



SS34AHE THRU SS320AHE

Reverse Voltage - 40 to 200 Volts Forward Current - 3.0 Ampere

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features

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



Top View
Simplified outline SMAHE and symbol

Mechanical Data

- ◆ **Case** : JEDEC SMAHE Molded plastic body
- ◆ **Terminals** : Solderable per MIL-STD-750, Method 2026
- ◆ **Weight** : 0.0010 ounce, 0.030grams

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

Mechanical Data

Ratings at 25 C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	SS34AHE	SS36AHE	SS310AHE	SS315AHE	SS320AHE	UNITS
Marking Code		MDD SS34	MDD SS36	MDD SS310	MDD SS315	MDD SS320	
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	$I_{F(AV)}$	3.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80					A
Maximum instantaneous forward voltage at 3.0A	V_F	0.55	0.70	0.85	0.95		V
Maximum DC reverse current $T_A=25^{\circ}C$ at rated DC blocking voltage $T_A=100^{\circ}C$	I_R	0.5 10	0.3 5.0				mA
Typical junction capacitance (NOTE 1)	C_J	180	150				pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	100					$^{\circ}C/W$
Operating junction temperature range	T_J	-55 to +150					$^{\circ}C$
Storage temperature range	T_{STG}	-55 to +150					$^{\circ}C$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. P.C.B. mounted with 3.81X3.81cm copper pad areas



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Typical Characteristics

Fig.1 Forward Current Derating Curve

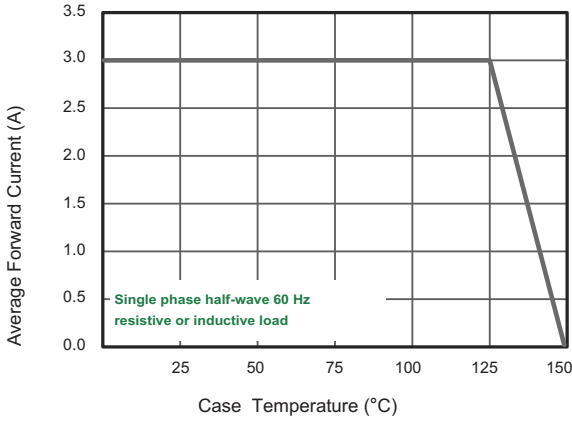


Fig.2 Typical Reverse Characteristics

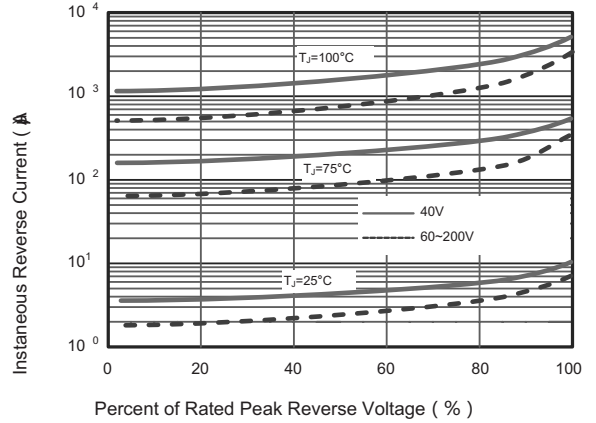


Fig.3 Typical Forward Characteristic

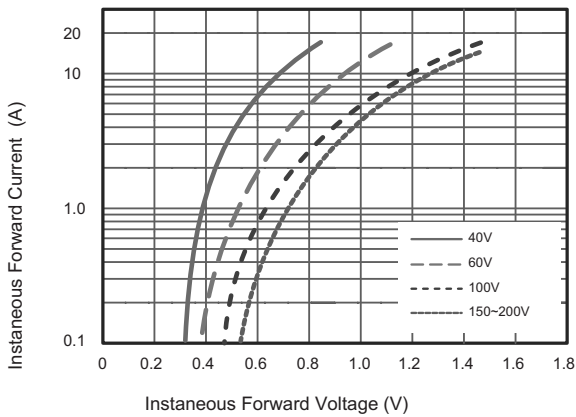


Fig.4 Typical Junction Capacitance

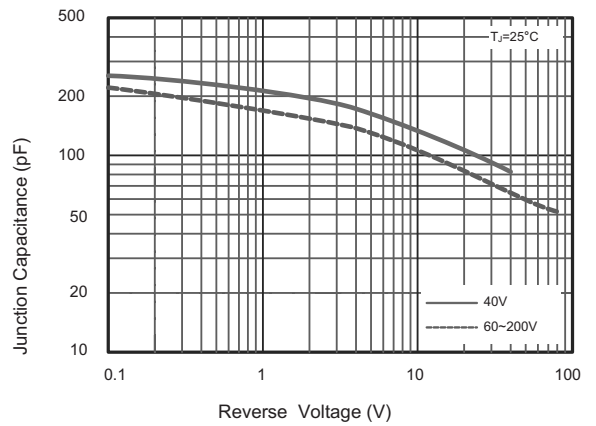


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

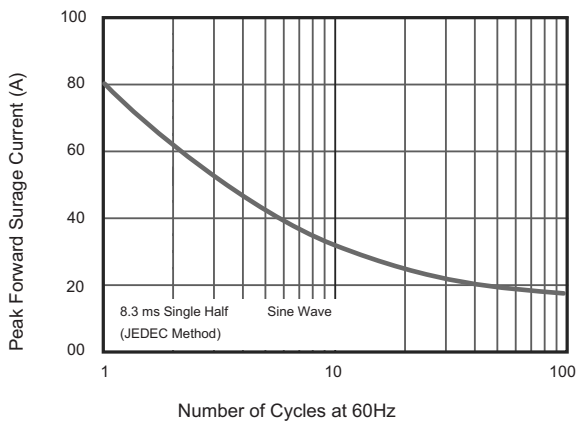
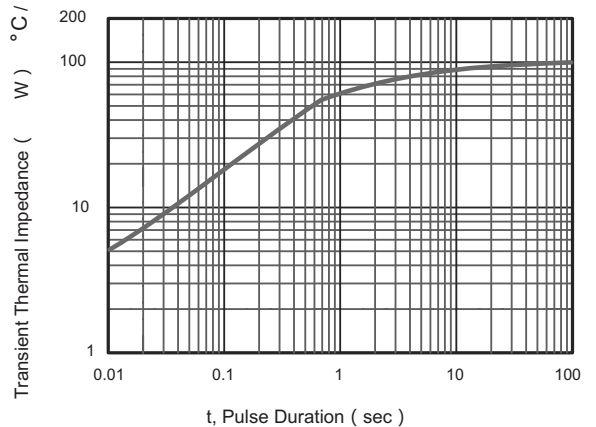


Fig.6- Typical Transient Thermal Impedance



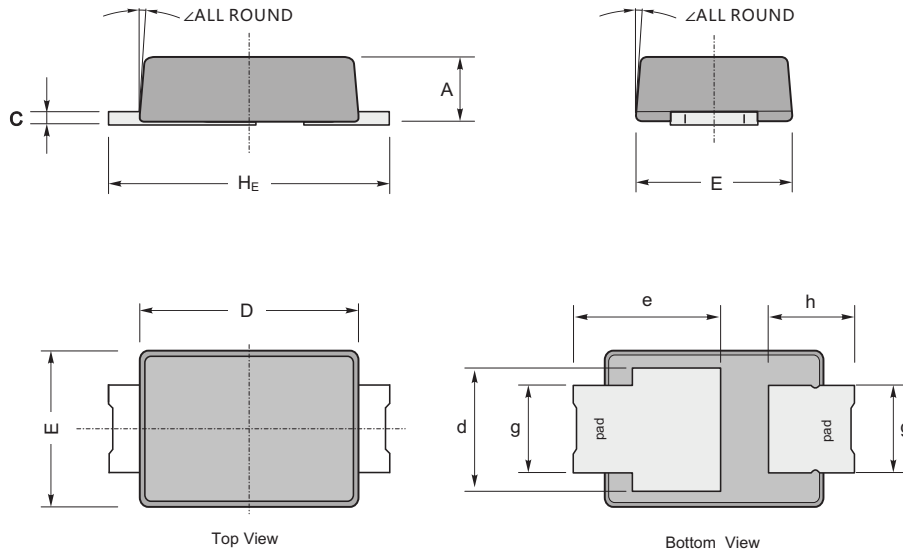
The curve above is for reference only.



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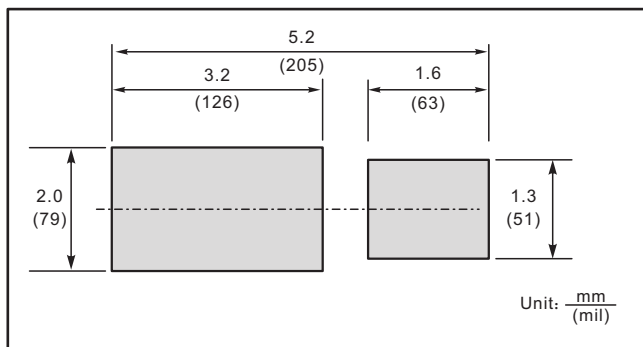
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Packing information



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	1.0	
mil	max	47	13.8	161	106	205	75	120	59	47	
	min	35	7.9	145	90	189	67	112	51	39	

The recommended mounting pad size



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