



S5AH THRU S5MH

SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIERS

REVERSE VOLTAGE: 50 to 1000VOLTS

FORWARD CURRENT: 5.0 AMPERE

FEATURES

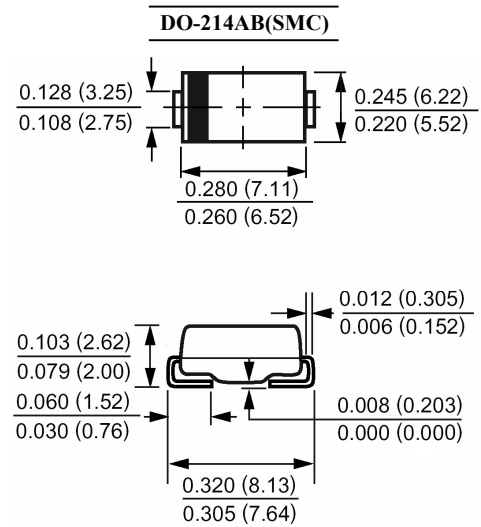
- Glass passivated junction chip
- Low reverse leakage
- High forward surge current capability
- Suffix "H" indicates Halogen-free parts, ex. S5AH

MECHANICAL DATA

Case : Molded plastic, DO-214AB(SMC)

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

Polarity : Color band denotes cathode end



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	S5AH	S5BH	S5DH	S5GH	S5JH	S5KH	S5MH	Units
		S5A	S5B	S5D	S5G	S5J	S5K	S5M	
Marking Code									
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	$I_{(AV)}$	5							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150							Amp
Maximum Forward Voltage at 5.0A	V_F	1.10							Volts
Maximum Reverse Current at $T_J=25^\circ\text{C}$ at Rated DC Blocking Voltage at $T_J=125^\circ\text{C}$	I_R	5.0 200.0							μAmp
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	48							$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	-55 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150							$^\circ\text{C}$

NOTES:

1. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.6" x 0.6" (16 mm x 16 mm) copper pad areas.



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RATINGS AND CHARACTERISTIC CURVES

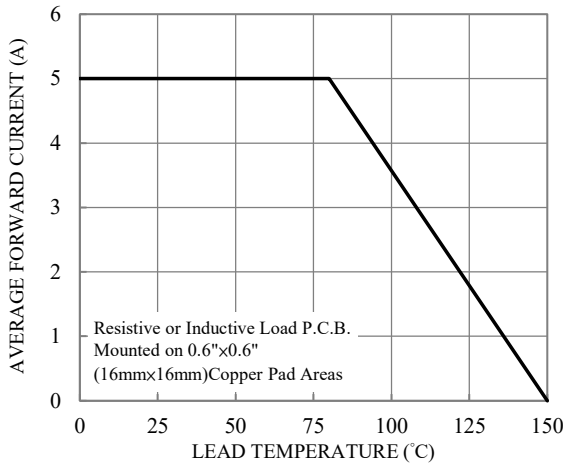


Fig.1-FORWARD CURRENT DERATING CURVE

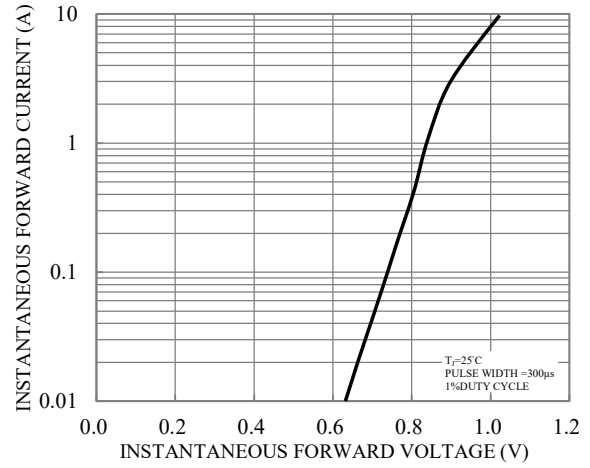


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

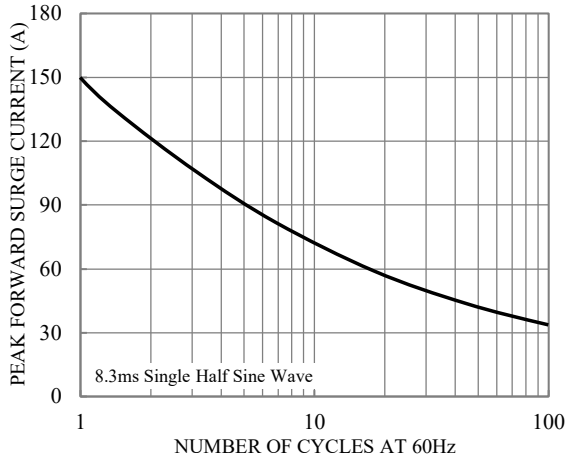


Fig.3-MAXIMUM NON-REPETITIVE SURGE CURRENT

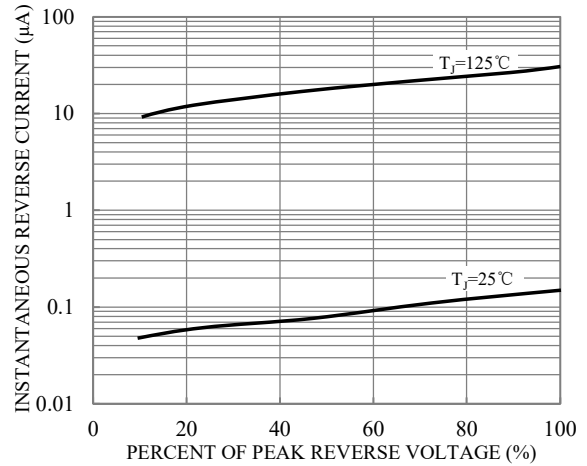


Fig.4-TYPICAL REVERSE CHARACTERISTICS