

SS32AT THRU SS320AT

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Forward Current-3.0A

Reverse Voltage-20V to 200V

FEATURES

- ◆ For surface mount applications
- ◆ High forward surge current capability
- ◆ Low power loss, high efficiency
- ◆ Metal silicon junction, majority carriers conduction

MECHANICAL DATA

- ◆ Case: SMA molded plastic body
- ◆ Terminals: Solderable per MIL-STD-750 , Method 2026
- ◆ Weight: Approximated 0.06 grams

PINNING

| PIN | DESCRIPTION |
|-----|-------------|
| 1 | Cathode |
| 2 | Anode |



Top View
Simplified outline SMA and symbol

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

| PARAMETER | SYMBOL | SS32AT | SS34AT | SS34AAT | SS36AT | SS38AT | SS310AT | SS312AT | SS315AT | SS320AT | UNIT | | |
|---|-----------------------------------|-------------|--------|---------|--------|----------|---------|---------|---------|---------|------|--|--|
| Maximum Repetitive Peak Reverse Voltage | V _{RRM} | 20 | 40 | 45 | 60 | 80 | 100 | 120 | 150 | 200 | V | | |
| Maximum RMS Voltage | V _{RMS} | 14 | 28 | 31.5 | 42 | 56 | 70 | 84 | 105 | 140 | V | | |
| Maximum DC Blocking Voltage | V _{DC} | 20 | 40 | 45 | 60 | 80 | 100 | 120 | 150 | 200 | V | | |
| Maximum Average Forward Rectified Current at T _C =75°C | I _{F(AV)} | 3.0 | | | | | | | | | A | | |
| Peak Forward Surge Current (Note1) | I _{FSM} | 80 | | | | 70 | | | | A | | | |
| Maximum Forward Voltage at 3.0 A | V _F | 0.55 | | 0.70 | | | 0.85 | | 0.95 | | V | | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage at T _A =25°C T _A =100°C | I _R | 0.5 5 | | | | 0.3 3 | | | | mA | | | |
| Typical Junction Capacitance (Note2) | C _J | 450 | | | | 400 | | | | pF | | | |
| Typical Thermal Resistance (Note3) | R _{θJA} | 70 | | | | | | | | °C/W | | | |
| Operating and Storage Temperature Range | T _J , T _{STG} | -55 to +150 | | | | | | | | | °C | | |

Notes: 1. Measured at 8.3 ms single half sine wave superimposed on rated load (JEDEC Method).

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

3. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

Dated: 06/2016

Rev:1.0

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RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

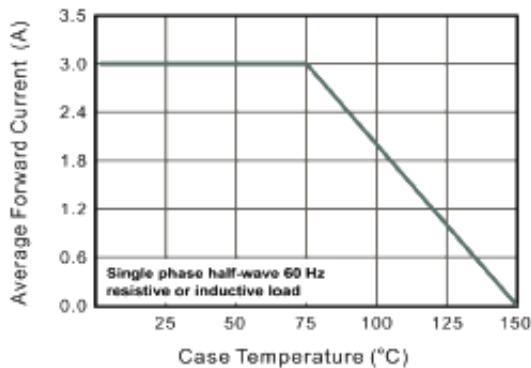


Fig.2 Typical Reverse Characteristics

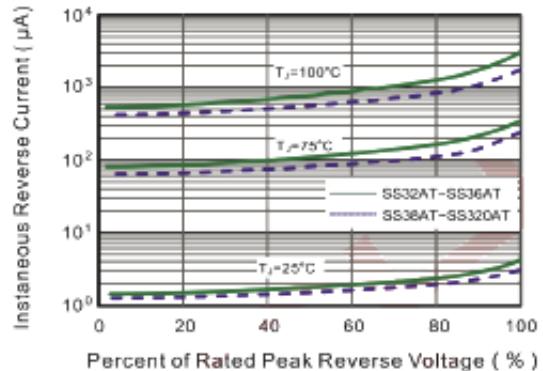


Fig.3 Typical Forward Characteristics

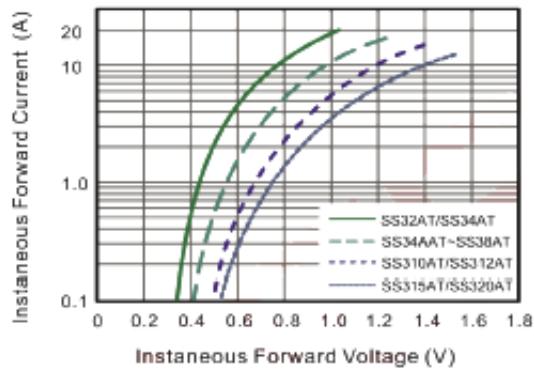


Fig.4 Typical Junction Capacitance

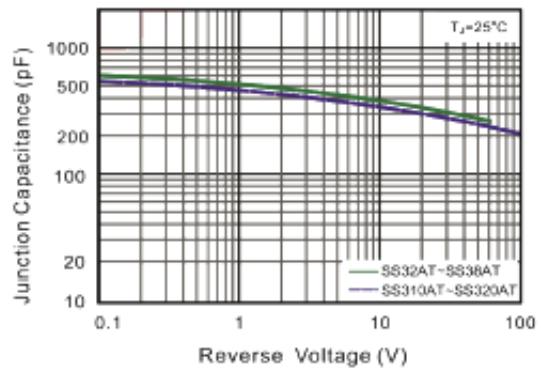


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

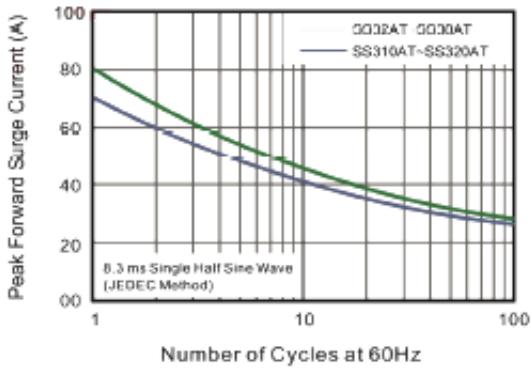
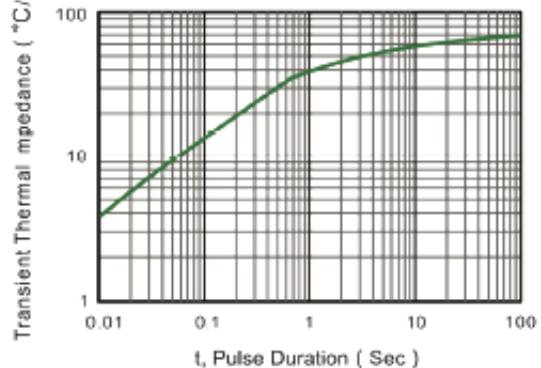


Fig.6 Typical Transient Thermal Impedance

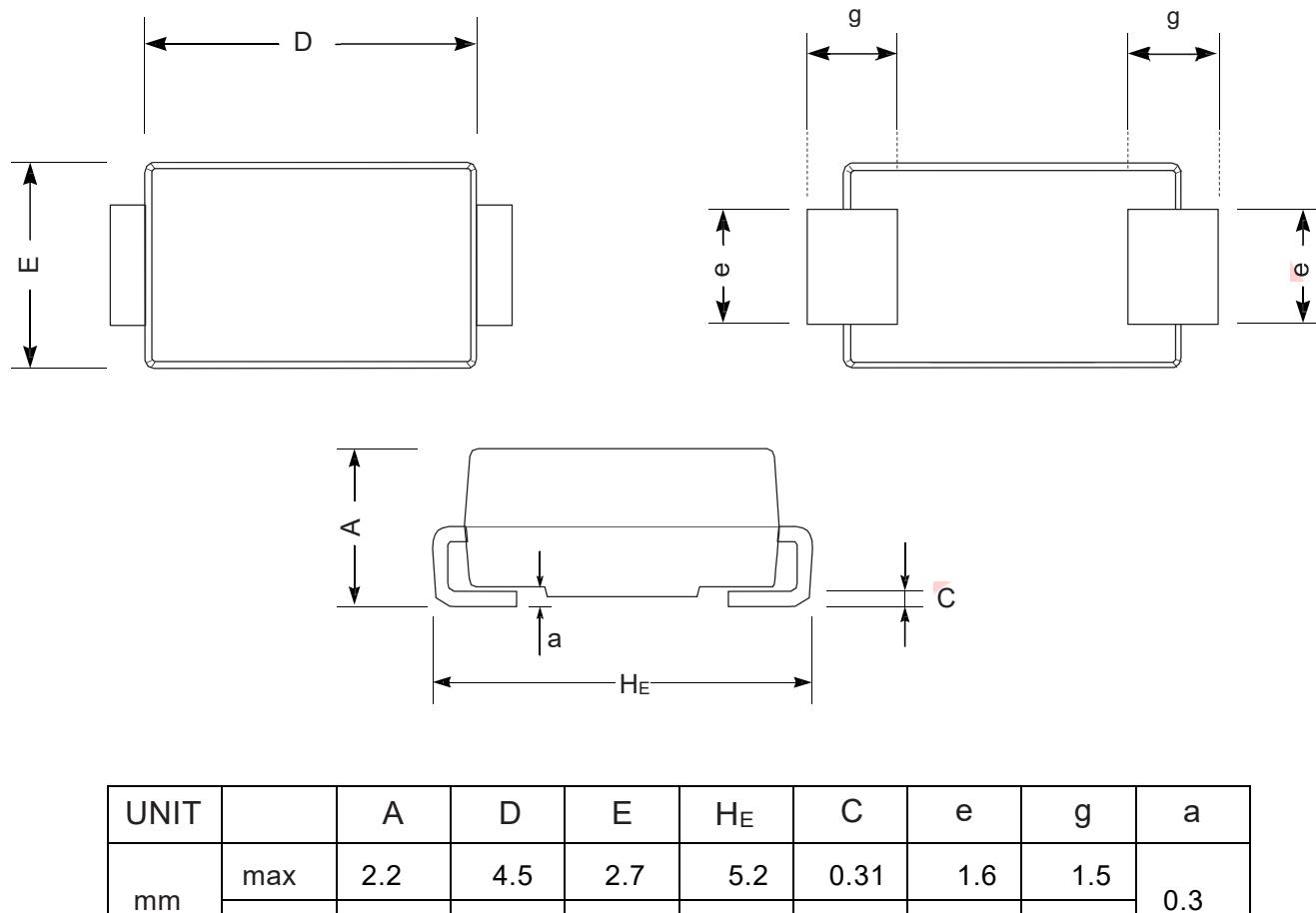


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PACKAGE OUTLINE

SMA



ORDERING INFORMATION

| Device | Package | Shipping |
|---------------------|---------|--------------------------------|
| SS32AT thru SS320AT | SMA | 5,000/ Tape & Reel (13 inches) |

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