



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 |



Top View
Simplified outline outline SMAHE-C and symbol

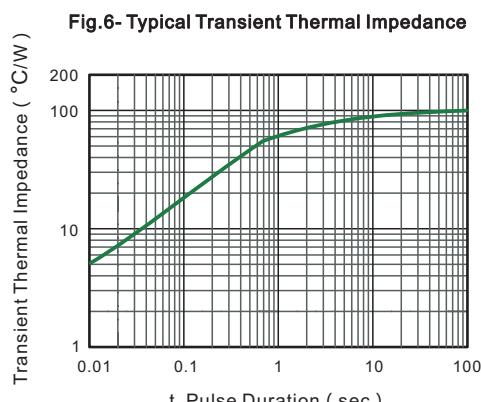
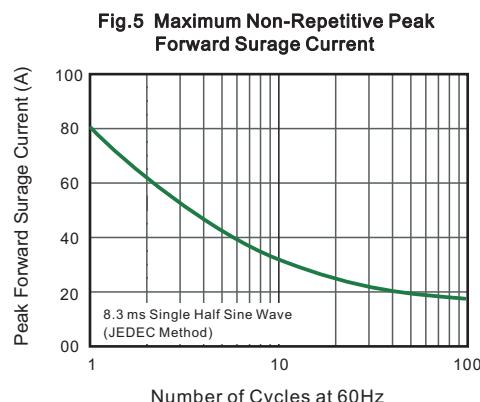
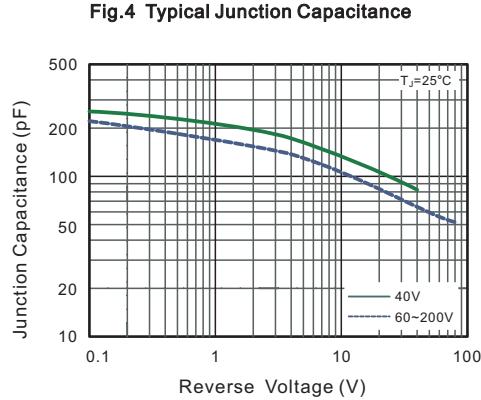
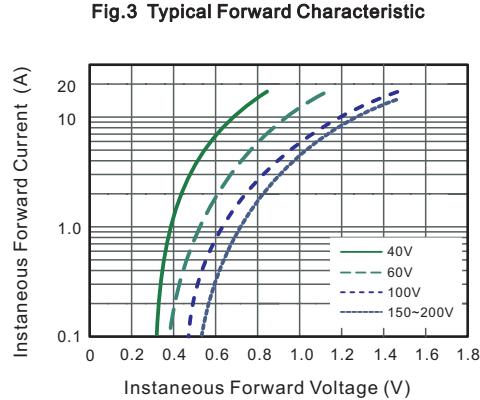
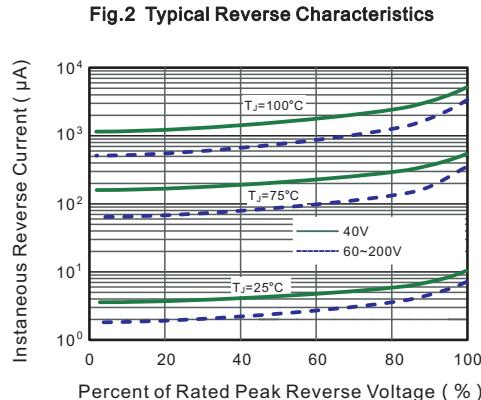
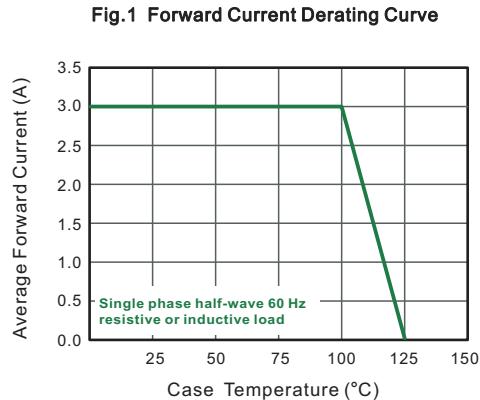
Absolute Maximum Ratings and Electrical characteristics

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 | SS34AHE | SS36AHE | SS310AHE | SS315AHE | SS320AHE | 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 | $I_{F(AV)}$ | | | 3.0 | | | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | I_{FSM} | | | 80 | | | A |
| Max Instantaneous Forward Voltage at 3 A | V_F | 0.55 | 0.70 | 0.85 | 0.95 | | V |
| Maximum DC Reverse Current $T_a = 25^\circ C$ at Rated DC Reverse Voltage $T_a = 100^\circ C$ | I_R | 0.5 10 | | 0.3 5 | | | mA |
| Typical Junction Capacitance ⁽¹⁾ | C_j | 180 | | 150 | | | pF |
| Typical Thermal Resistance ⁽²⁾ | $R_{\theta JA}$ | | | 100 | | | °C/W |
| Operating Junction Temperature Range | T_j | | | -55 ~ +125 | | | °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 3.81 X 3.81 cm copper pad areas.

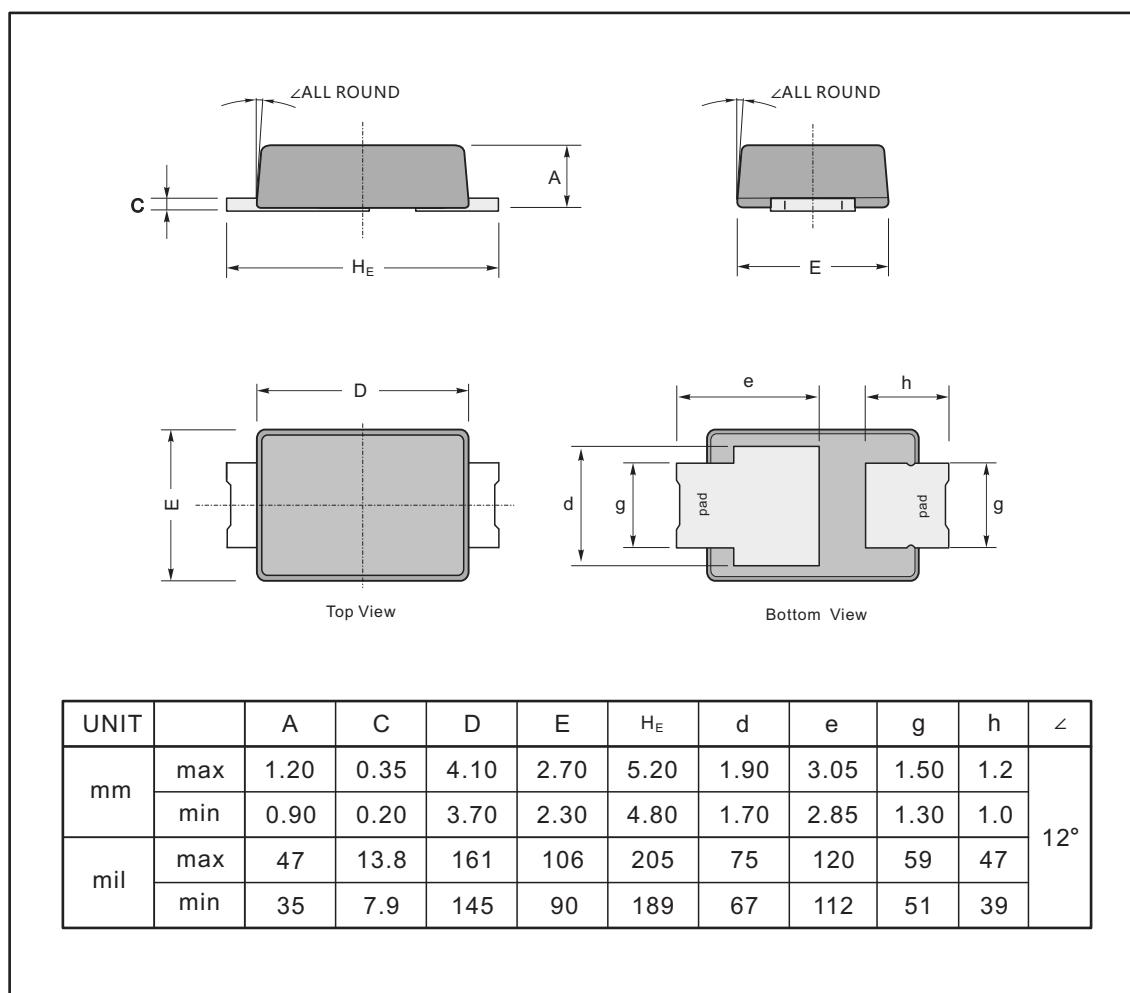




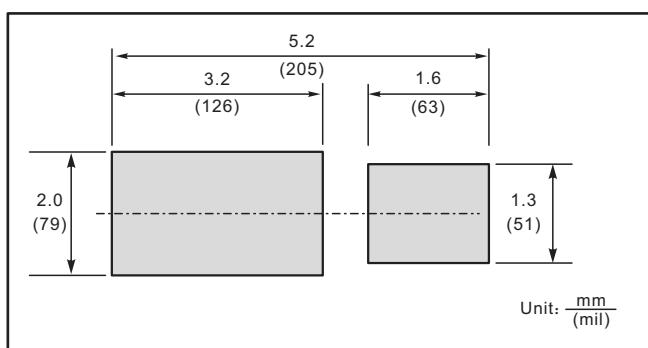
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SMAHE-C



The recommended mounting pad size



Marking

| Type number | Marking code |
|-------------|--------------|
| SS34AHE | SS34 |
| SS36AHE | SS36 |
| SS310AHE | SS310 |
| SS315AHE | SS315 |
| SS320AHE | SS320 |



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