

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

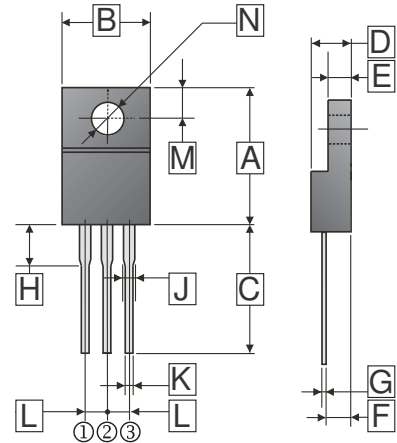
## FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

## MECHANICAL DATA

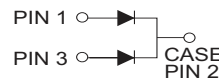
- Case: Molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Lead: Lead solderable per MIL-STD-202 method 208 guaranteed
- Polarity: As Marked
- Mounting position: Any
- Weight: 2.2 grams (approximate)

ITO-220



Dimensions in millimeters

| REF. | Millimeter |       | REF. | Millimeter |      |
|------|------------|-------|------|------------|------|
|      | Min.       | Max.  |      | Min.       | Max. |
| A    | 14.80      | 15.60 | H    | 3.00       | 4.00 |
| B    | 9.50       | 10.50 | J    | 0.90       | 1.50 |
| C    | 13.00      | REF.  | K    | 0.50       | 0.90 |
| D    | 4.30       | 4.70  | L    | 2.34       | 2.74 |
| E    | 2.50       | 3.20  | M    | 2.50       | 2.90 |
| F    | 2.40       | 2.90  | N    | φ 3.5      | REF. |
| 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%.)

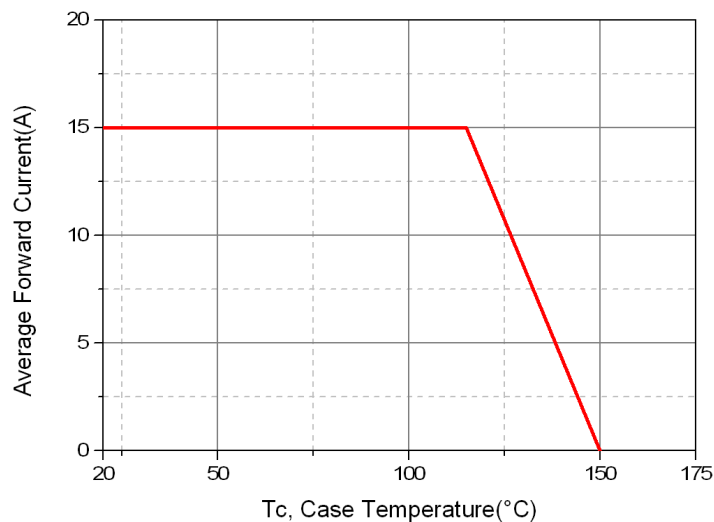
| Parameter                                                                                          |                                       | Symbol          | Rating  | Unit        |
|----------------------------------------------------------------------------------------------------|---------------------------------------|-----------------|---------|-------------|
| Maximum Recurrent Peak Reverse Voltage                                                             |                                       | $V_{RRM}$       | 100     | V           |
| Working Peak Reverse Voltage                                                                       |                                       | $V_{RSM}$       | 100     | V           |
| Maximum DC Blocking Voltage                                                                        |                                       | $V_{DC}$        | 100     | V           |
| Maximum Average Forward Rectified Current                                                          | Per Leg                               | $I_F$           | 10      | A           |
|                                                                                                    | Per Device                            |                 | 20      |             |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) |                                       | $I_{FSM}$       | 150     | A           |
| Maximum Instantaneous Forward Voltage                                                              | $I_F=10A, T_A=25^{\circ}C$ , per leg  | $V_F$           | 0.85    | V           |
|                                                                                                    | $I_F=10A, T_A=125^{\circ}C$ , per leg |                 | 0.74    |             |
| Maximum DC Reverse Current at Rated DC Blocking Voltage <sup>3</sup>                               | $T_A = 25^{\circ}C$                   | $I_R$           | 0.5     | mA          |
|                                                                                                    | $T_A = 100^{\circ}C$                  |                 | 10      |             |
| Typical Junction Capacitance <sup>1</sup>                                                          |                                       | $C_J$           | 150     | pF          |
| Typical Thermal Resistance <sup>2</sup>                                                            |                                       | $R_{\theta JC}$ | 4       | °C / W      |
| Voltage Rate Of Change (Rated $V_R$ )                                                              |                                       | $dv / dt$       | 10000   | V / $\mu s$ |
| Operating Temperature Range $T_J$                                                                  |                                       | $T_J$           | -50~125 | °C          |
| Storage Temperature Range $T_{STG}$                                                                |                                       | $T_{STG}$       | -50~150 | °C          |

Notes:

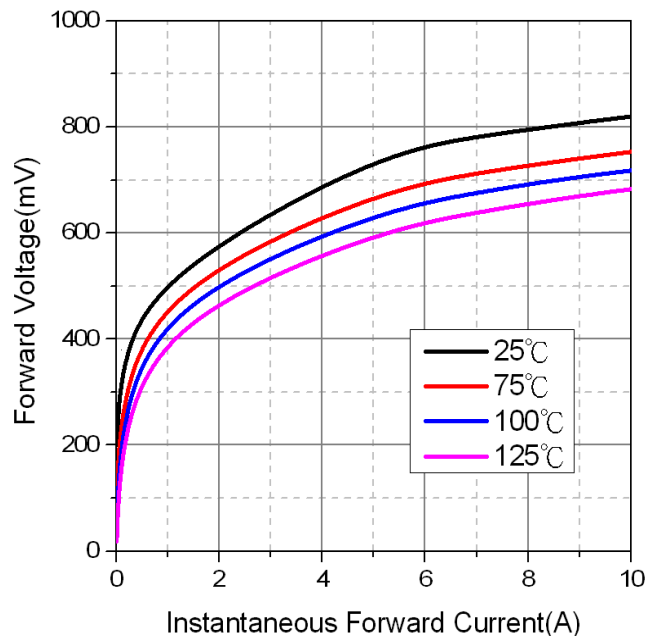
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.
3. Pulse test: 300uS pulse width, 1% duty cycle.

## RATINGS AND CHARACTERISTIC CURVES

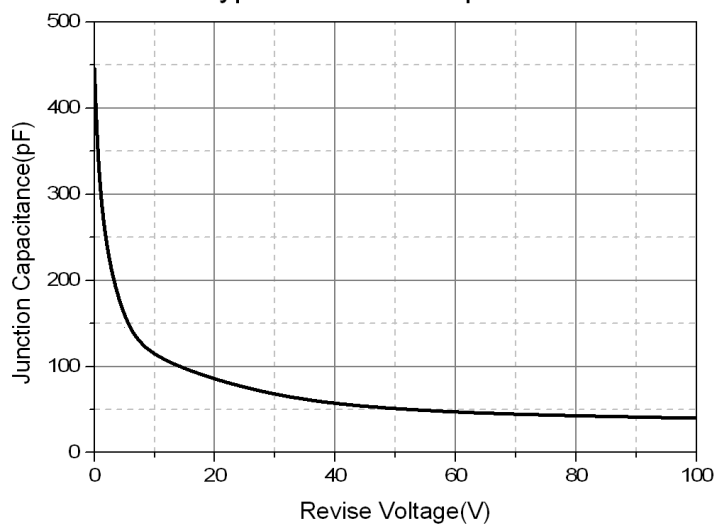
Typical Forward Current Derating Curve



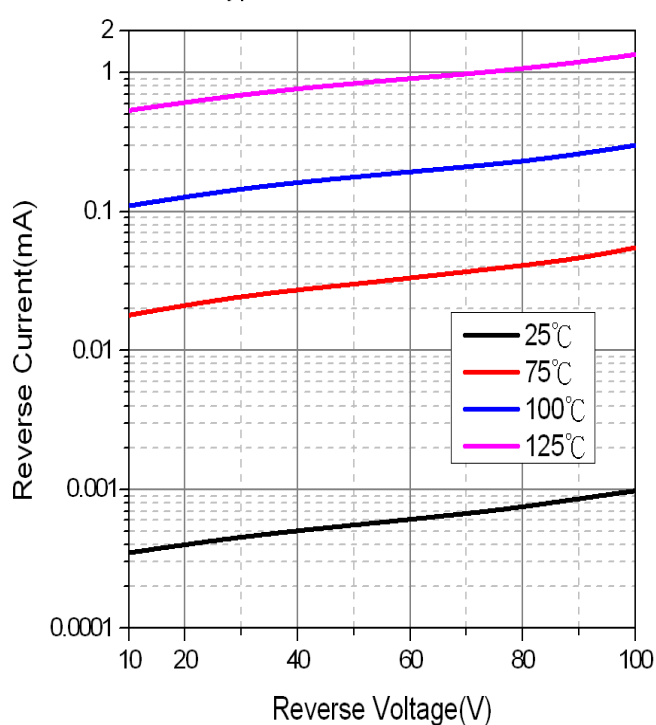
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non-Repetitive Forward Surge Current

