



MBR10150FCT

Schottky Barrier Rectifier

Voltage 150 V **Current** 10 A

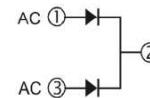
Features

- Low power loss, high efficiency
- High surge current capability
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : ITO-220AB-1 Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0765 ounces, 2.17 grams

ITO-220AB-1



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

| PARAMETER | | SYMBOL | LIMIT | UNITS |
|---|------------|--------------------|---------|-------|
| Maximum Repetitive Peak Reverse Voltage | | V _{RRM} | 150 | V |
| Maximum Rms Voltage | | V _{RMS} | 105 | V |
| Maximum Dc Blocking Voltage | | V _{DC} | 150 | V |
| Maximum Average Forward Current | Per Device | I _{F(AV)} | 10 | A |
| | Per Diode | | 5 | |
| Peak Forward Surge Current: 8.3 ms Single Half Sine-Wave Superimposed On Rated Load Per Diode | | I _{FSM} | 150 | A |
| Typical Junction Capacitance Measured at 1 MHz And Applied V _R = 4 V | | C _J | 106 | pF |
| Typical Thermal Resistance Per Diode ^(Note 1) | | R _{θJC} | 2 | °C/W |
| Operating Junction Temperature Range | | T _J | -65~175 | °C |
| Storage Temperature Range | | T _{STG} | -65~175 | °C |



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Electrical Characteristics ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

| PARAMETER | SYMBOL | TEST CONDITION | MIN. | TYP. | MAX. | UNITS |
|-------------------------------------|--------|---|------|------|------|-------|
| Forward Voltage | V_F | $I_F = 1\text{ A}, T_J = 25\text{ }^\circ\text{C}$ | - | 0.65 | - | V |
| | | $I_F = 5\text{ A}, T_J = 25\text{ }^\circ\text{C}$ | - | 0.79 | 0.9 | |
| | | $I_F = 1\text{ A}, T_J = 125\text{ }^\circ\text{C}$ | - | 0.5 | - | |
| | | $I_F = 5\text{ A}, T_J = 125\text{ }^\circ\text{C}$ | - | 0.65 | - | |
| Reverse Current ^(Note 2) | I_R | $V_R = 150\text{ V}, T_J = 25\text{ }^\circ\text{C}$ | - | - | 0.05 | mA |
| | | $V_R = 150\text{ V}, T_J = 125\text{ }^\circ\text{C}$ | - | - | 20 | |

NOTES:

1. Mounted on infinite heatsink
2. Short duration pulse test used to minimize self-heating effect



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TYPICAL CHARACTERISTIC CURVES

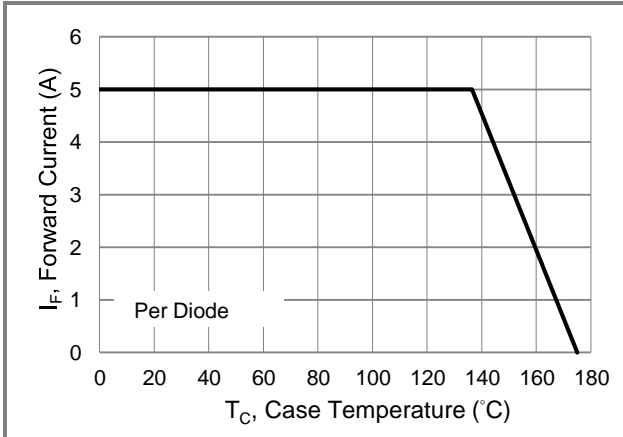


Fig.1 Forward Current Derating Curve

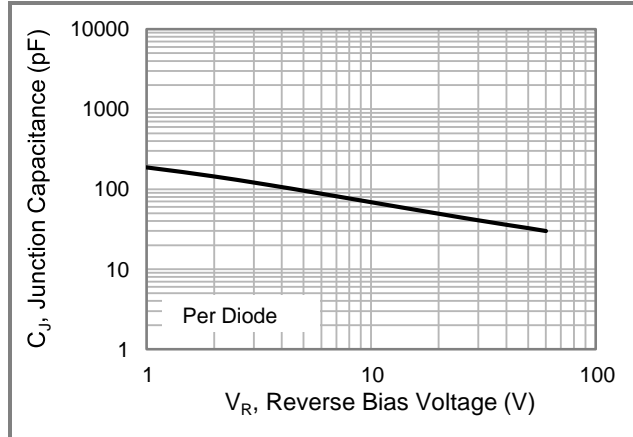


Fig.2 Typical Junction Capacitance

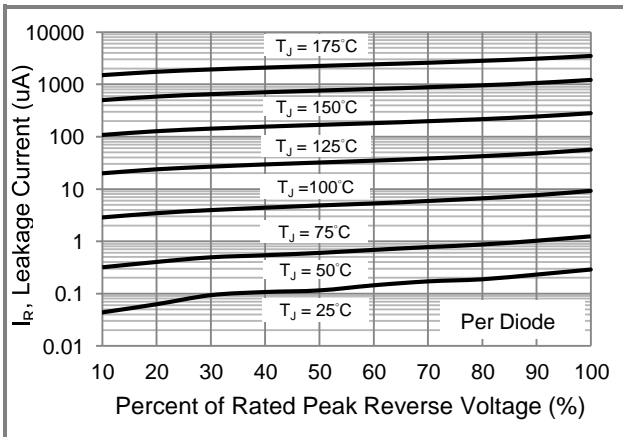


Fig.3 Typical Reverse Characteristics

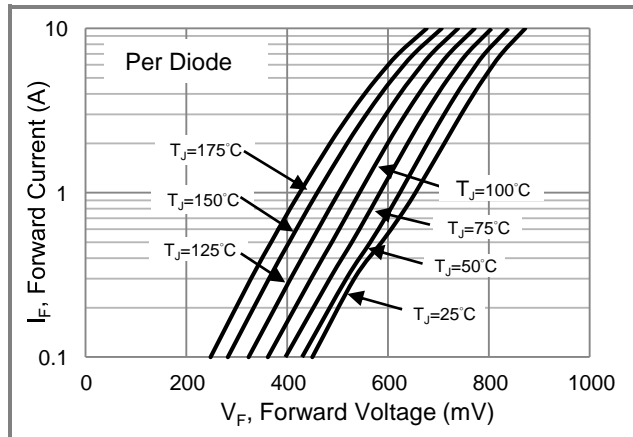


Fig.4 Typical Forward Characteristics

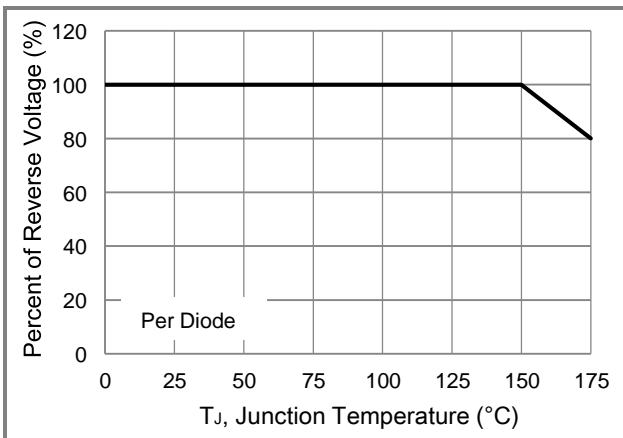


Fig.5 Operating Temperature Derating Curve

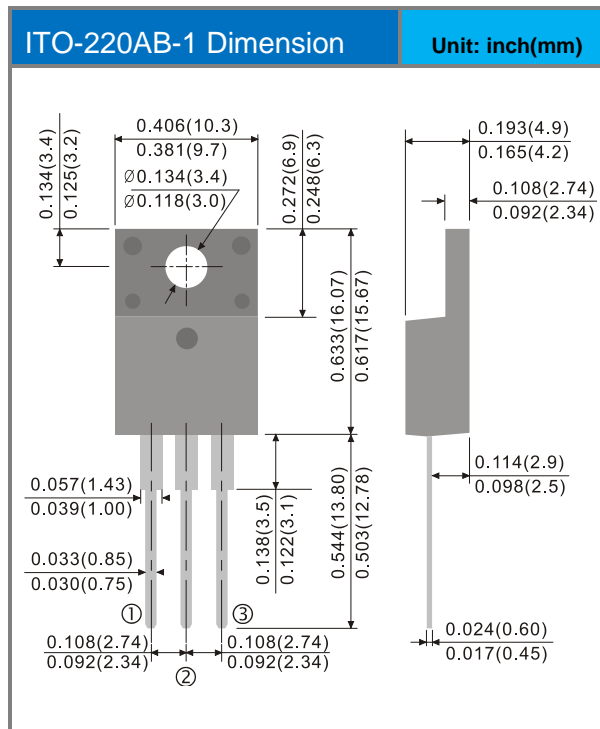


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Part No. Packing Code Version

| Part No. Packing Code | Package Type | Packing Type | Marking | Version |
|-----------------------|--------------|--------------|-------------|--------------|
| MBR10150FCT_T0_00101 | ITO-220AB-1 | 50pcs / Tube | MBR10150FCT | Halogen free |

Packaging Information





MBR10150FCT

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