

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

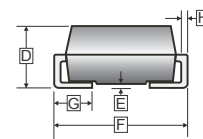
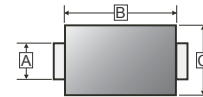
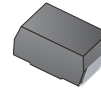
FEATURES

- High Current Capability
- Extremely Low Thermal Resistance
- For Surface Mount Application
- Higher Temp Soldering : 250°C for 10 Seconds at Terminals
- Low Reverse Current

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 Rate Flame Retardant
- Lead: Axial Leads, Solderable per MIL-STD-202 method 208 Guaranteed
- Polarity: Color Band Denotes Cathode End
- Mounting Position: Any

SMA



PACKAGE INFORMATION

| Package | MPQ | Leader Size |
|---------|-----|-------------|
| SMA | 5K | 13' inch |

| REF. | Millimeter | | REF. | Millimeter | |
|------|------------|------|------|------------|-------|
| | Min. | Max. | | Min. | Max. |
| A | 1.25 | 1.65 | E | 0.051 | 0.203 |
| B | 3.99 | 4.60 | F | 4.78 | 5.28 |
| C | 2.50 | 2.90 | G | 0.76 | 1.52 |
| D | 1.98 | 2.44 | H | 0.152 | 0.305 |

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%.)

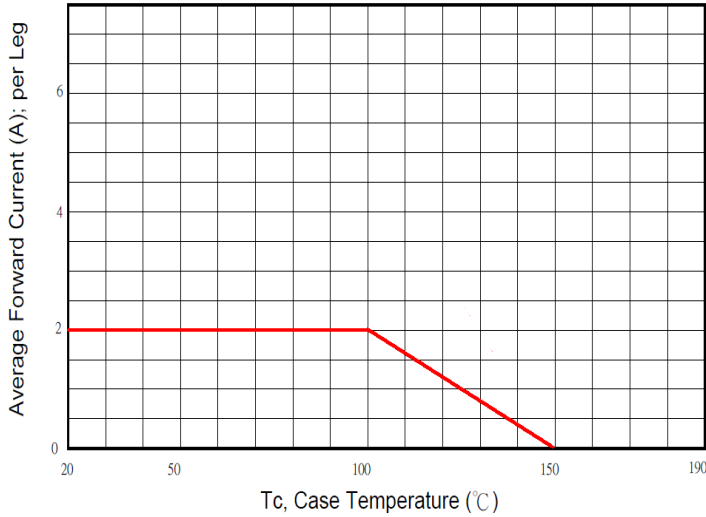
| Parameter | Symbol | Rating | Unit |
|--|-----------------|---|-------------------|
| Peak Repetitive Peak reverse voltage | V_{RRM} | 200 | V |
| Working Peak Reverse Voltage | V_{RWM} | 200 | V |
| Maximum DC Blocking Voltage | V_R | 200 | V |
| Average Forward Current @ $T_J=25^\circ\text{C}$ | $I_{F(AV)}$ | 2 | A |
| Peak Forward Current @ 8.3 ms Half Sine | I_{FSM} | 50 | A |
| Maximum Instantaneous Forward Voltage | V_F | $I_{FM} = 2.0 \text{ A}, T_A = 25^\circ\text{C}$ | 0.9 |
| | | $I_{FM} = 2.0 \text{ A}, T_A = 75^\circ\text{C}$ | 0.85 |
| | | $I_{FM} = 2.0 \text{ A}, T_A = 125^\circ\text{C}$ | 0.72 |
| Maximum DC Reverse Current At Rated DC Blocking Voltage ⁴ | I_R | $T_J = 25^\circ\text{C}$ | 0.2 |
| | | $T_J = 100^\circ\text{C}$ | 5 |
| Typical Junction Capacitance ¹ | C_J | 70 | pF |
| Typical Thermal Resistance ² | $R_{\theta JA}$ | 80 | °C / W |
| Typical Thermal Resistance ³ | $R_{\theta JC}$ | 25 | °C / W |
| Voltage Rate of Change (Rated V_R) | dv / dt | 10000 | V / μs |
| Operating Temperature Range | T_J | -50~150 | °C |
| Storage temperature | T_{STG} | -65~150 | °C |

Notes:

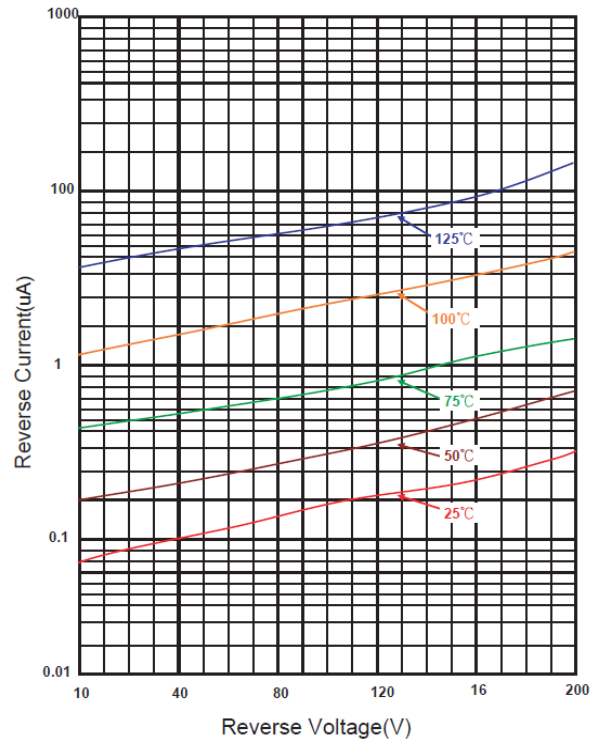
1. Measured at 1MHz and applied reverse voltage of 5.0 V D.C.
2. Thermal Resistance Junction to Ambient.
3. Thermal Resistance Junction to Case.
4. Pulse test: 300us pulse width, 1% duty cycle

RATINGS AND CHARACTERISTIC CURVES

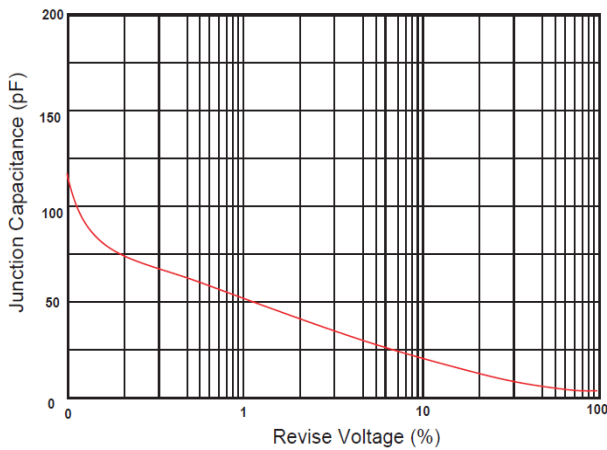
Typical Forward Current Derating Curve



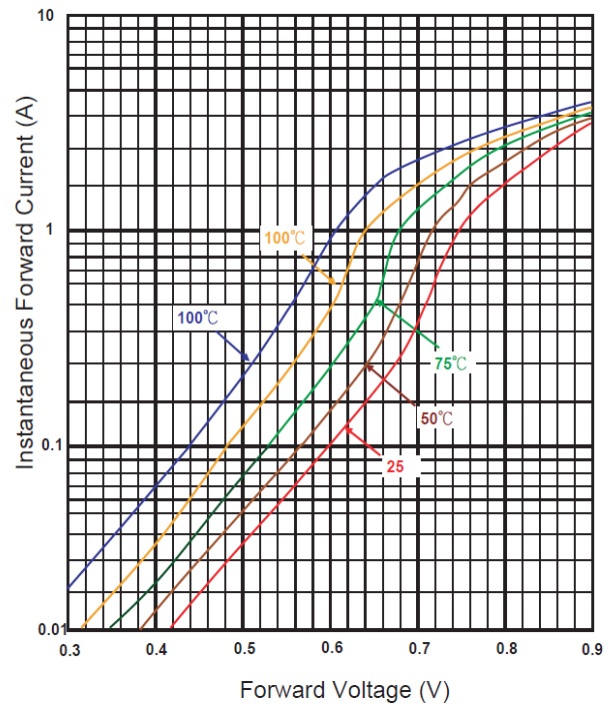
Typical Reverse Characteristic



Typical Junction Capacitance



Typical Forward Characteristic



Maximum Non- Repetitive Forward Surge Current

