



MBR10200CT

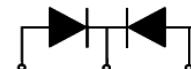
Schottky Barrier Rectifier

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
- For use in low voltage, high frequency inverters
- Free wheeling and polarity protection applications



CASE:TO-220-AB



1. Anode 2. Cathode 3. Anode

Mechanical Characteristics

- Case: Epoxy, Molded
- Weight: 1.9 grams (approximately)
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead temperature for soldering purposes: 260°C Max. for 10 sec
- Shipped 50 units per plastic tube

Maximum Ratings and Electrical Characteristics (TC=25°C unless otherwise noted)

| PARAMETER | TEST CONDITIONS | | SYMBOL | MBR10200CT | UNIT |
|---|--|---|--------------------|--------------|----------|
| Maximum repetitive peak reverse voltage | | | V _{RRM} | 200 | V |
| Working peak reverse voltage | | | V _{RWM} | 200 | V |
| Maximum DC blocking voltage | | | V _{DC} | 200 | V |
| Maximum average forward rectified current at T _c =105°C total Device per Diode | | | I _{F(AV)} | 10 5 | A |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load per diode | | | I _{FSM} | 125 | A |
| Peak repetitive reverse current per leg at t _p =2.0us , 1KHz | | | I _{RRM} | 0.5 | A |
| Voltage rate of change (rated VR) | | | DV/dt | 10000 | V/us |
| Operating junction temperature range | | | T _J | -55 to+150 | °C |
| Storage temperature range | | | T _{STG} | -55 to+150 | °C |
| Isolation voltage (TO220F-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 | 200 15 | uA mA |

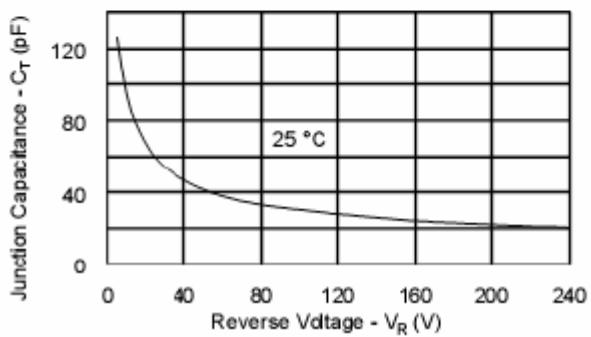
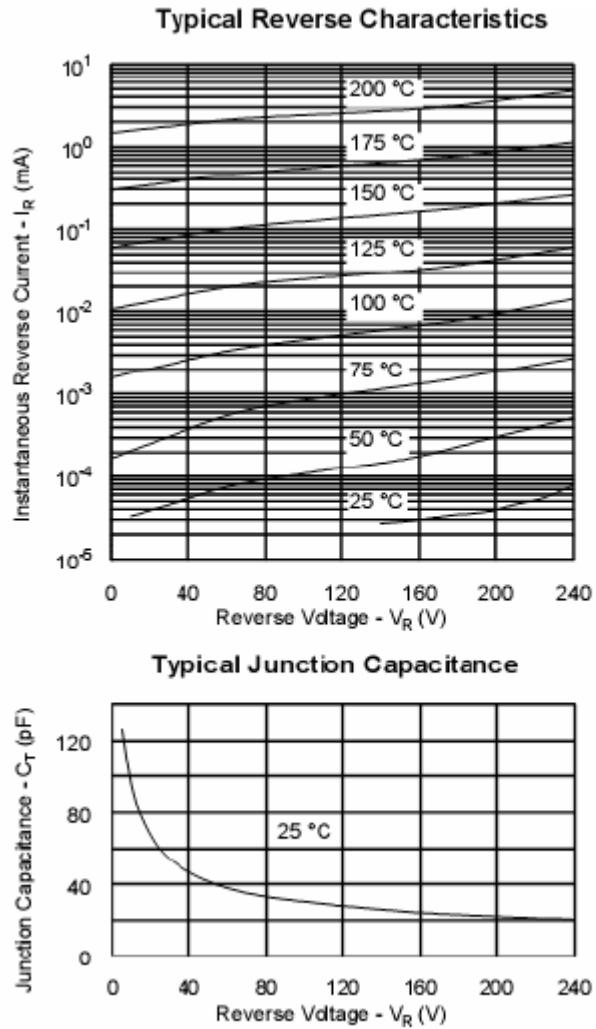
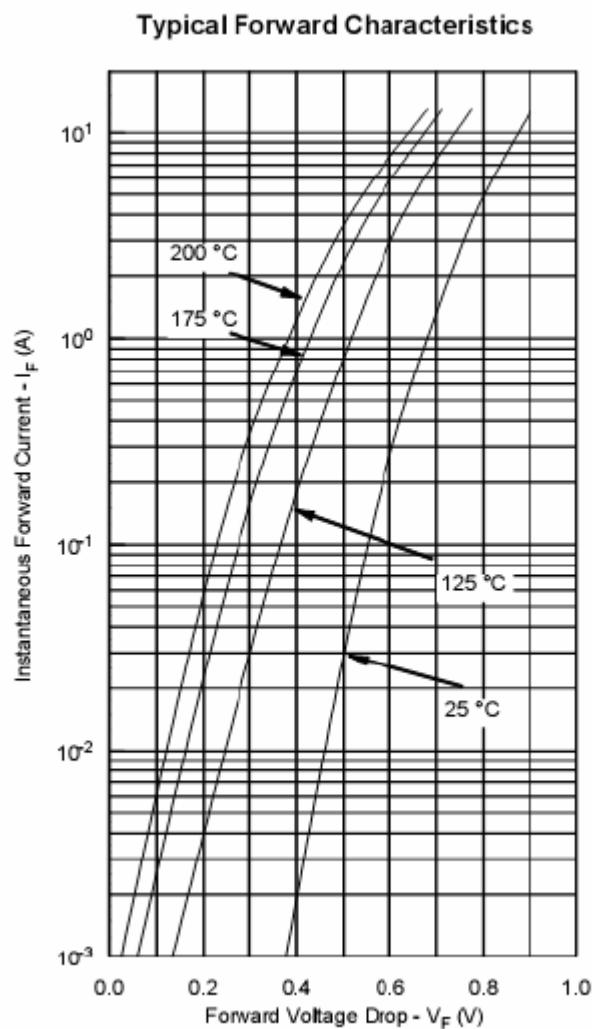
Thermal Characteristics Ta=25°C unless otherwise noted

| Symbol | Parameter | Max | Unit |
|------------------|---|------|-------|
| R _{θJC} | Thermal Resistance, Junction to Case per Leg | 2.0 | °C /W |
| R _{θJA} | Thermal Resistance, Junction to Ambient per Leg | 62.5 | °C /W |

Note:

1. Screw mounting with 4-40 screw, where washer diameter is ≤ 4.9mm(0.19")
2. Pulse test: 300μs pulse width, 1% duty cycle

Rating and Characteristic Curves (T_c=25°C Unless otherwise noted)

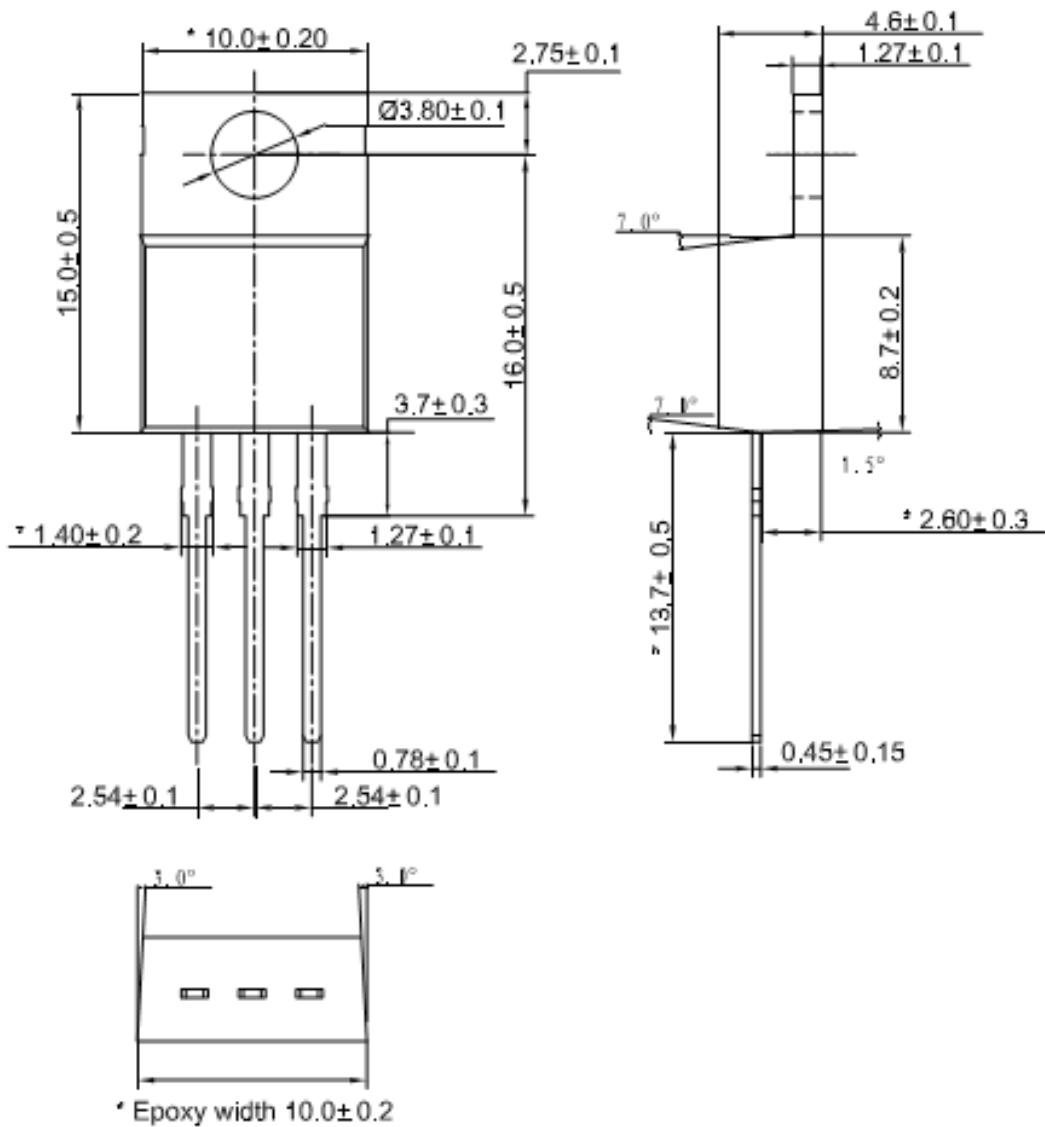




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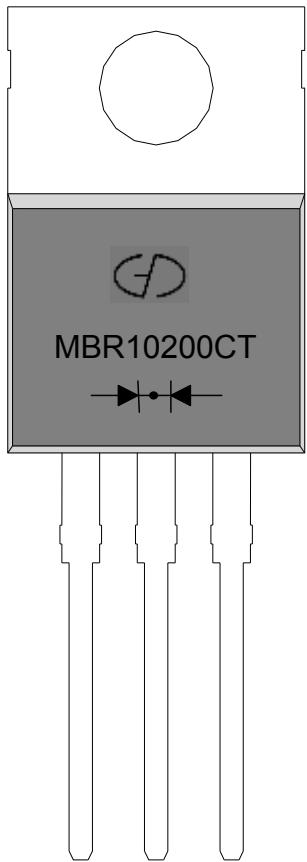
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Package Outline (TO-220-AB) UNIT:MM



Lead Frame Material : Copper Plating: Pure Tin Plating

MARKING



1. Part Name : MBR10200CT

2. Logo Mark: 

3. Polarity: 