

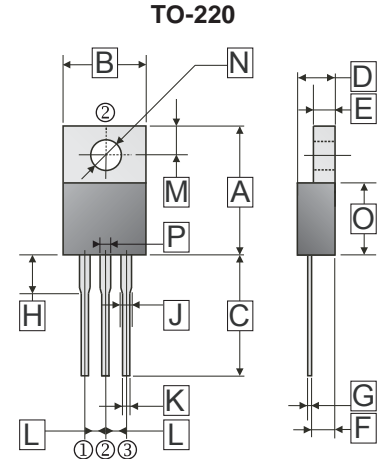
RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

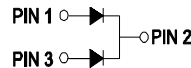
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Epitaxial construction

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: 1.93 grams (approximate)



| REF. | Millimeter | | REF. | Millimeter | |
|------|------------|-------|------|------------|------|
| | Min. | Max. | | Min. | Max. |
| A | 14.22 | 16.51 | J | 0.7 | 1.78 |
| B | 9.65 | 10.67 | K | 0.38 | 1.02 |
| C | 12.50 | 14.75 | L | 2.39 | 2.69 |
| D | 3.56 | 4.90 | M | 2.50 | 3.43 |
| E | 0.51 | 1.45 | N | 3.10 | 4.09 |
| F | 2.03 | 2.92 | O | 8.38 | 9.65 |
| G | 0.31 | 0.76 | P | 0.89 | 1.45 |
| H | 3.5 | 4.5 | | | |



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%.)

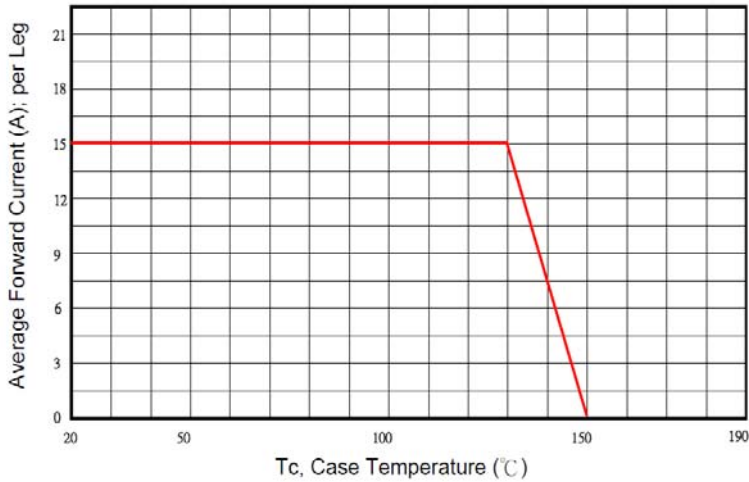
| Parameter | | Symbol | Part Number | Unit |
|--|---|-----------------|-------------|-------------------|
| Maximum Recurrent Peak Reverse Voltage | | V_{RRM} | 45 | V |
| Working Peak Reverse Voltage | | V_{RSM} | 45 | V |
| Maximum DC Blocking Voltage | | V_{DC} | 45 | V |
| Maximum Average Forward Rectified Current | Per Leg | I_F | 15 | A |
| | Per Device | | 30 | |
| Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method) | | I_{FSM} | 180 | A |
| Maximum Instantaneous Forward Voltage | $I_F = 15\text{ A}, T_A = 25^\circ\text{C}, \text{ per leg}$ | V_F | 0.57 | V |
| | $I_F = 15\text{ A}, T_A = 125^\circ\text{C}, \text{ per leg}$ | | 0.52 | |
| Maximum DC Reverse Current at Rated DC Blocking Voltage ³ | $T_A = 25^\circ\text{C}$ | I_R | 0.5 | mA |
| | $T_A = 100^\circ\text{C}$ | | 12 | |
| Typical Junction Capacitance ¹ | | C_J | 2400 | pF |
| Typical Thermal Resistance ² | | $R_{\theta JC}$ | 2 | °C / W |
| Voltage Rate Of Change (Rated VR) | | dv / dt | 10000 | V / μS |
| Operating Temperature Range T_J | | T_J | -50~150 | °C |
| Storage Temperature Range T_{STG} | | T_{STG} | -65~175 | °C |

Notes:

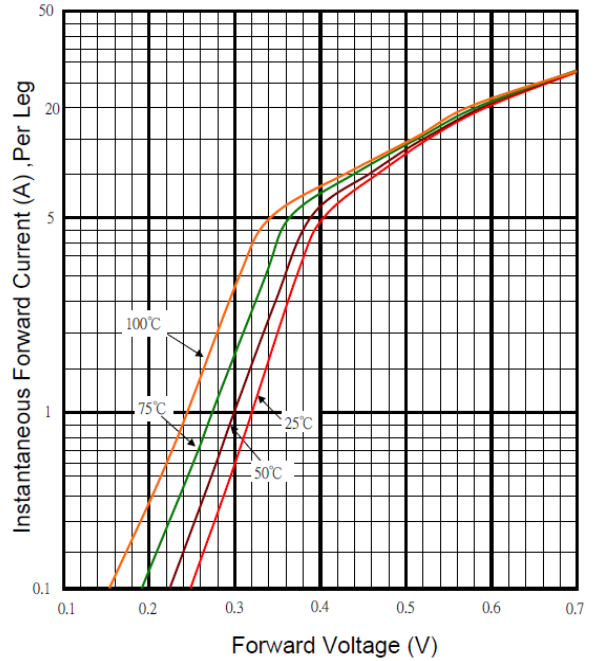
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Thermal Resistance Junction to Case.
3. Pulse Test: Pulse Width $\leq 300\mu\text{S}$, Duty Cycle $\leq 2\%$

RATINGS AND CHARACTERISTIC CURVES

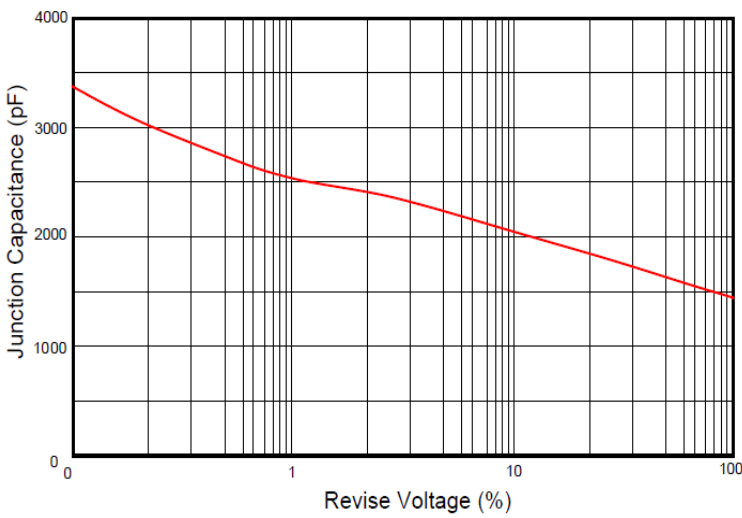
Typical Forward Current Derating Curve



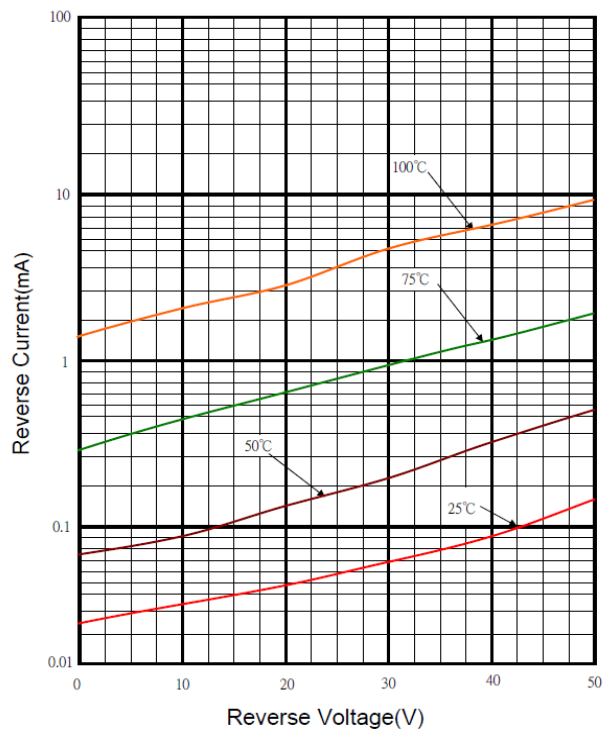
Typical Forward Characteristic



Typical Junction Capacitance



Typical Reverse Characteristic



Maximum Non- Repetitive Forward Surge Current

