

MBR20B100CTH/FCTH/CRH/CGH

Power Schottky Rectifier - 20Amp 100Volt

Features

-Plastic package has Underwriters Laboratory Flammability Classifications 94V-0

-High Junction Temperature Capability

-Low forward voltage, high current capability

-High surge capacity

-Low power loss, high efficiency

-ESD performance human body mode > 8 KV

-Halogen-Free

Application

-AC/DC Switching Adaptor and other Switching Power Supply

| | Absolute maximum ratings | |
|--|--------------------------|--|
|--|--------------------------|--|

| Symbol | Ratings | Unit | Conditions |
|----------|-------------|------|-----------------------------------|
| lF(AV) | 20 | А | Average Forward Current |
| Vrrm | 100 | V | Repetitive Peak Reverse Voltage |
| IFSM | 150 | А | Peak Forward Surge Current |
| VF | 0.66 | V | Forward Voltage Drop |
| Tj, Tstg | -50 to +175 | °C | Operating and Storage Temperature |

Electrical characteristics

| Parameters | Symbol | Ratings | Conditions |
|--|----------|----------|----------------------------|
| | | | Per Leg at IF = 10A |
| Maximum Instantaneous Forward Voltage | Vf | 0.82V | Tc = 25°C |
| | | 0.66V | Tc = 125°C |
| | | | Per Leg at VR = 100V |
| Maximum Reverse Leakage Current | lr | 0.05mA | Tc = 25°C |
| | | 10mA | Tc = 125°C |
| | | | Per Leg |
| Typical Thermal Resistance, Junction to Case | Rθ (j-c) | 2.2 °C/W | TO-220AB / TO-262 / TO-263 |
| | | 4.5 °C/W | ITO-220AB |

Note : 1.Mounted on P.C.B with copper pad size 20mm x 30mm, thickness 1.5mm

2.Reverse Surge 2.0A @ 0.004ms, 10 cycle

3.Repetitive Peak Reverse Current (IRRM) 0.5A @ Per Leg at tp = 2μ s, 1kHz

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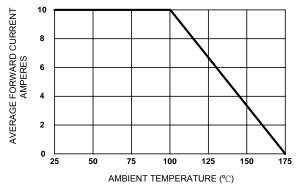


Figure 1. Forward Current Derating Curve

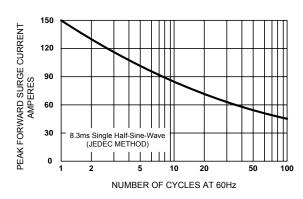
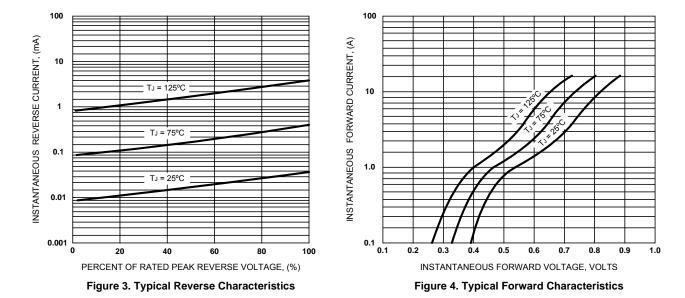


Figure 2. Maximum Non-repetitive Surge Current



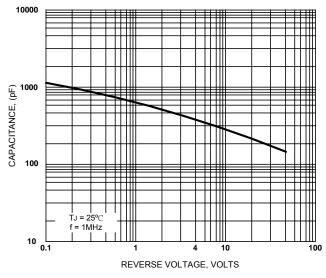
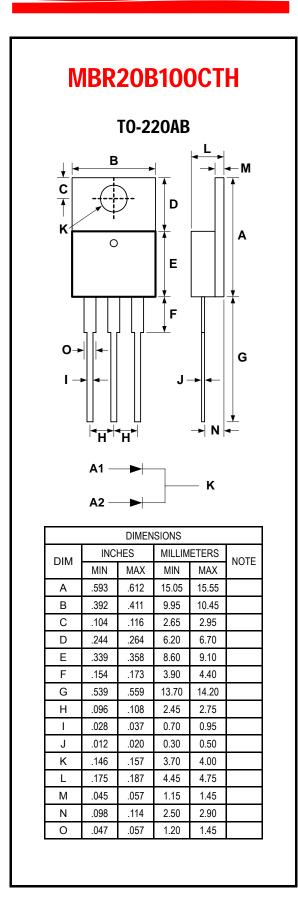
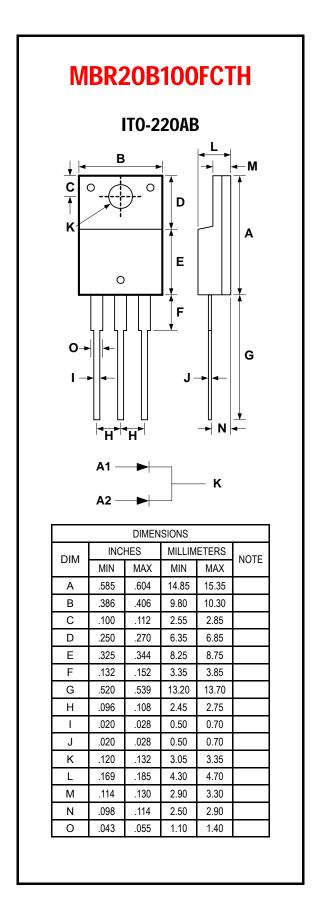
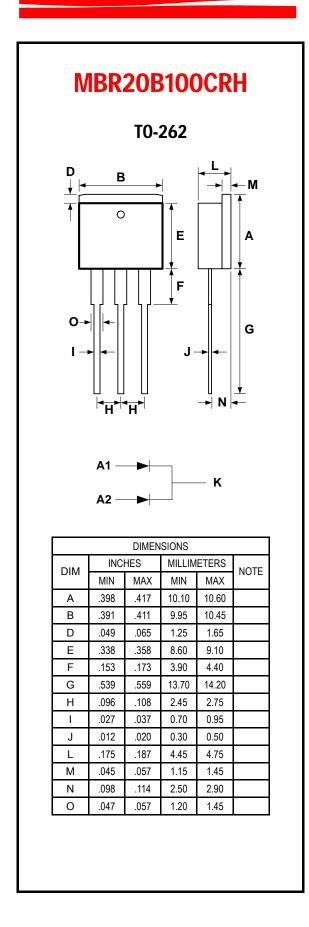


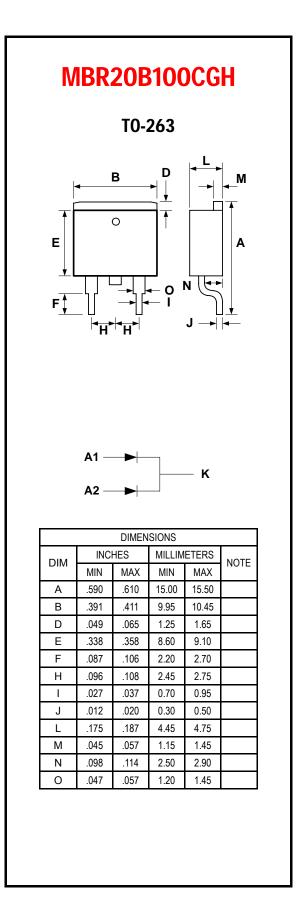
Figure 5. Typical Junction Capacitance





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