



AS10ACH THRU AS10MCH

SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIER

REVERSE VOLTAGE: 50 to 1000 VOLTS
FORWARD CURRENT: 10.0 AMPERE

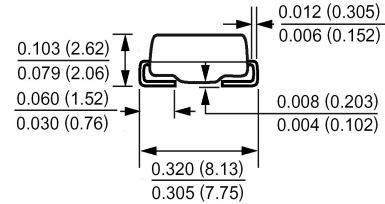
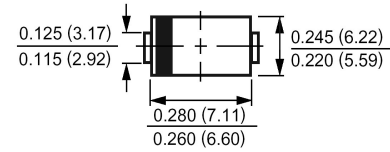
FEATURES

- AEC-Q101 Qualified
- For surface mounted applications
- Glass passivated die construction
- Low forward voltage drop and high current capability
- Suffix "H" indicates Halogen-free parts, ex. AS10ACH

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

DO-214AB(SMC)



Dimensions in inch and (millimeter)

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	AS10ACH	AS10BCH	AS10DCH	AS10GCH	AS10JCH	AS10KCH	AS10MCH	Units
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 (see Fig-1)	$I_{(AV)}$	10.0							Amp
Non-Repetitive Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	250.0							Amp
Non-Repetitive Peak Forward Surge Current, 1.0ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	500.0							Amp
Maximum Forward Voltage at 10.0A	V_F	1.10							Volts
I ² T Rating for Fusing (t < 8.3 ms)	I ² T	518.75							A ² S
Maximum Reverse Current at T _j =25°C at Rated DC Blocking Voltage T _j =125°C	I_R	10.0 250.0							μAmp
Typical Thermal Resistance, Junction to Case ⁽¹⁾	$R_{\theta JA}$	3.0							°C/W
Typical Thermal Resistance, Junction to Terminal ⁽¹⁾	$R_{\theta JA}$	7.0							°C/W
Typical Thermal Resistance, Junction to Ambient ⁽¹⁾	$R_{\theta JA}$	12.0							°C/W
Operating Junction Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{stg}	-55 to +150							°C

Note :

1. Thermal resistance measured with device mounted on aluminum pad with 100mm x 100mm x 2mm heatsink.



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RATINGS AND CHARACTERISTIC CURVES

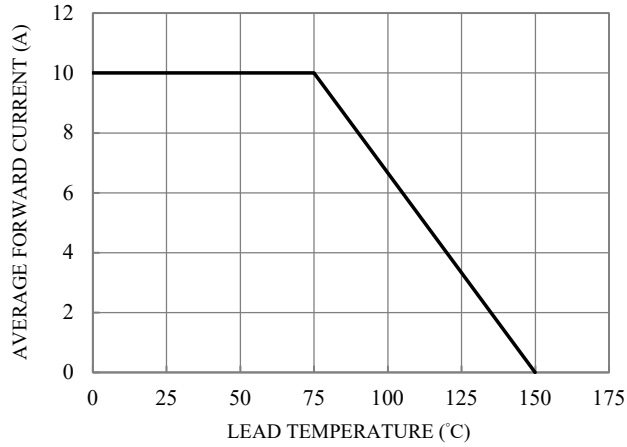


Fig.1-FORWARD CURRENT DERATING CURVE

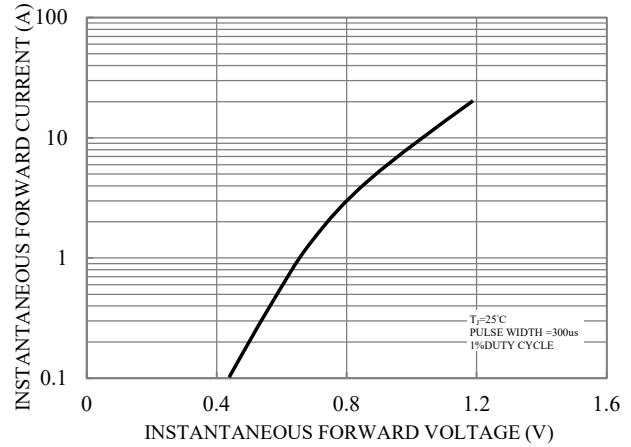


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

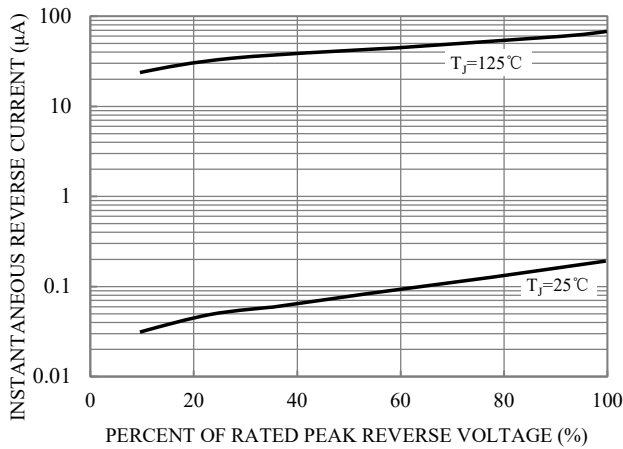


Fig.3-TYPICAL REVERSE CHARACTERISTICS

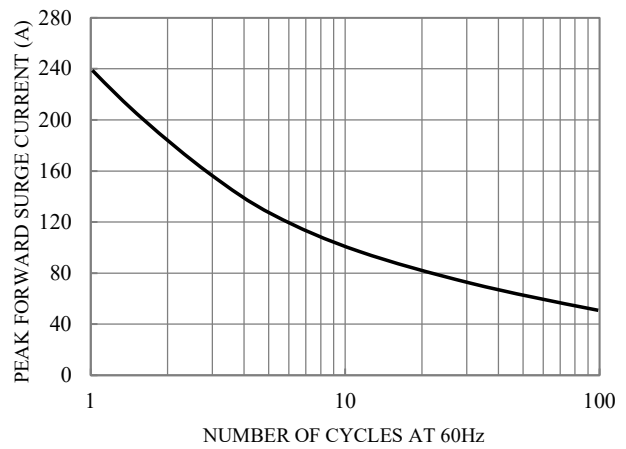


Fig.4-MAXIMUM NON-REPETITIVE SURGE CURRENT