

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

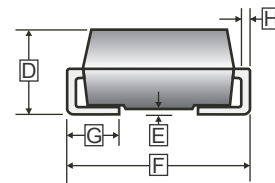
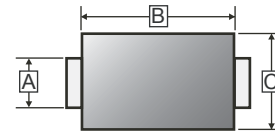
FEATURES

- Low profile package
- Ideal for automated placement
- Guard Ring for over voltage protection
- Low forward voltage drop
- Component in accordance to RoHS 2002/95/EC

MECHANICAL DATA

- Case: Molded Plastic
- Epoxy: UL 94V-0 rate flame retardant
- Terminals: Lead Free Plating (Tin Finish).
Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Mounting position: Any
- Weight: 0.095 grams

SMB



| REF. | Millimeter | | REF. | Millimeter | |
|------|------------|------|------|------------|-------|
| | Min. | Max. | | Min. | Max. |
| A | 1.91 | 2.20 | E | - | 0.203 |
| B | 4.06 | 4.70 | F | 5.08 | 5.59 |
| C | 3.30 | 3.94 | G | 0.76 | 1.52 |
| D | 2.13 | 2.44 | H | 0.15 | 0.305 |

PACKAGE INFORMATION

| Package | MPQ | Leader Size |
|---------|-----|-------------|
| SMB | 3K | 13 inch |

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 |
|--|-----------------|-------------------|------|
| Maximum repetitive peak reverse voltage | V_{RRM} | 40 | V |
| Maximum RMS voltage | V_{RMS} | 28 | V |
| Maximum DC Blocking Voltage | V_{DC} | 40 | V |
| Maximum average forward rectified current | $I_{F(AV)}$ | 5 | A |
| Peak Forward Current @ 8.3 ms Half Sine | I_{FSM} | 100 | A |
| Maximum Instantaneous Forward Voltage @ $I_F=5A$ | V_F | 0.45 | V |
| Maximum DC Reverse Current At Rated DC Blocking | I_R | $T_C=25^\circ C$ | 0.5 |
| | | $T_C=100^\circ C$ | 50 |
| Typical Junction Capacitance ¹ | C_J | 400 | pF |
| Typical Thermal Resistance | $R_{\theta JA}$ | 60 | °C/W |
| Typical Thermal Resistance | $R_{\theta JC}$ | 20 | °C/W |
| Operating And Storage Temperature Range | T_J, T_{STG} | -55~125, -50~150 | °C |

Note:

1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

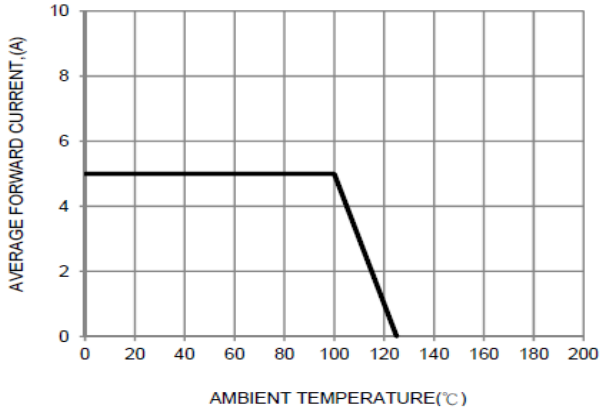


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

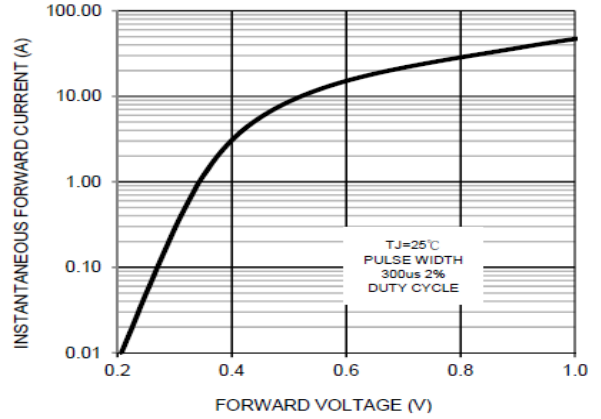


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

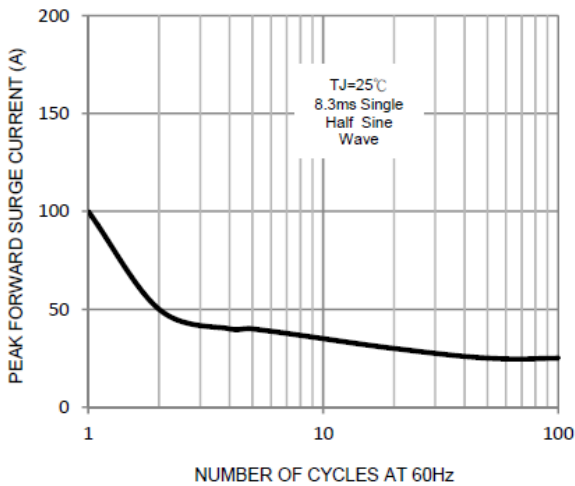


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

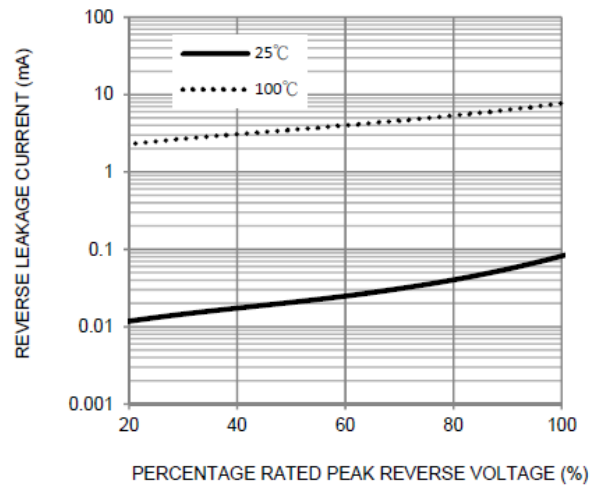


FIG. 5-TYPICAL JUNCTION CAPACITANCE

