

SSL34AT

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Features and Benefits:

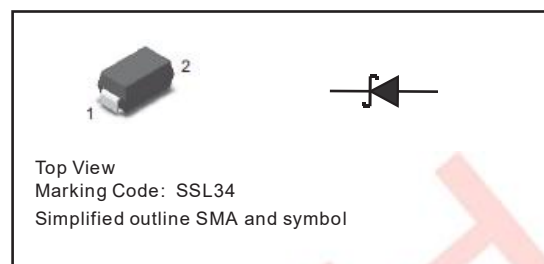
- ◆ Metal silicon junction, majority carrier conduction
- ◆ For surface mounted applications
- ◆ Low power loss, high efficiency
- ◆ High forward surge current capability
- ◆ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

Mechanical Data

- ◆ Case: SMA
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026
- ◆ Approx. Weight: 0.055g / 0.002oz

PINNING

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



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

| PARAMETER | SYMBOL | SSL34AT | Units |
|---|--------|------------|-------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 40 | V |
| Maximum RMS voltage | VRMS | 28 | V |
| Maximum DC blocking Voltage | VDC | 40 | V |
| Maximum Average Forward Rectified Current @Tc=100°C | IF(AV) | 3 | A |
| Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | IFSM | 80 | A |
| Maximum Instantaneous Forward Voltage at 3 A | VF | 0.45 | V |
| Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta = 100°C | IR | 0.3 5 | mA |
| Typical Junction Capacitance @f=1MHz, 4V DC | Cj | 450 | pF |
| Maximum Thermal Resistance Junction To Case(per leg) | RθJA | 60 | °C/W |
| Operating Junction Temperature Range | TJ | -55 ~ +150 | °C |
| Operation Junction Temperature and Storage Temperature | Tstg | -55 ~ +150 | °C |

1. Measured at 1 MHz and applied reverse voltage of 4 V D.C
2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

RATINGS AND CHARACTERISTIC CURVES

Fig.1 Forward Current Derating Curve

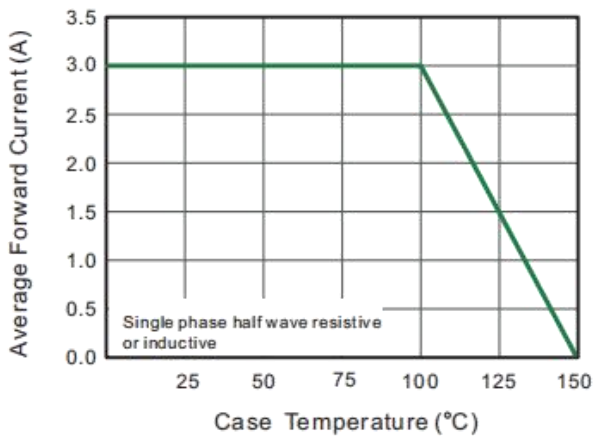


Fig.2 Typical Reverse Characteristics

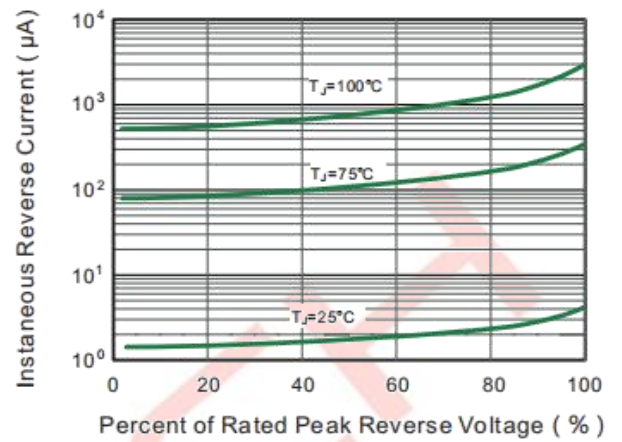


Fig.3 Typical Forward Characteristic

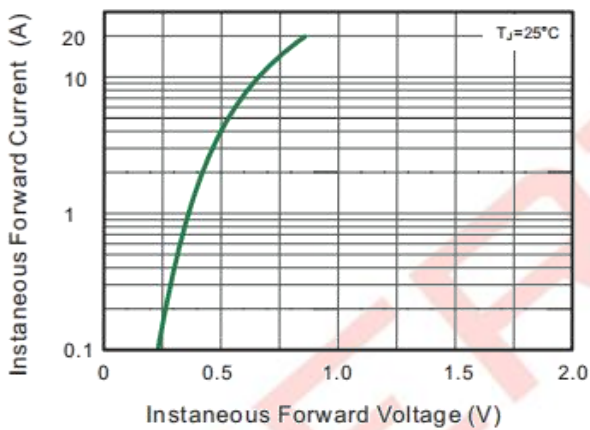


Fig.4 Typical Junction Capacitance

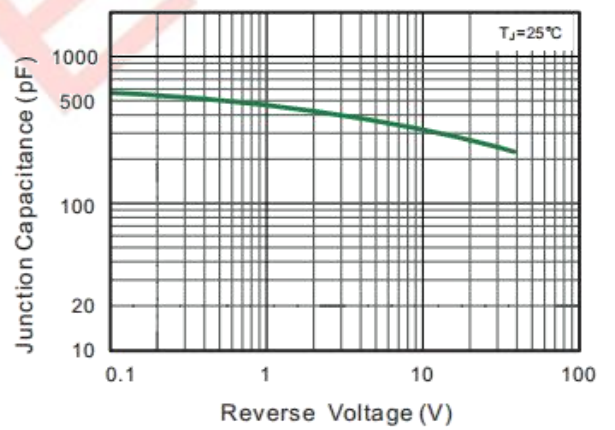


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

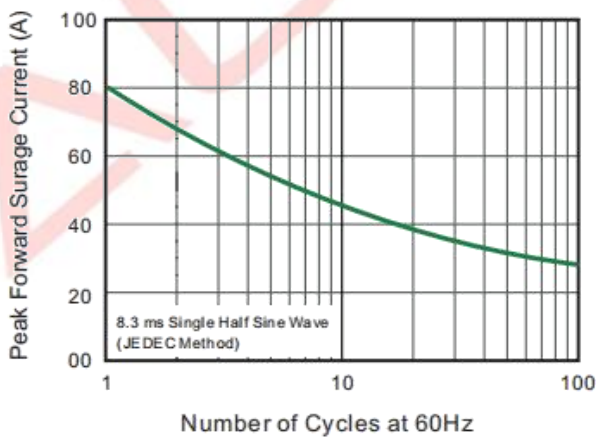
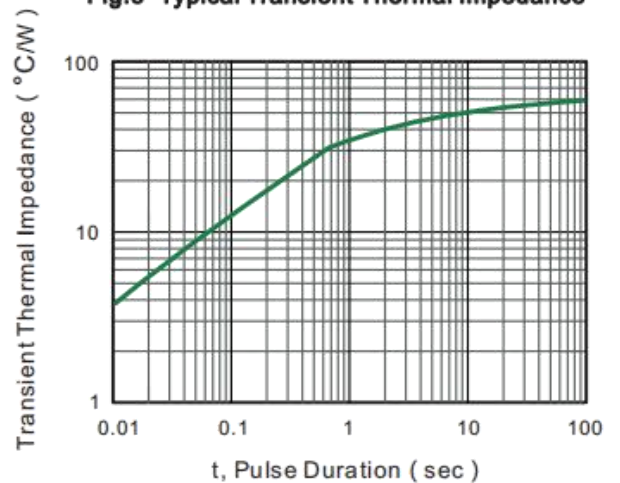


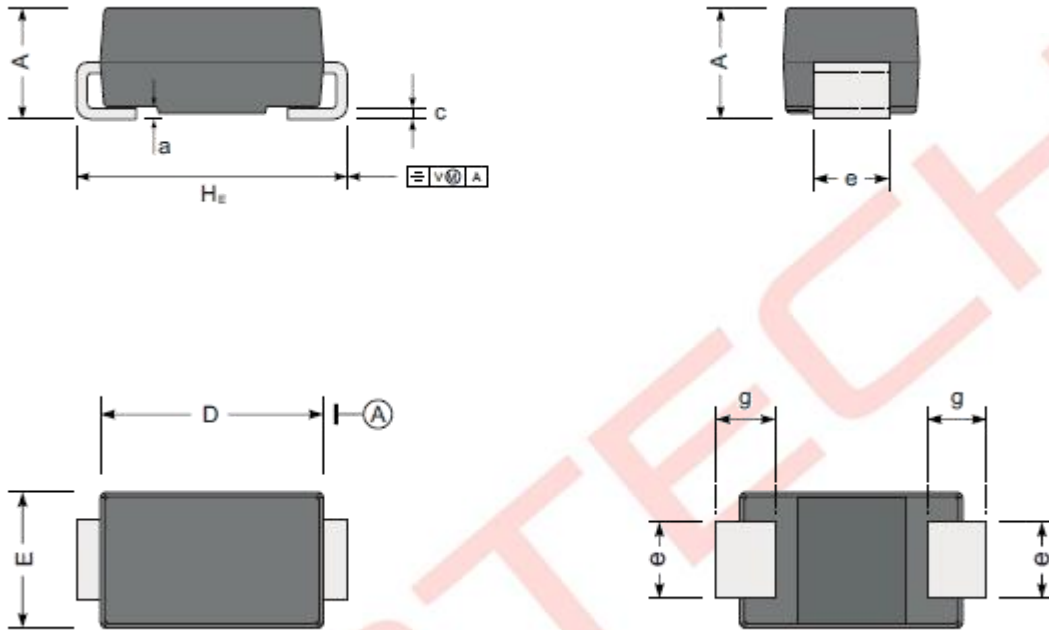
Fig.5- Typical Transient Thermal Impedance



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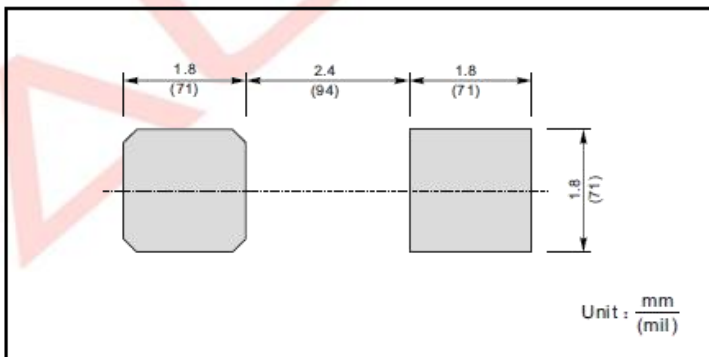
PACKAGE OUTLINE

SMA



| UNIT | | A | D | E | HE | c | e | g | a |
|------|-----|-----|-----|-----|-----|------|-----|-----|-----|
| mm | max | 2.2 | 4.5 | 2.7 | 5.2 | 0.31 | 1.6 | 1.5 | 0.3 |
| | min | 1.9 | 4.0 | 2.3 | 4.7 | 0.15 | 1.3 | 0.9 | |
| mil | max | 87 | 181 | 106 | 205 | 12 | 63 | 59 | 12 |
| | min | 75 | 157 | 91 | 185 | 6 | 51 | 35 | |

The recommended mounting pad size



Marking

| Type number | Marking code |
|-------------|--------------|
| SSL34AT | SSL34 |