method 208
- Surge overload rating to 30A peak

Mechanical Data

- Case: Molded Plastic
- Polarity: Indicated on cathode
- Weight: 0.002 ounces, 0.064 grams

Outline Drawing



Dimensions in inches and (millimeters)

Maximum Ratings & Characteristics

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

		S1A	S1B	S1D	S1G	S1J	S1K	S1M	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward @ T_L = 100°C Output Current	$I_{(AV)}$	1.0							A
Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave Superimposed On Rated Load	I_{FSM}	30							A
Maximum DC Forward Voltage Drop Per Element At 1.0A DC	V_F	1.1							V
Maximum Reverse Current At Rated @ T_A = 25°C	I_R	5							μA
DC Blocking Voltage per Element @ T_A = 125°C		100							μA
Typical Junction Capacitance *(See Note)	C_J	10							pF
Maximum Thermal Resistance** (See Note)	$R_{(THJL)}$	30							°C/W
Operating Temperature Range	T_J	-65 to +150							°C
Storage Temperature Range	T_{STG}	-65 to +150							°C

Note: *Measured at 1.0MHz and applied reverse voltage of 4.0V DC

**Thermal resistance junction to lead, measured on PC board with 5.0mm^2 X (0.013mm thick)