



# S2AH THRU S2MH

## SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIERS

**REVERSE VOLTAGE:** 50 to 1000 VOLTS

**FORWARD CURRENT:** 2.0 AMPERE

### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Glass Passivated Die Construction
- For surface mounted applications
- High forward surge current capability
- Suffix "H" indicates Halogen-free parts, ex. S2AH

### MECHANICAL DATA

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

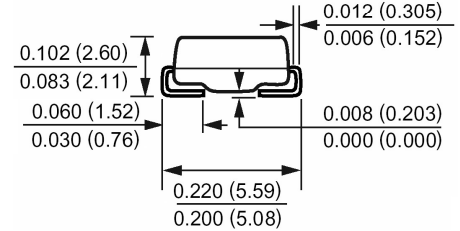
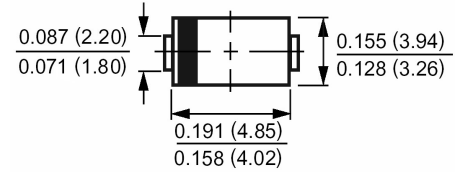
Epoxy : UL 94V-O rate flame retardant

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

Polarity : Color band denotes cathode end

Mounting position : Any

### 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%.

Parameter	Symbols	S2AH	S2BH	S2DH	S2GH	S2JH	S2KH	S2MH	Units
		S2A	S2B	S2D	S2G	S2J	S2K	S2M	
Marking Code									
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> =75°C	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>	1.1							Volts
Maximum Reverse Current at T <sub>A</sub> =25°C at Rated DC Blocking Voltage T <sub>A</sub> =125°C	I <sub>R</sub>	10							μAmp
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub>	75							°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-65 to +150							°C
Storage Temperature Range	T <sub>stg</sub>	-65 to +150							°C

#### NOTES:

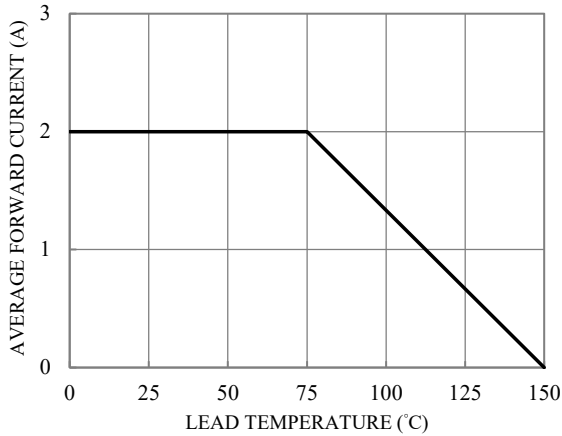
1- Thermal resistance from junction to ambient mounted on P.C.B. with 0.3 x 0.3" (8.0 x 8.0mm) copper pad areas



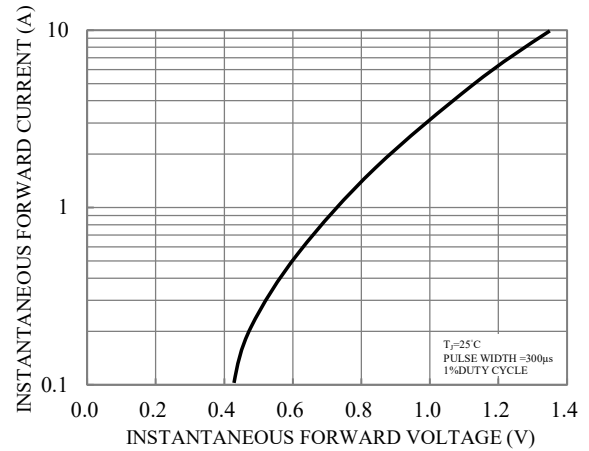
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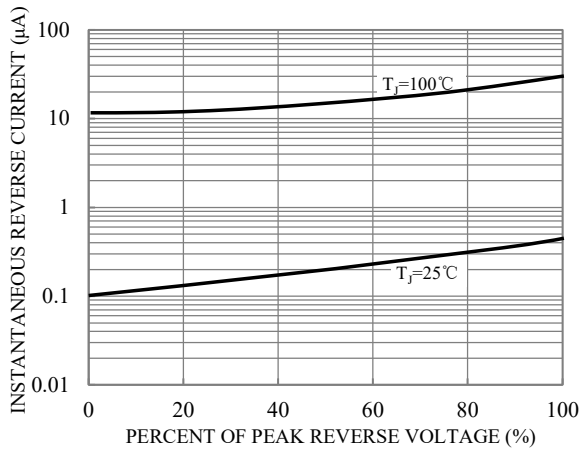
### RATINGS AND CHARACTERISTIC CURVES



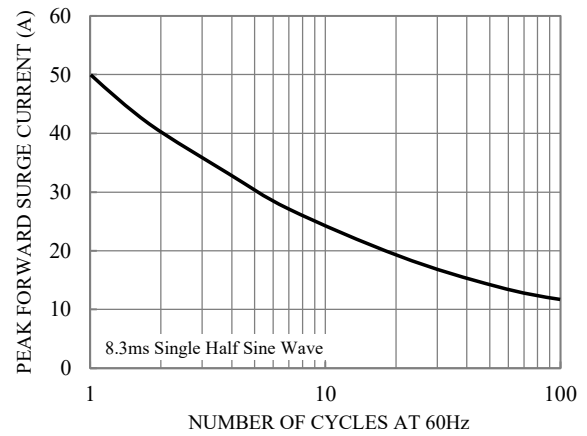
**Fig.1-FORWARD CURRENT DERATING CURVE**



**Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**Fig.3-TYPICAL REVERSE CHARACTERISTICS**



**Fig.4-MAXIMUM NON-REPETITIVE SURGE CURRENT**