

S1A THRU S1M

1.0 AMP. Surface Mount Rectifiers



Voltage Range 50 to 1000 Volts Current 1.0 Ampere

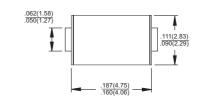
Features

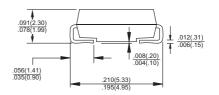
- ♦ For surface mounted application
- Glass passivated junction chip.
- ♦ Low forward voltage drop
- High current capability
- ♦ Easy pick and place
- ♦ High surge current capability
- Plastic material used carries Underwriters Laboratory Classification 94V-O
- → High temperature soldering:
 260°C / 10 seconds at terminals

Mechanical Data

- Case: Molded plastic
- ♦ Terminals: Solder plated
- Polarity: Indicated by cathode band
- Packaging: 12mm tape per EIA STD RS-481
- Weight: 0.064 gram

SMA/DO-214AC





Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%

if of capacitive load, defate current by 20%											
Type Number	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 $@T_L = 110^{\circ}C$	I _(AV)	1.0							Α		
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	30							Α		
Maximum Instantaneous Forward Voltage @ 1.0A	V_{F}	1.1							V		
Maximum DC Reverse Current @ $T_A = 25^{\circ}C$ at Rated DC Blocking Voltage @ $T_A = 125^{\circ}C$	I _R	5 50							uA uA		
Typical Thermal Resistance (Note 3)	$R heta_{JL}$	27 30				0	℃ /W				
	$R\theta_{JA}$			75			8	5	C/ VV		
Maximum Reverse Recovery Time (Note 1)	Trr	1.8							uS		
Typical Junction Capacitance (Note 2)	Cj	12							pF		
Operating Temperature Range	TJ	-55 to +150							Ç		
Storage Temperature Range	T _{STG}	-55 to +150							Ç		

Notes: 1. Reverse Recovery Test Conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

- 2. Measured at 1 MHz and Applied V_R=4.0 Volts
- 3.Measured on P.C. Board with 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Areas.



