



Surface Mount Schottky Barrier Rectifier
Reverse Voltage - 40 to 200 V
Forward Current - 3.0A

FEATURES

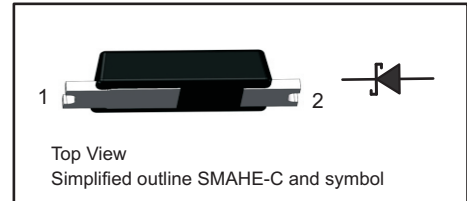
- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

MECHANICAL DATA

- Case: SMAHE-C
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 30mg / 0.0010oz

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute 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 by 20 %

Parameter	Symbols	SS34AHEM	SS36AHEM	SS310AHEM	SS315AHEM	SS320AHEM	Units
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	40	60	100	150	200	V
Maximum RMS voltage	V _{RMS}	28	42	70	105	140	V
Maximum DC Blocking Voltage	V _{DC}	40	60	100	150	200	V
Maximum Average Forward Rectified Current @ Fig.1	I _{F(AV)}	3.0					A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	80					A
Peak Forward Surge Current,1.0ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	160					A
I ² t Rating for fusing(3ms≤t≤8.3ms)	I ² t	26.5					A ² S
Max Instantaneous Forward Voltage at 3 A	V _F	0.55	0.70	0.85	0.95		V
Maximum DC Reverse Current at Rated DC Reverse Voltage T _a = 25°C T _a =100°C	I _R	0.5 10		0.3 5			mA
Typical Junction Capacitance ⁽¹⁾	C _j	130	110	83	68	50	pF
Typical Thermal Resistance ⁽²⁾	R _{θJA} R _{θJC} R _{θJL}	95 20 25					°C/W
Operating Junction Temperature Range	T _j	-55 ~ +150					°C
Storage Temperature Range	T _{stg}	-55 ~ +150					°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

(2) P.C.B. mounted with 0.2 X 0.2" (5 X 5 mm) copper pad areas.



Fig.1 Forward Current Derating Curve

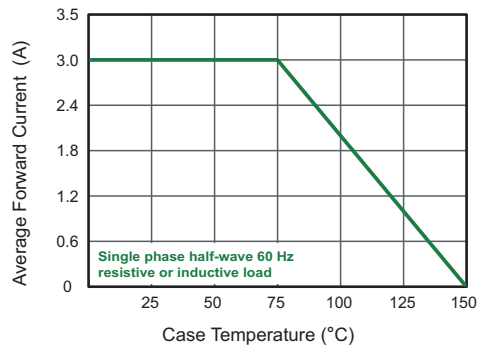


Fig.2 Typical Reverse Characteristics

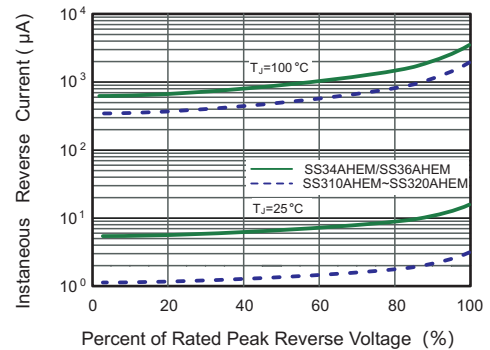


Fig.3 Typical Forward Characteristic

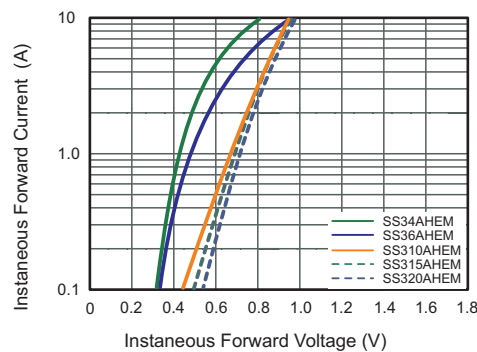


Fig.4 Typical Junction Capacitance

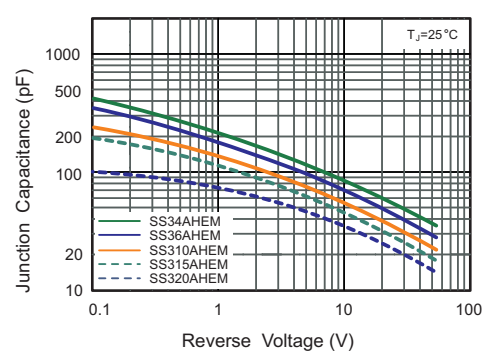
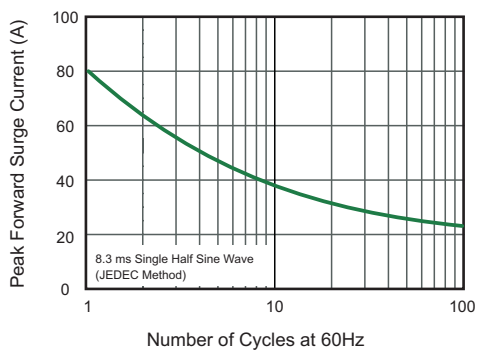


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

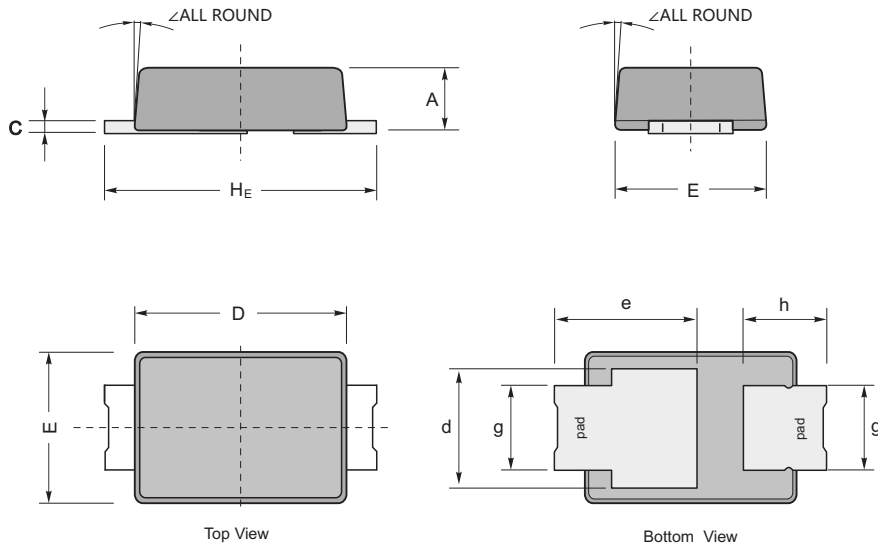




PACKAGE OUTLINE

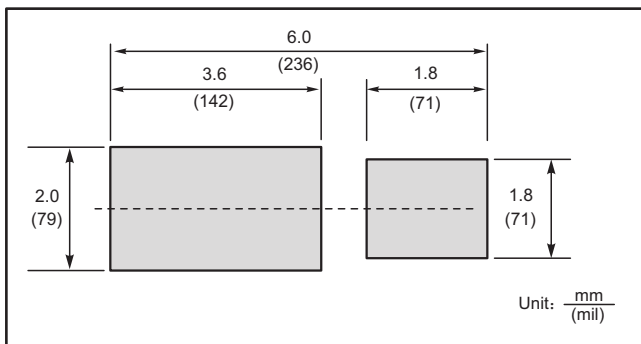
Plastic surface mounted package; 2 leads

SMAHE-C



UNIT		A	C	D	E	H _E	d	e	g	h	$\angle$
mm	max	1.20	0.35	4.10	2.70	5.20	1.90	3.05	1.50	1.2	12°
	min	0.90	0.20	3.70	2.30	4.80	1.70	2.85	1.30	0.8	
mil	max	47	13.8	161	106	205	75	120	59	47	
	min	35	7.9	145	90	189	67	112	51	32	

The recommended mounting pad size



Marking

Type number	Marking code
SS34AHEM	SS34
SS36AHEM	SS36
SS310AHEM	SS310
SS315AHEM	SS315
SS320AHEM	SS320



Important Notice and Disclaimer

Jingdao Microelectronics reserves the right to make changes to this document and its products and specifications at any time without notice.

Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.

Jingdao Microelectronics makes no warranty, representation or guarantee regarding the suitability of its products for any particular purpose, nor does Jingdao Microelectronics assume any liability for application assistance or customer product design.

Jingdao Microelectronics does not warrant or accept any liability with products which are purchased or used for any unintended or unauthorized application.

No license is granted by implication or otherwise under any intellectual property rights of Jingdao Microelectronics.

Jingdao Microelectronics products are not authorized for use as critical components in life support devices or systems without express written approval of Jingdao Microelectronics.