

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

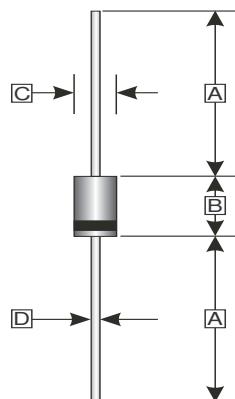
FEATURES

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

MECHANICAL DATA

- Case: Molded plastic
- Epoxy: UL 94V-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: 1.10 grams (approximately)

DO-27



| REF. | Millimeter | |
|------|------------|------|
| | Min. | Max. |
| A | 25.4 (TYP) | |
| B | 7.20 | 9.53 |
| C | 5.00 | 5.60 |
| D | 1.20 | 1.32 |

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} | 150 | V |
| Working Peak Reverse Voltage | V_{RSM} | 150 | V |
| Maximum DC Blocking Voltage | V_{DC} | 150 | V |
| Maximum Average Forward Rectified Current | I_F | 5 | A |
| Peak Forward Surge Current, 8.3 ms single half sine-wave | I_{FSM} | 110 | A |
| Voltage Rate of Change (Rated V_R) | dv/dt | 10000 | V / μ s |
| Typical Thermal Resistance | $R_{\theta JC}$ | 15 | $^{\circ}$ C / W |
| Operating and Storage Temperature Range | T_J, T_{STG} | 175, -50~175 | $^{\circ}$ C |

ELECTRICAL CHARACTERISTICS

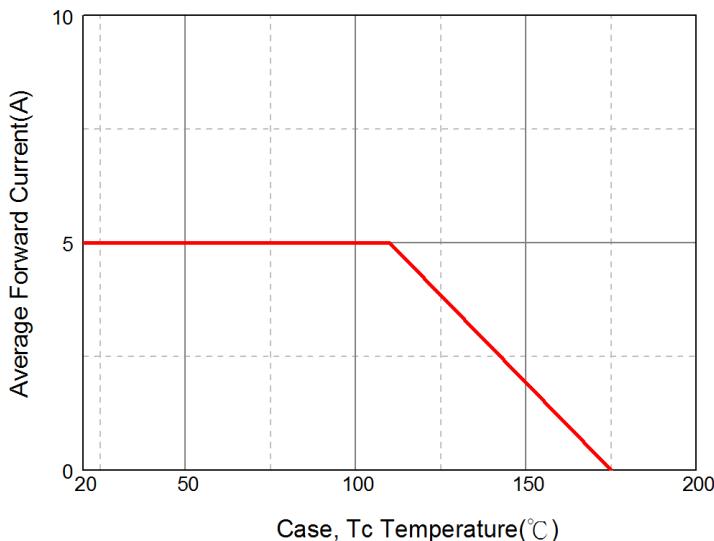
| Parameter | Symbol | Typ. | Max. | Unit | Test Condition |
|--|--------|------|------|------|--------------------------------|
| Instantaneous Forward Voltage | V_F | 0.81 | 0.85 | V | $I_F = 5A, T_J = 25^{\circ}C$ |
| | | 0.67 | - | | $I_F = 5A, T_J = 125^{\circ}C$ |
| Maximum DC Reverse Current at Rated DC Blocking Voltage ² | I_R | 0.5 | 50 | uA | $T_J=25^{\circ}C$ |
| | | 75 | 800 | | $T_J=125^{\circ}C$ |
| Typical Junction Capacitance ¹ | C_J | 95 | - | pF | |

NOTES:

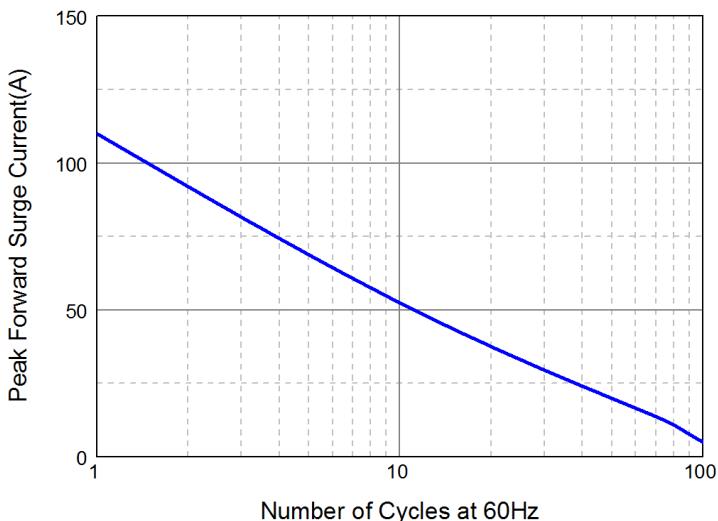
1. Measured at 1MHz and applied reverse voltage of 5.0V D.C.
2. Pulse Test : Pulse Width = 300 μ s, Duty Cycle \leq 2.0%.

RATINGS AND CHARACTERISTIC CURVES

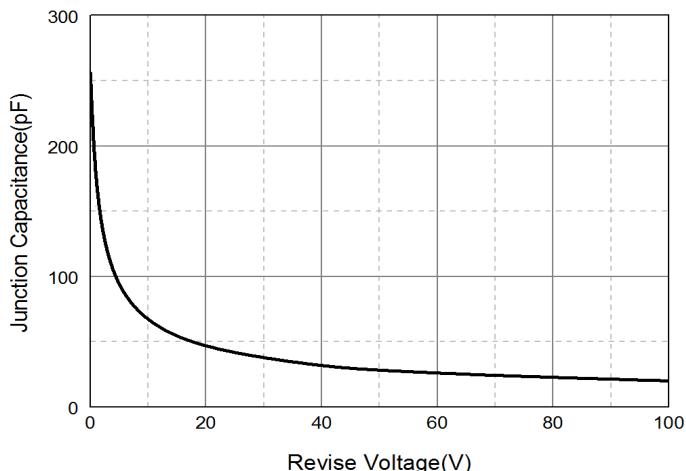
Typical Forward Current Derating Curve



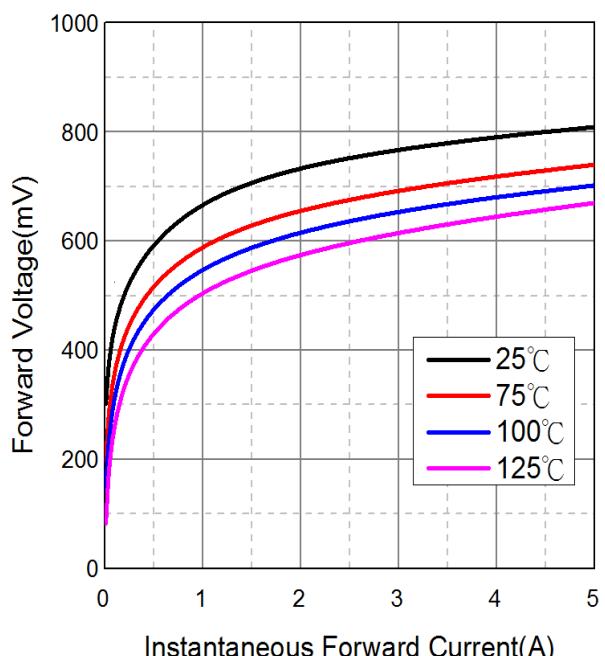
Maximum Non-Repetitive Forward Surge Current



Typical Junction Capacitance



Typical Forward Characteristic



Typical Reverse Characteristic

