

S1A THRU S1M

SURFACE MOUNT SILICON RECTIFIER

VOLTAGE: 50-1000V

CURRENT: 1.0A

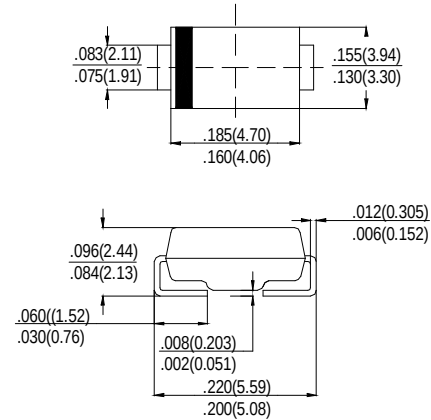
FEATURES

- Ideal for surface mounted applications
- Low leakage current
- Glass passivated junction

MECHANICAL DATA

- **Case:** Molded plastic
- **Epoxy:** UL94V-0 rate flame retardant
- **Terminals:** Solder plated, solderable per MIL-STD- 750, Method 2026
- **Polarity:** As marked
- **Mounting position:** Any
- **Weight:** 0.093 grams

SMB (DO-214AA)



Dimensions in inches and (millimeters)

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 current by 20%.

		SYMBOL	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 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 rectified Current at T _A =75°C		I_o	1.0							A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)		I_{FSM}	30							A
Maximum forward Voltage at 1.0A DC		V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ T _A =25°C	I_R	5.0							μA
	@ T _A =125°C		100							
Typical Thermal Resistance (Note2)		R_{θJL}	12							°C/W
Typical Junction Capacitance (Note1)		C_J	30							pF

Notes: 1. Measured at 1MHz and applied reverse voltage of 4.0 volts

2. Thermal Resistance (Junction to Ambient), $.0.2 \times 0.2 \text{ in}^2$ ($5 \times 5 \text{ mm}^2$) copper pads to each terminal