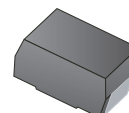


RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

- High Current Capability
- High Surge Current Capability
- Low Reverse Current
- Qualified to AEC-Q101 Standards for High Reliability

SMA



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

PACKAGE INFORMATION

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

Cathode  Anode

ORDER INFORMATION

| Part Number | Type |
|-------------|---------------------------------|
| SK545ACR-C | Lead (Pb)-free and Halogen-free |

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 | Ratings | Unit | |
|--|-------------------------|--------------|--------------------|----|
| Maximum Repetitive Peak Reverse Voltage | V_{RRM} | 45 | V | |
| Maximum RMS Voltage | V_{RMS} | 31.5 | | |
| Maximum DC Blocking Voltage | V_{DC} | 45 | | |
| Maximum Average Forward Rectified Current | I_F | 5 | A | |
| Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load | I_{FSM} | 100 | A | |
| Maximum Instantaneous Forward Voltage @ $T_A=25^\circ\text{C}$ | $I_F=1\text{A}$ | V_F | 0.34 | V |
| | $I_F=5\text{A}$ | | 0.48 | |
| Maximum DC Reverse Current @Rated DC Blocking Voltage | $T_A=25^\circ\text{C}$ | I_R | 0.5 | mA |
| | $T_A=100^\circ\text{C}$ | | 10 | |
| Typical Junction Capacitance ¹ | C_J | 1000 | pF | |
| Typical Thermal Resistance | $R_{\theta JC}$ | 30 | $^\circ\text{C/W}$ | |
| Operating Junction & Storage Temperature Range | T_J, T_{STG} | 150, -55~150 | $^\circ\text{C}$ | |

Note:

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

RATINGS AND CHARACTERISTIC CURVES

FIG. 1-Typical Forward Current Derating Curve

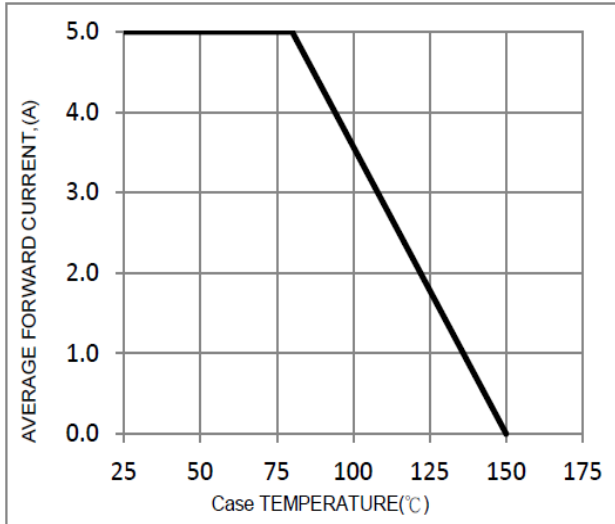


FIG. 2-Typical Forward Characteristics

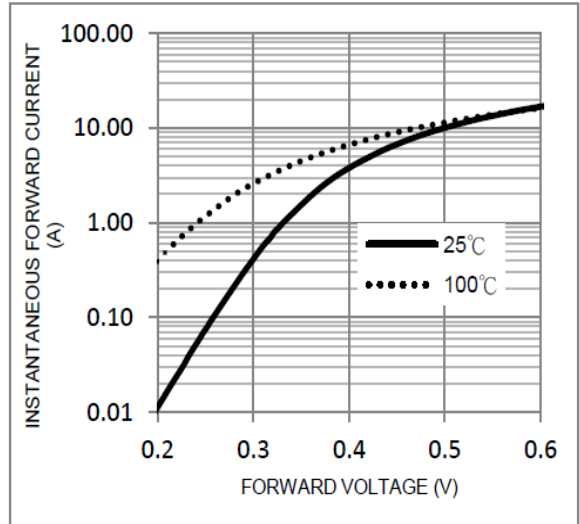


FIG. 3-Maximum Non-Repetitive Forward Surge Current

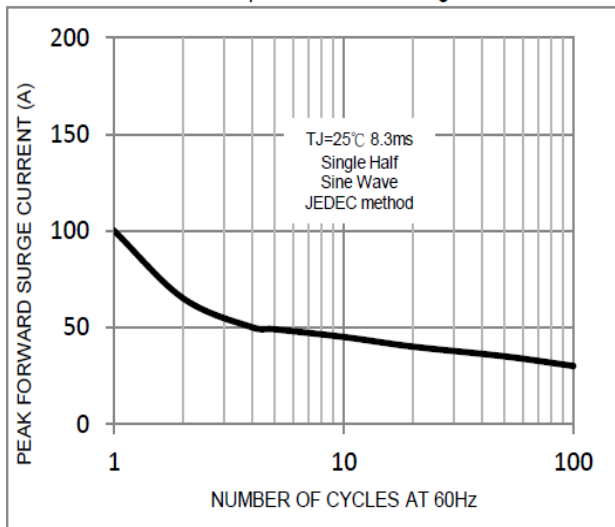


FIG. 4-Typical Reverse Characteristics

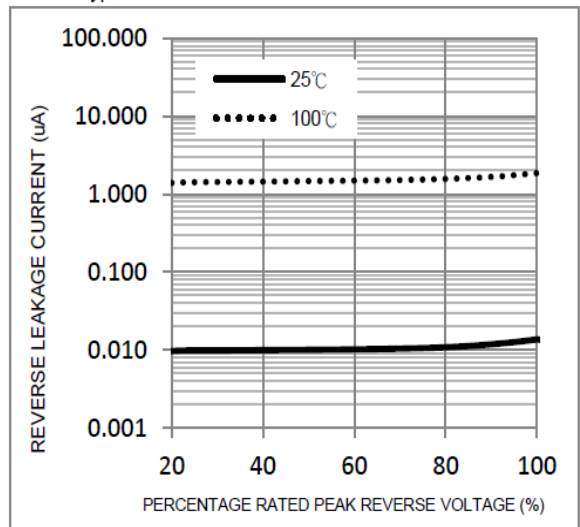
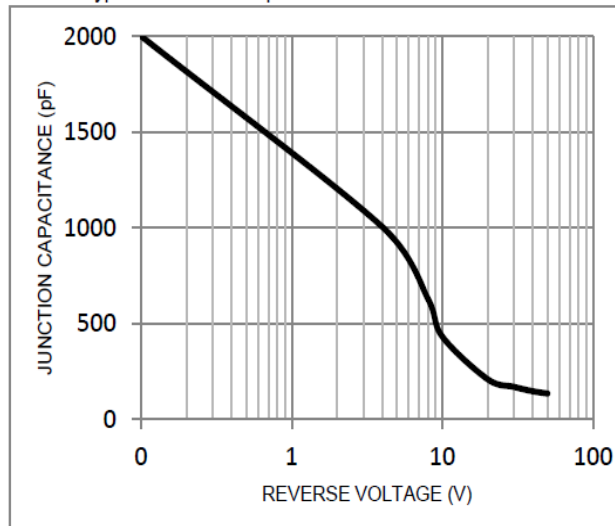
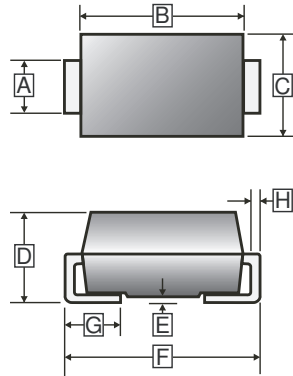


FIG. 5-Typical Junction Capacitance



PACKAGE OUTLINE DIMENSIONS

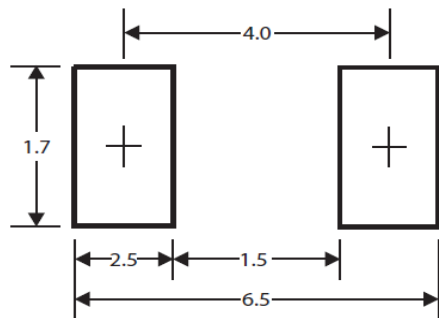
SMA



| REF. | Millimeter | |
|------|------------|------|
| | Min. | Max. |
| A | 1.23 | 1.65 |
| B | 3.99 | 4.75 |
| C | 2.30 | 2.90 |
| D | 1.90 | 2.62 |
| E | - | 0.30 |
| F | 4.70 | 5.28 |
| G | 0.75 | 1.52 |
| H | 0.15 | 0.31 |

MOUNTING PAD LAYOUT

SMA



*Dimensions in millimeters