

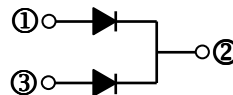
RoHS Compliant Product  
A suffix of "-C" specifies halogen free

## FEATURES

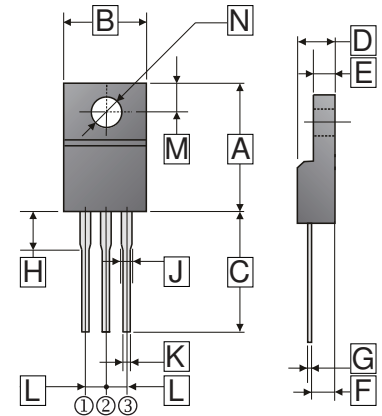
- Planar MOS Schottky technology
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

## MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any
- Weight: 1.98 g (Approximate)



ITO-220



| REF. | Millimeter |       | REF. | Millimeter |       |
|------|------------|-------|------|------------|-------|
|      | Min.       | Max.  |      | Min.       | Max.  |
| A    | 14.60      | 15.70 | H    | 2.70       | 4.00  |
| B    | 9.50       | 10.50 | J    | 0.90       | 1.50  |
| C    | 12.60      | 14.00 | K    | 0.50       | 0.90  |
| D    | 4.30       | 4.70  | L    | 2.34       | 2.74  |
| E    | 2.30       | 3.2   | M    | 2.40       | 3.00  |
| F    | 2.30       | 2.90  | N    | φ 3.0      | φ 3.4 |
| G    | 0.30       | 0.75  |      |            |       |

## 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                   | $V_{RRM}$       | 60      | V           |
| Working Peak Reverse Voltage                             | $V_{RSM}$       | 60      | V           |
| Maximum DC Blocking Voltage                              | $V_{DC}$        | 60      | V           |
| Maximum Average Forward Rectified Current                | $I_F$           | 10      | A           |
| (Per Leg)  |                 | 20      |             |
| (Per Device)   |                 |         |             |
| Peak Forward Surge Current, 8.3 ms single half sine-wave | $I_{FSM}$       | 150     | A           |
| Voltage Rate of Change (Rated $V_R$ )                    | $dv/dt$         | 10000   | V / $\mu$ s |
| Typical Thermal Resistance                               | $R_{\theta JC}$ | 4       | °C / W      |
| Operating and Storage Temperature Range                  | $T_J, T_{STG}$  | -40~150 | °C          |

## ELECTRICAL CHARACTERISTICS

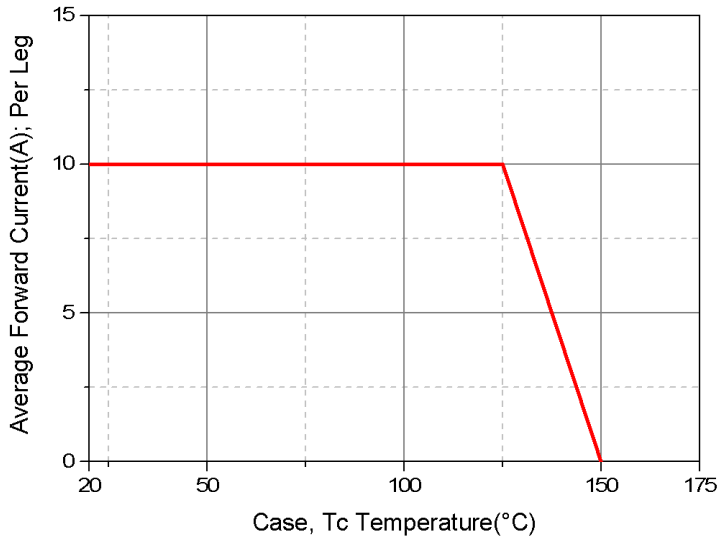
| Parameter  | Symbol | Typ. | Max. | Unit | Test Condition                 |
|--|--------|------|------|------|--------------------------------|
| Maximum Instantaneous Forward Voltage                                | $V_F$  | 0.38 | 0.41 | V    | $I_F = 3A, T_J = 25^\circ C$   |
|  |        | 0.44 | 0.49 |      | $I_F = 5A, T_J = 25^\circ C$   |
|  |        | 0.56 | 0.6  |      | $I_F = 10A, T_J = 25^\circ C$  |
|  |        | 0.54 | -    |      | $I_F = 10A, T_J = 125^\circ C$ |
| Maximum DC Reverse Current at Rated DC Blocking Voltage <sup>2</sup> | $I_R$  | -    | 0.3  | mA   | $T_J = 25^\circ C$             |
|  |        | -    | 15   |      | $T_J = 100^\circ C$            |
| Typical Junction Capacitance <sup>1</sup>                            | $C_J$  | 320  | -    | pF   |                                |

### NOTES:

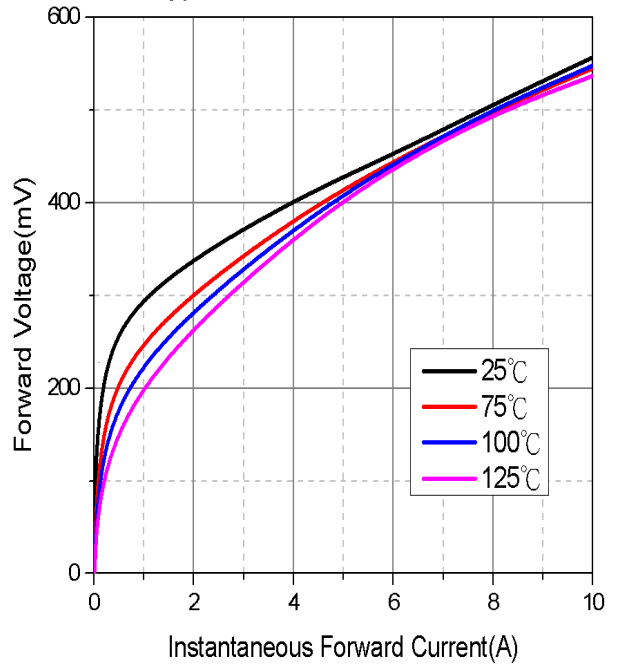
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test : Pulse Width = 300  $\mu$ s, Duty Cycle  $\leq$  2.0%.

**RATINGS AND CHARACTERISTIC CURVES**

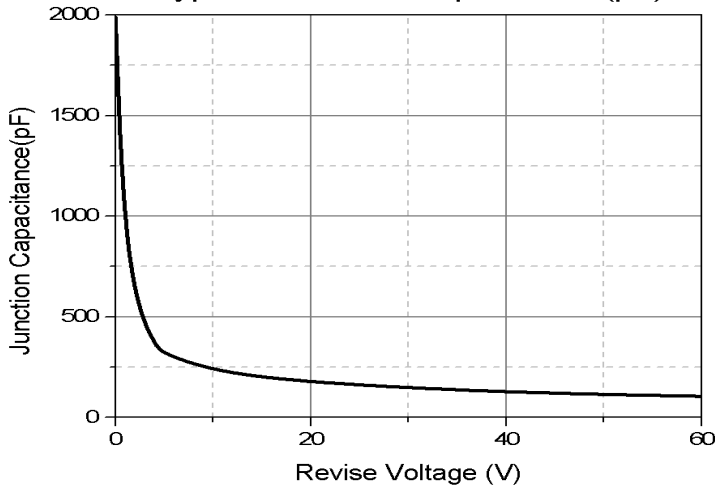
Typical Forward Current Derating Curve



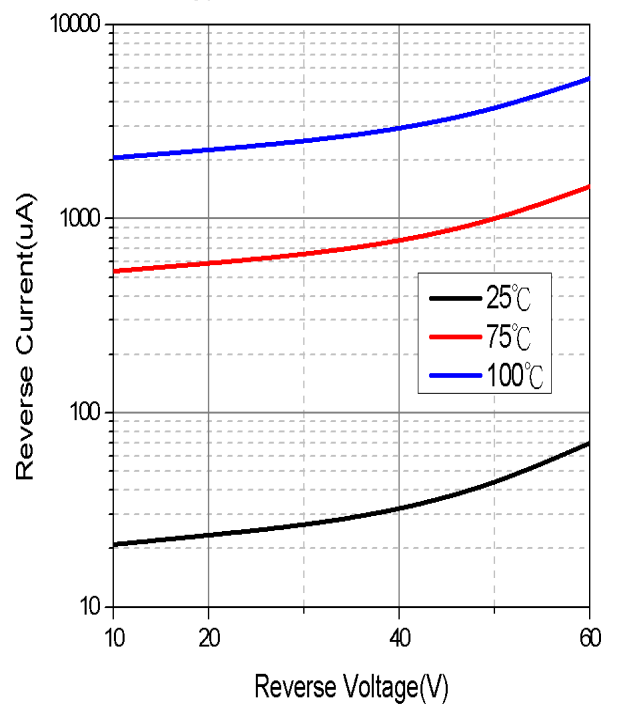
Typical Forward Characteristic



Typical Junction Capacitance (pF)



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

