



# 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
- ◆ 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



# SS34AHE THRU SS320AHE

Reverse Voltage - 20 to 200 Volts Forward Current - 3.0 Ampere

## Typical Characteristics

Fig.1 Forward Current Derating Curve

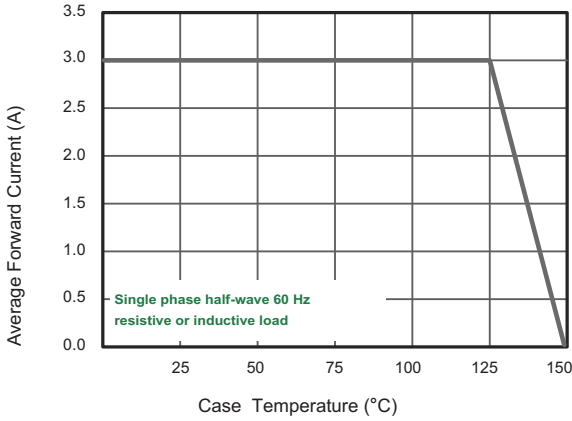


Fig.2 Typical Reverse Characteristics

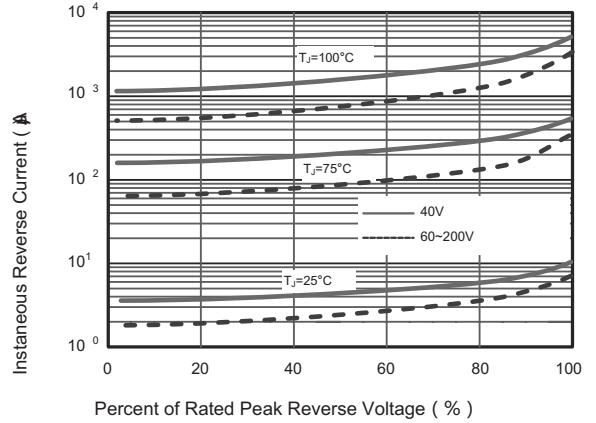


Fig.3 Typical Forward Characteristic

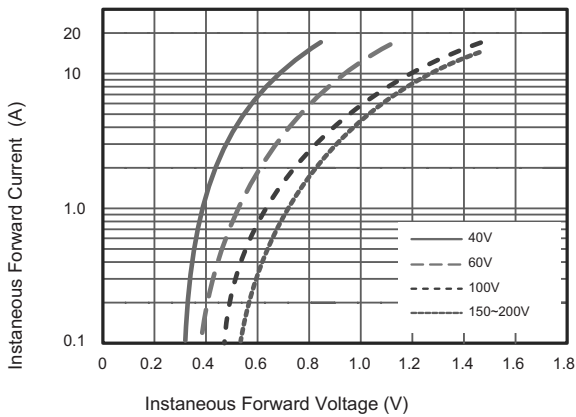


Fig.4 Typical Junction Capacitance

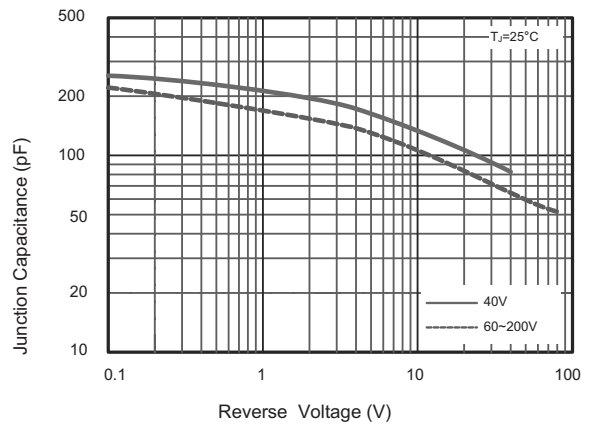


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

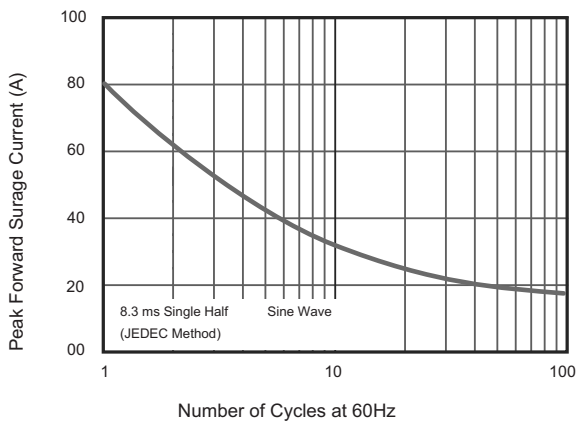
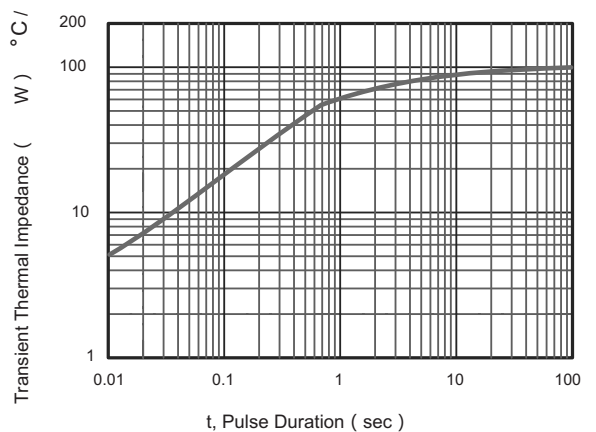


Fig.6- Typical Transient Thermal Impedance



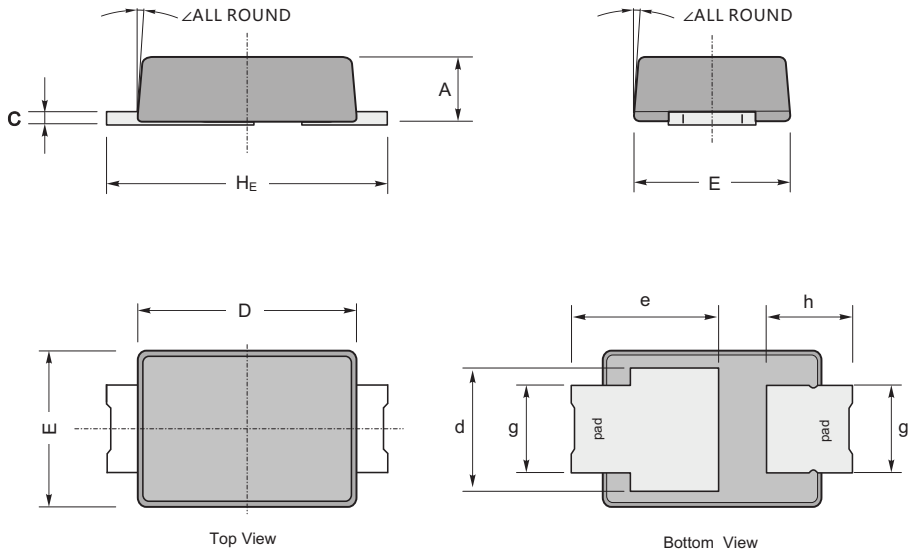
The curve above is for reference only.



# SS3AHE THRU SS320AHE

Reverse Voltage - 20 to 200 Volts Forward Current - 3.0 Ampere

## Packing information



UNIT		A	C	D	E	HE	d	e	g	h	∠
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

