S2M150AH

SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIER

REVERSE VOLTAGE: **1000 VOLTS**
FORWARD CURRENT: **2.0 AMPERE**

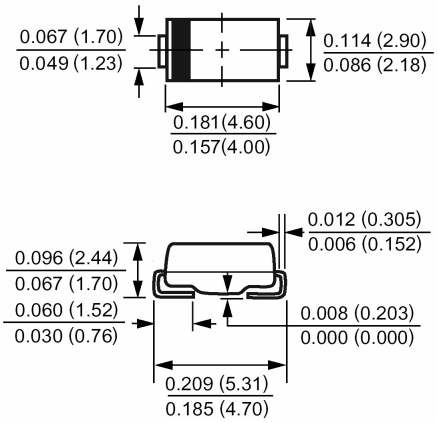
FEATURES

· Plastic package has Underwriters Laboratory Flammabiliy Classification 94V-O
· For surface mounted applications
· Low profile package
· Easy pick and place
· Built-in strain relief
· Low forward voltage drop
· Suffix "H" indicates Halogen-free parts, ex.S2M150AH

MECHANICAL DATA

Case : Molded plastic, DO-214AC(SMA)
Terminals : Solder plated, solderable per MIL-STD-750, method 2026 guaranteed
Polarity : Color band denotes cathode end

DO-214AC(SMA)



Dimensions in inchs and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60H_Z, resistive or inductive load.
For capacitive load, derate current by 20%.

Parameter	Symbols	*S2M150AH*	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1000	**Volts**
Maximum RMS Voltage	V_{RMS}	700	**Volts**
Maximum DC Blocking Voltage	V_{DC}	1000	**Volts**
Maximum Average Forward Rectified Current at T_L=80℃	$I_{(AV)}$	2.0	**Amp**
Peak Forward Surge Current T_J=25℃, τ=800μs, Discharge waveform, Repetitive, for second 4 a round (see Fig 4)	I_{FSM}	150	**Amp**
Maximum Forward Voltage at 2.0A	V_F	1.10	**Volts**
Maximum Reverse Current at T_A=25℃	I_R	5.0	**μAmp**
at Rated DC Blocking Voltage T_A=125℃		125.0	
Typical Junction Capacitance (Note 1)	C_J	30	**pF**
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	35	**℃/W**
Operating Junction Temperature Range	T_J	-55 to +150	**℃**
Storage Temperature Range	Tstg	-55 to +150	**℃**

NOTES:

1- Measured at 1 MH_Z 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

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RATINGS AND CHARACTERISTIC CURVES

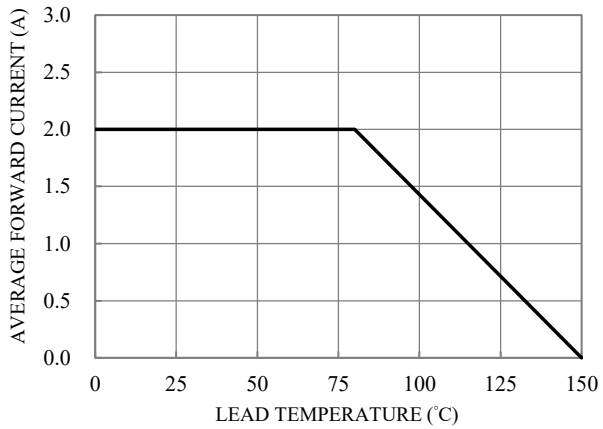

Fig.1-FORWARD CURRENT DERATING CURVE

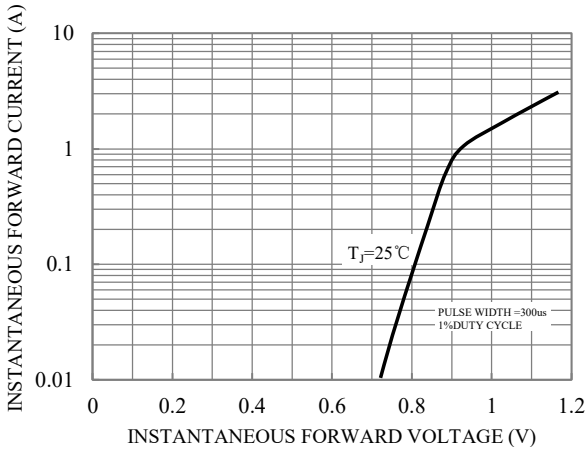

Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

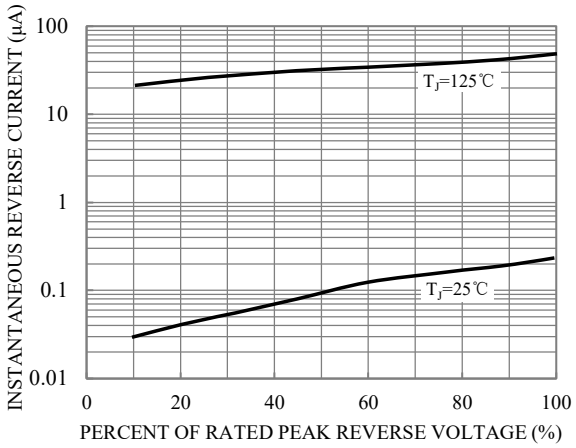

Fig.3-TYPICAL REVERSE CHARACTERISTICS

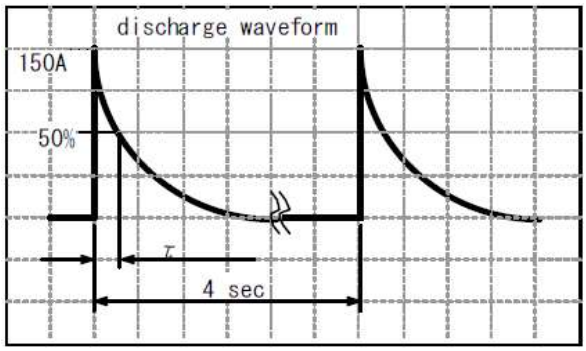

Fig.4- PEAK FORWARD SURGE CURRENT DISCHARGE WAVEFORM