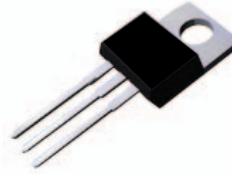


MBR10150CT/MBRF10150CT

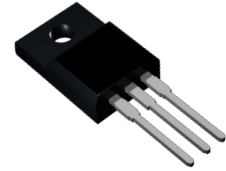
Schottky Barrier Rectifier
Reverse Voltage 150 V Forward Current 10 A

Features

- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Low forward voltage, high efficiency
- Guarding for over voltage protection



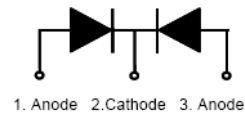
MBR10150CT
Package: TO-220-AB



MBRF10150CT
Package: ITO-220-AB

Mechanical Data

- Case: epoxy, molded
- Weight: 1.9grams (approximately)
- Finish: all external surfaces corrosion resistant and terminal leads readily solderable
- Lead temperature for soldering purpose: 260°C max. for 10 sec
- 50 units per plastic tube



Schematic Diagram

Maximum Ratings & Electrical Characteristics

(T_A=25°C unless otherwise noted)

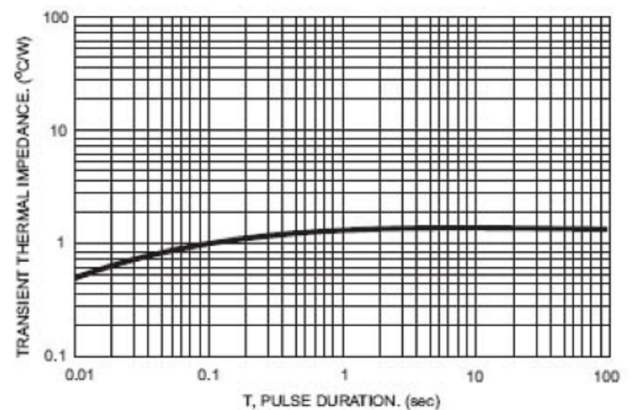
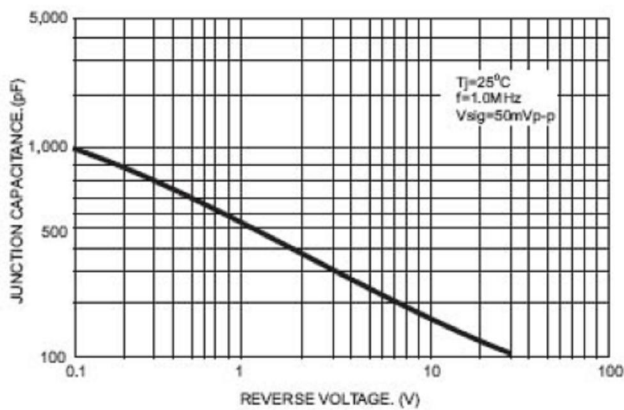
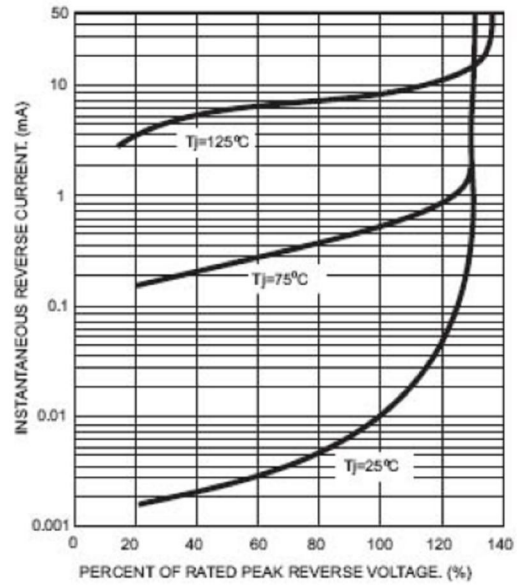
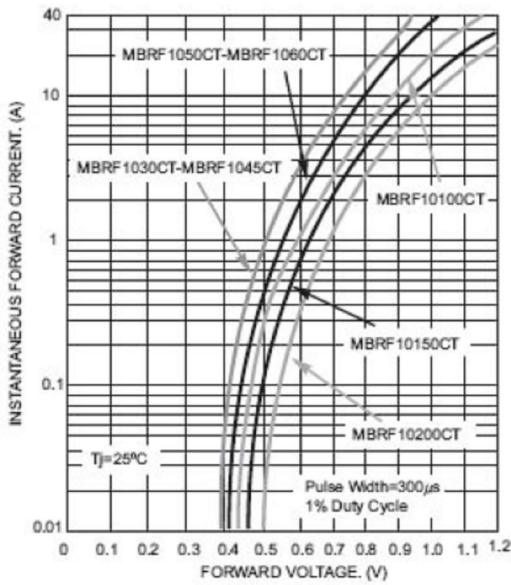
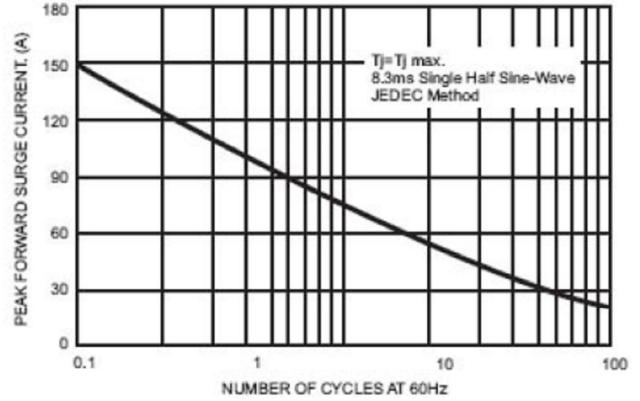
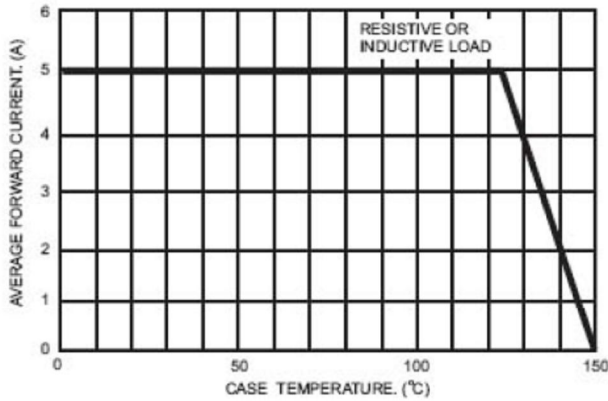
| Parameter | Test Conditions | | Symbol | Value | Unit |
|--|---|---|--------------------|-------------------------|-------------|
| Maximum Repetitive Peak Reverse Voltage | | | V _{RRM} | 150 | V |
| Working Peak Reverse Voltage | | | V _{RWM} | 150 | V |
| Maximum DC Blocking Voltage | | | V _{DC} | 150 | V |
| Maximum Average Forward Rectified Current @ T _c =105°C | Total Device | | I _{F(AV)} | 10 | A |
| | Per Diode | | | 5 | |
| Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load per Diode | | | I _{FSM} | 150 | A |
| Peak repetitive Reverse Current Per Leg at tp=2.0μs ,1KHz | | | I _{RRM} | 1.0 | A |
| Voltage Rate of Change (rated V _R) | | | DV/dt | 10000 | V/μs |
| Operating Junction Temperature Range | | | T _J | - 55 to+150 | °C |
| Storage Temperature Range | | | T _{STG} | - 55 to+150 | °C |
| Isolation Voltage (ITO-220-AB only) from Terminal to Heatsink t = 1 sec | | | V _{AC} | 1500 | V |
| Maximum Instantaneous Forward Voltage per Leg | I _F =5A I _F =5A | T _C =25°C T _C =125°C | V _F | 0.92 0.82 | V |
| Maximum Reverse Current per Leg at Working Peak Reverse Voltage | | T _J =25°C T _J =100°C | | I _R | |
| Thermal Characteristics (T_A=25°C unless otherwise noted) | | | | | |
| Symbol | Parameter | Typ.(TO-220-AB) | | Typ.(ITO-220-AB) | Unit |
| R _{θJC} | Thermal Resistance, Junction to Case per Leg | 2.0 | | 4.0 | °C/W |
| R _{θJA} | Thermal Resistance, Junction to Ambient per Leg | 62.5 | | 62.5 | °C/W |

Note: Pulse test:300us pulse width, duty cycle=2%

MBR10150CT/MBRF10150CT

Schottky Barrier Rectifier
Reverse Voltage 150 V Forward Current 10 A

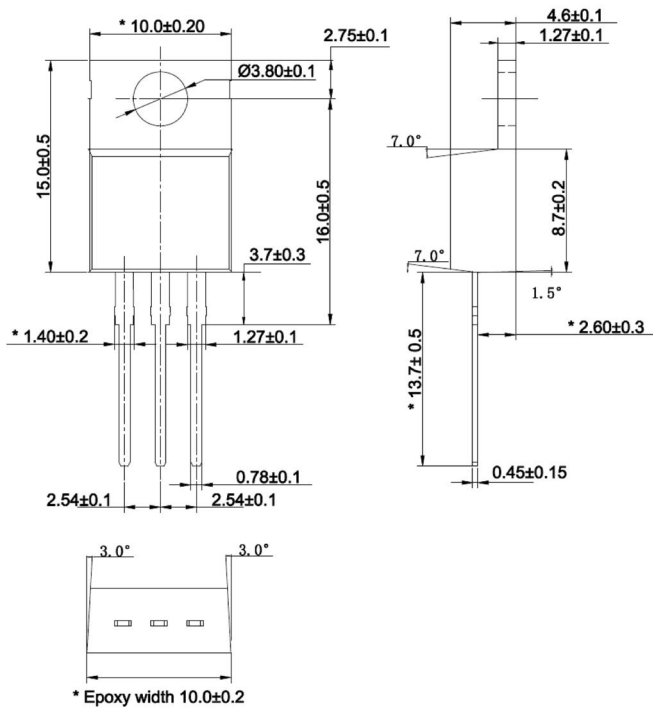
Ratings and Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)



Package Outline Dimensions

in millimeters

TO-220-AB



ITO-220-AB

