

# S2A THRU S2M

## SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIER



康比電子  
HORNBY ELECTRONIC

**REVERSE VOLTAGE:** 50 to 1000 VOLTS

**FORWARD CURRENT:** 2.0 AMPERE

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Easy pick and place
- Built-in strain relief
- Low forward voltage drop
- High temperature soldering : 250°C /10 seconds at terminals

### MECHANICAL DATA

Case: Molded plastic, DO-214AA(SMB)

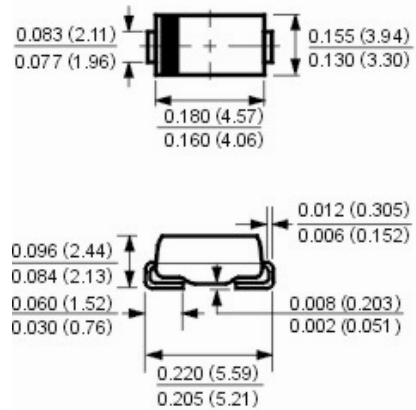
Terminals: Solder plated, solderable per MIL-STD-750, method 2026 guaranteed

Polarity: Color band denotes cathode end

Packaging: 12mm tape per EIA STD RS-481

Weight: 0.003 ounce, 0.093 gram

### DO-214AA(SMB)



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%.

	Symbols	S2A	S2B	S2D	S2G	S2J	S2K	S2M	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 at T <sub>L</sub> =90℃	I <sub>(AV)</sub>	2.0							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	50							Amp
Maximum Forward Voltage at 2.0A	V <sub>F</sub>	1.15							Volts
Maximum Reverse Current           at T <sub>A</sub> =25℃ at Rated DC Blocking Voltage       T <sub>A</sub> =125℃	I <sub>R</sub>	5.0 125							μAmp
Typical Junction Capacitance (Note 1)	C <sub>J</sub>	30							pF
Typical Thermal Resistance (Note 2)	R <sub>0JL</sub>	16							℃/W
Maximum Reverse Recovery Time (Note 3)	T <sub>RR</sub>	2.5							μS
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150							℃
Storage Temperature Range	T <sub>stg</sub>	-55 to +150							℃

### NOTES:

1- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

2- Thermal resistance from junction to lead mounted on P.C.B. with 0.3 x 0.3" (8.0 x 8.0mm) copper pad areas

3- Reverse Recovery Test Conditions:  $I_F=5A$ ,  $I_R=1A$ ,  $I_{RR}=0.25A$ .

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RATINGS AND CHARACTERISTIC CURVES

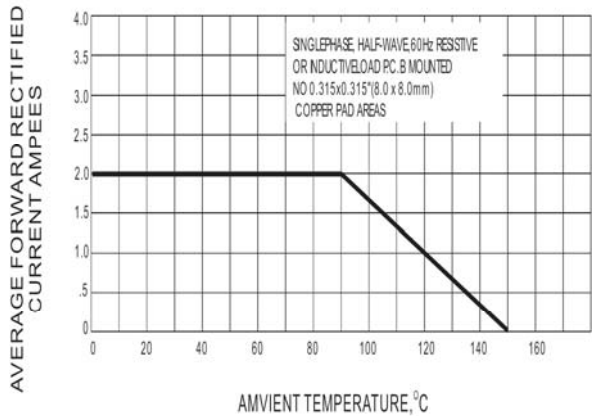


Fig. 3-MAXIMU AVERAGE FORWARD CURRENT RATING

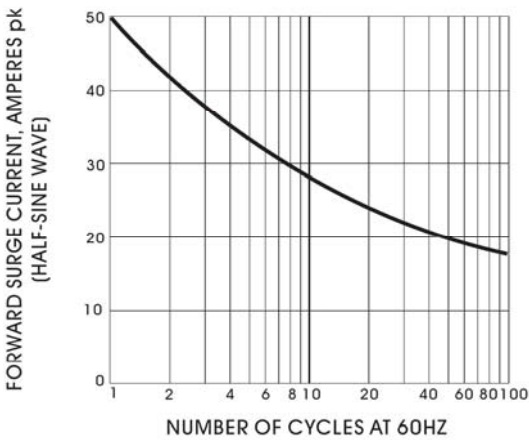


Fig. 2-MAXIMUM OVERLOAD SURGE-CURRENT

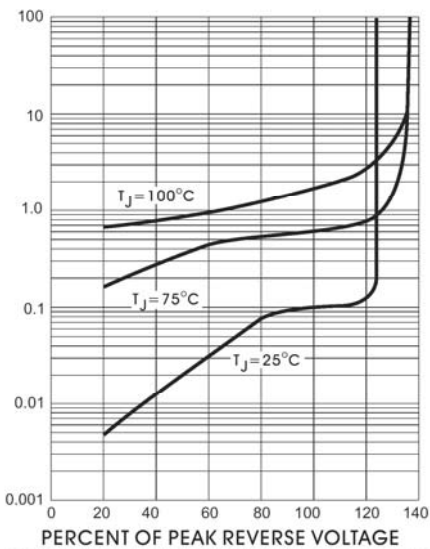


Fig. 3- TYPICAL REAK REVERSE CHARACTERISTICS

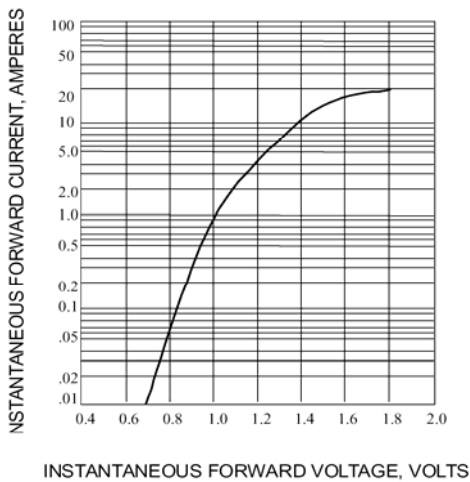


Fig. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

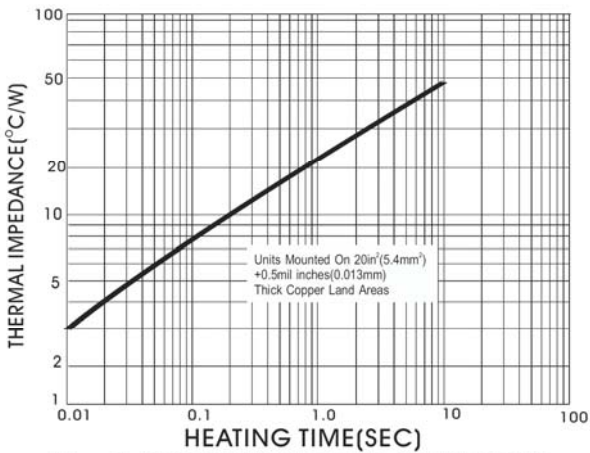


Fig. 5- TRANSIENT THERMAL IMPEDANCE

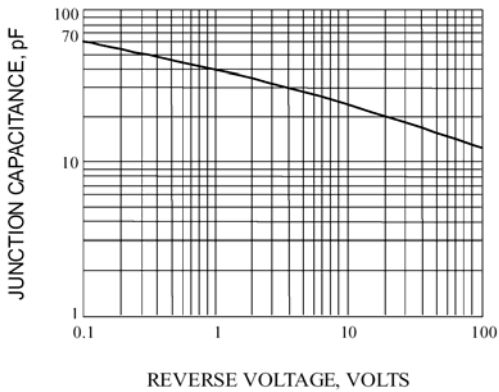


Fig. 6-TYPICAL JUNCTION CAPACITANCE