

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

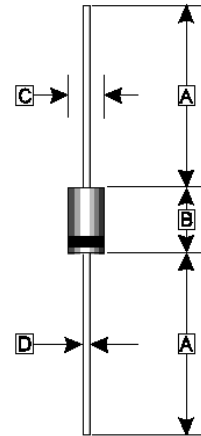
## FEATURES

- Trench MOS Schottky technology
- Low forward voltage drop
- Low reverse current
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

## MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 1.1 g (Approximate)

DO-27(DO-201)



| REF. | Millimeter |      |
|------|------------|------|
|      | Min.       | Max. |
| A    | 25.4 (TYP) |      |
| B    | 7.20       | 9.50 |
| C    | 4.80       | 5.60 |
| D    | 1.10       | 1.30 |

## 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 Recurrent Peak Reverse Voltage                   | $V_{RRM}$       | 100     | V           |
| Working Peak Reverse Voltage                             | $V_{RSM}$       | 100     | V           |
| Maximum DC Blocking Voltage                              | $V_{DC}$        | 100     | V           |
| Maximum Average Forward Rectified Current                | $I_F$           | 5       | A           |
| Peak Forward Surge Current, 8.3 ms single half sine-wave | $I_{FSM}$       | 80      | A           |
| Voltage Rate of Change (Rated $V_R$ )                    | dv/dt           | 10000   | V / $\mu$ s |
| Typical Thermal Resistance                               | $R_{\theta JC}$ | 12      | °C /W       |
| Operating and Storage Temperature Range                  | $T_J, T_{STG}$  | -40~150 | °C          |

## ELECTRICAL CHARACTERISTICS

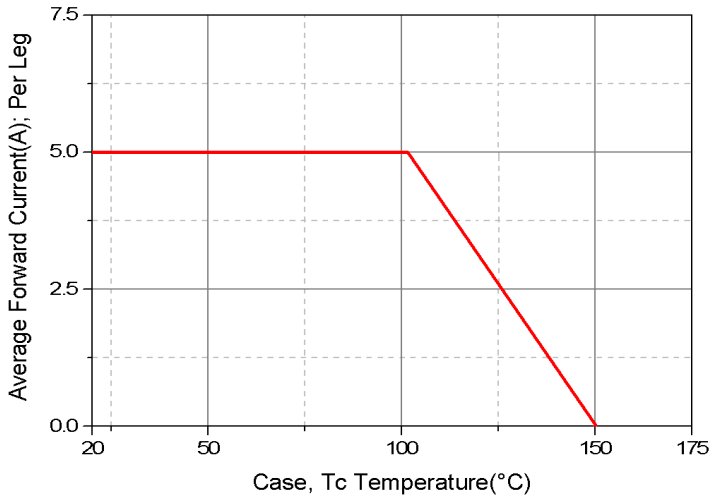
| Parameter  | Symbol | Typ. | Max. | Unit | Test Condition                |
|--|--------|------|------|------|-------------------------------|
| Maximum Instantaneous Forward Voltage                                | $V_F$  | 0.55 | 0.63 | V    | $I_F = 3A, T_J = 25^\circ C$  |
|  |        | 0.65 | 0.75 |      | $I_F = 5A, T_J = 25^\circ C$  |
|  |        | 0.60 | -    |      | $I_F = 5A, T_J = 125^\circ C$ |
| Maximum DC Reverse Current at Rated DC Blocking Voltage <sup>2</sup> | $I_R$  | -    | 0.1  | mA   | $T_J = 25^\circ C$            |
|  |        | -    | 10   |      | $T_J = 100^\circ C$           |
| Typical Junction Capacitance <sup>1</sup>                            | $C_J$  | 300  | -    | pF   |                               |

NOTES:

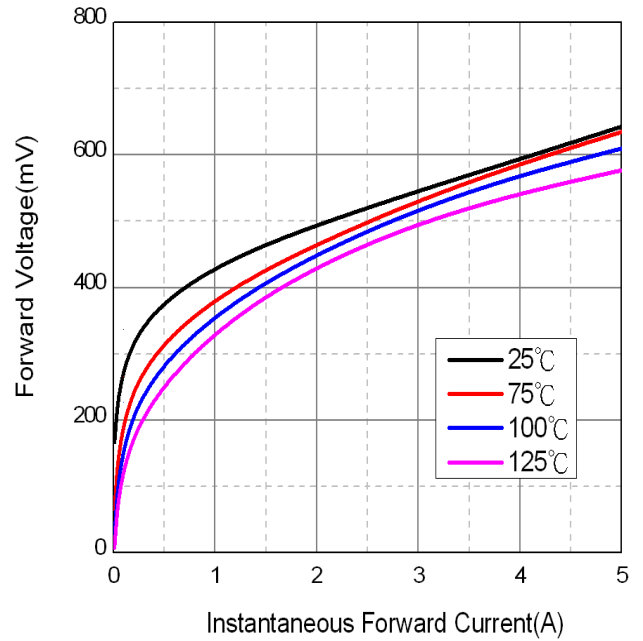
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test : Pulse Width = 300  $\mu$ s, Duty Cycle  $\leq$  2.0%.

**RATINGS AND CHARACTERISTIC CURVES**

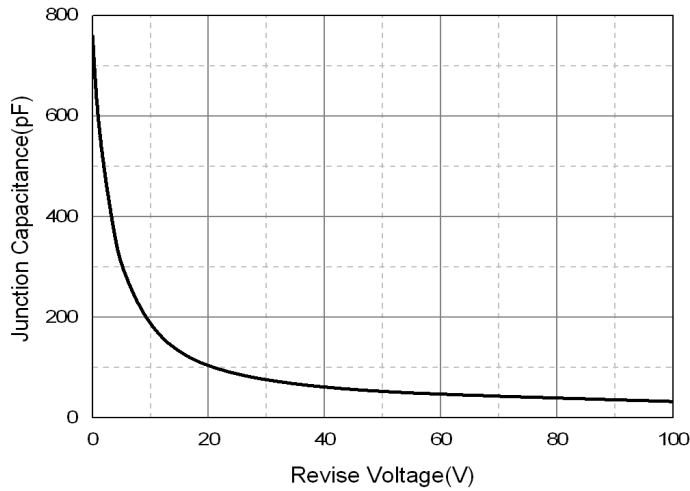
Typical Forward Current Derating Curve



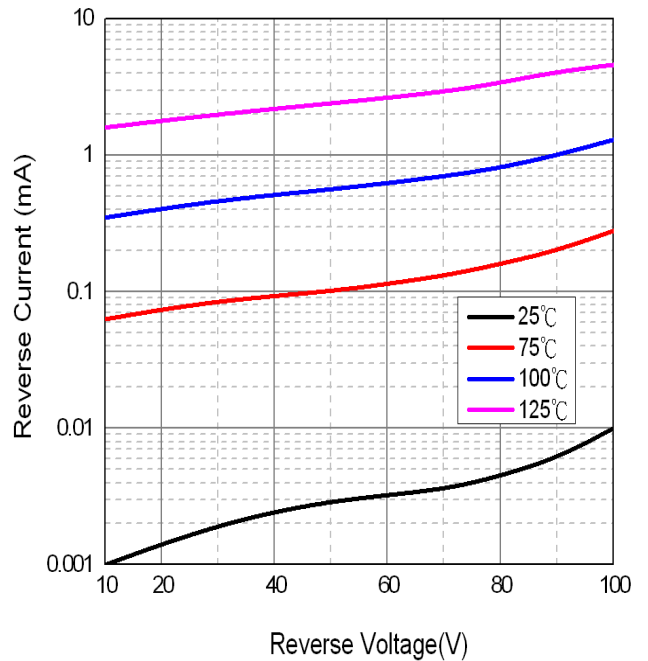
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

