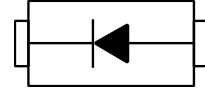


Surface Mount Schottky Barrier Rectifier

Feature

- 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 Characteristics

- Package: SMC
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.22g / 0.0077oz

Electrical characteristics per line@25°C

| Parameter | Symbol | Min. | Typ. | Max. | Units | Conditions |
|-----------------|--------|------|------|------|-------|-------------|
| Forward voltage | V_F | - | - | 0.7 | V | $I_F = 3A$ |
| Reverse current | I_R | - | - | 0.5 | mA | $V_R = 60V$ |

Absolute maximum rating@25°C

| Parameter | Symbol | Value | Units |
|--|-----------|------------|-------|
| Reverse voltage (DC) | V_{RM} | 60 | V |
| Average rectified forward current | I_O | 3 | A |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load | I_{FSM} | 80 | A |
| Operating Junction temperature Range | T_J | -55 to 125 | °C |
| Storage temperature | T_{STG} | -40 to 125 | °C |

Typical Characteristics

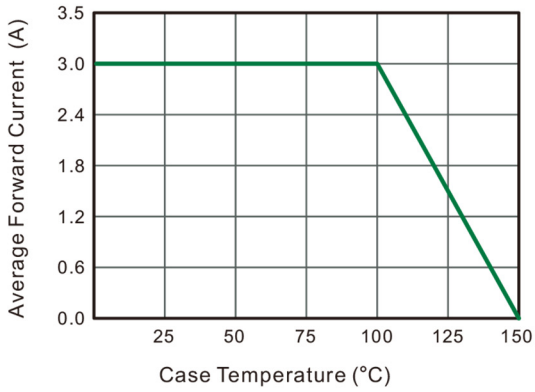


Fig.1 Forward Current Derating Curve

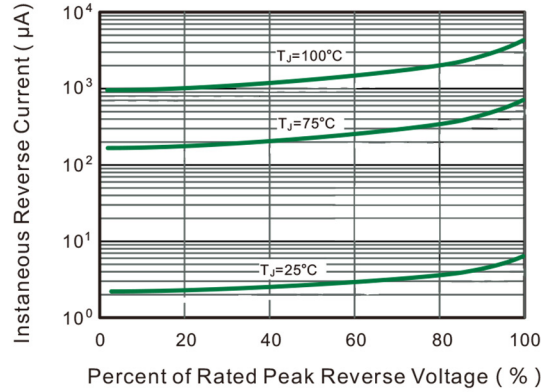


Fig.2 Typical Reverse Characteristics

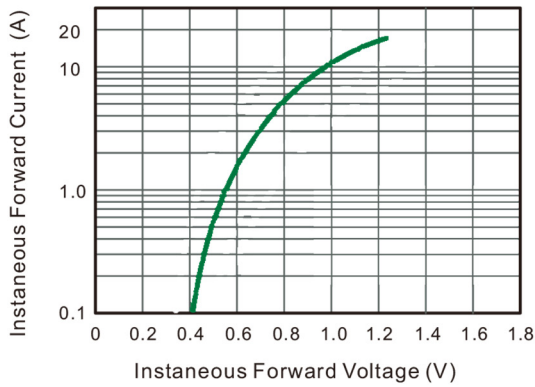


Fig.3 Typical Forward Characteristic

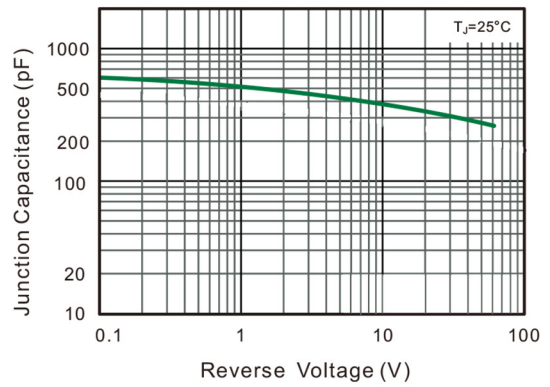


Fig.4 Typical Junction Capacitance

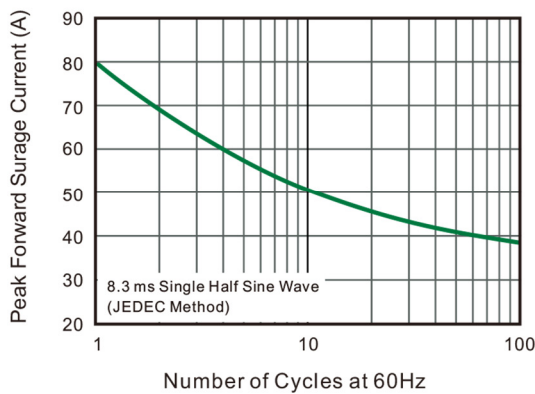


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

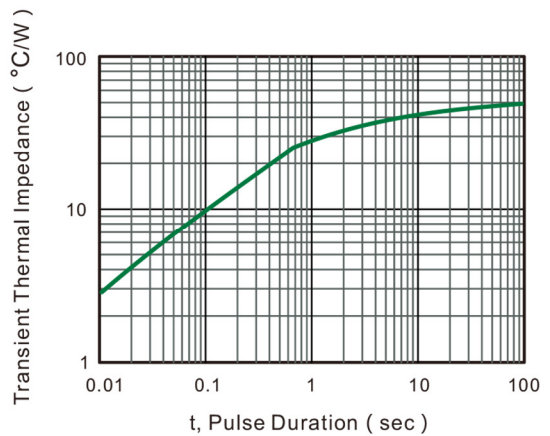
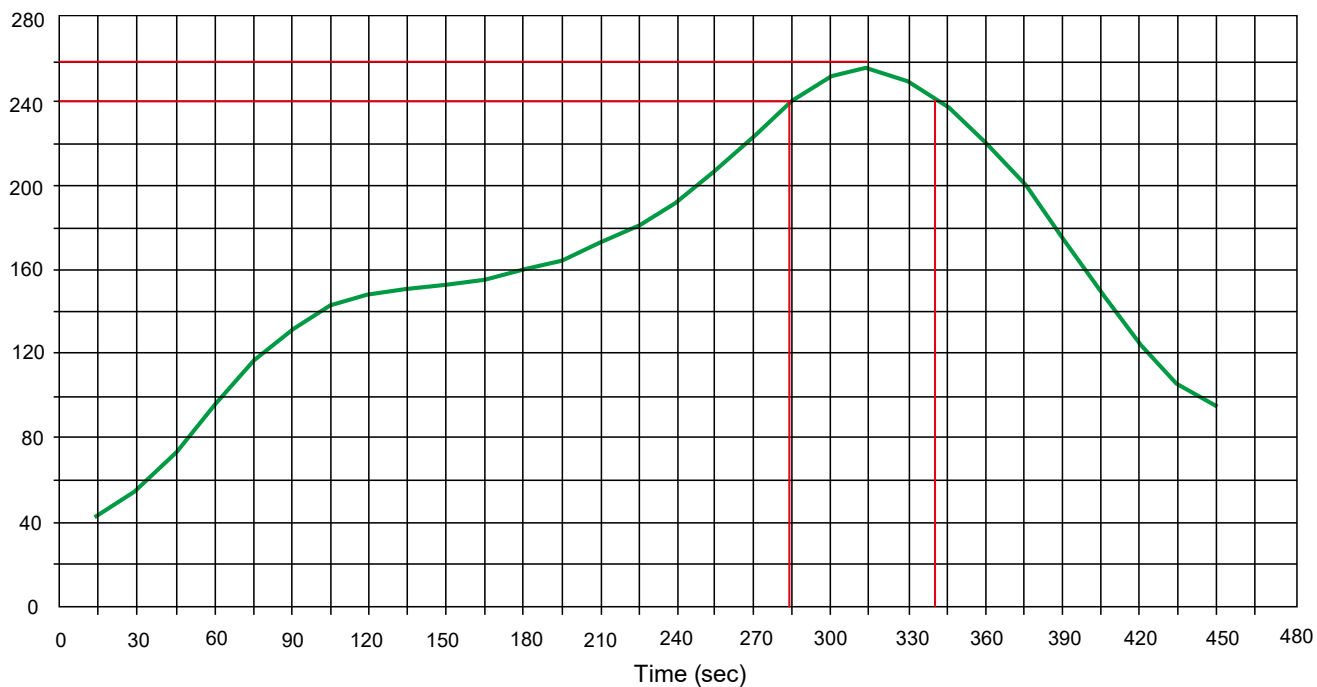


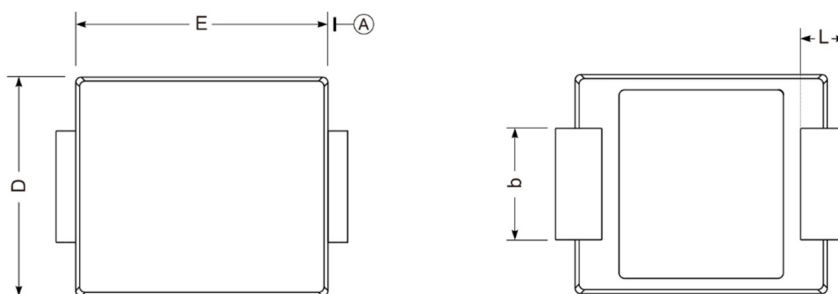
Fig.6 Typical Transient Thermal Impedance

Solder Reflow Recommendation

Peak Temp=257°C, Ramp Rate=0.802deg. °C/sec

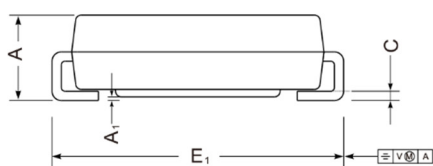


Product dimension (SMC)

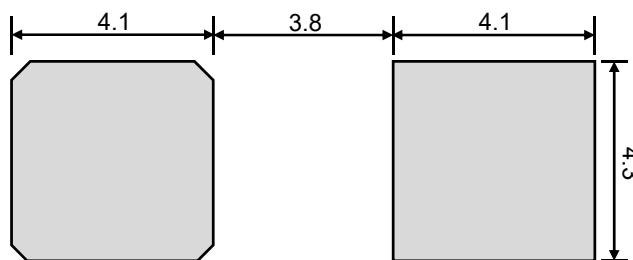


Top View

Bottom View



Side View




Suggested PCB Layout

Unit:mm

| Dim | Millimeters | | Inches | |
|----------------|-------------|------|--------|-------|
| | Min | Max | Min | Max |
| A | 2.00 | 2.62 | 0.079 | 0.103 |
| E | 6.50 | 7.00 | 0.256 | 0.276 |
| D | 5.60 | 6.20 | 0.220 | 0.244 |
| E ₁ | 7.50 | 8.00 | 0.299 | 0.315 |
| A ₁ | 0.05 | 0.21 | 0.002 | 0.008 |
| C | 0.15 | 0.31 | 0.006 | 0.012 |
| L | 0.90 | 1.60 | 0.035 | 0.063 |
| b | 2.75 | 3.25 | 0.108 | 0.128 |


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