

II. Schottky Rectifier

High-Voltage Schottky Diodes

MBR20200/MBR20200F

■ Productor Character

- Half Bridge Rectified、Common Cathode Structure.
- Multilayer Metal -Silicon Potential Structure.
- Beautiful High Temperature Character.
- Have Over Voltage protect loop, high reliability.
- RoHs Product.

TO-220AB



■ Primary Use

- Low Voltage High Frequency Switching Power Supply.
- Low Voltage High Frequency Invers Circuit.
- Low Voltage Continued Circuit and Protection Circuit.

ITO-220AB

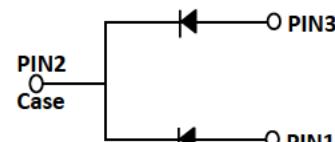


■ Summarize

- MBR20200/MBR20200F Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications

Device Weight :

ITO-220AB-1.48g TO-220AB-1.96g



Absolute Maximum Ratings

| Item | Symbol | Data | Unit |
|---|------------------|-----------|------|
| Maximal Inverted Repetitive Peak Voltage | VRRM | 200 | V |
| *Average Rectified Forward Current (Rated VR=20Khz Square Wave) - 50% duty cycle | IFAV | 20 | A |
| Typical Thermal Resistance (per leg) | R _{θJC} | 2 | °C/W |
| Package = TO-220AB | | 4 | °C/W |
| Forward Peak Surge Current(Rated Load 8.3 Half MSSine Wave-According to JEDEC Method) | IFSM | 150 | A |
| Maximum Rate of Voltage Change (at Rated VR) | dv/dt | 10000 | V/uS |
| Peak Repetitive Reverse Surge Current (2uS-1Khz) | IRRM | 1 | A |
| Operating Junction Temperature | T _J | -40- +175 | °C |
| Storage Temperature | T _{STG} | -40- +175 | °C |

Electricity Character

| Item | Test Condition | | TYP. | MAX. | Unit |
|------|------------------------|---------|------|------|------|
| IR | T _J = 25°C | VR=VRRM | | 10 | uA |
| | T _J = 125°C | | | 1 | mA |
| VF | T _J = 25°C | IF=10A | | 0.92 | V |
| | T _J = 125°C | IF=10A | 0.66 | 0.72 | V |

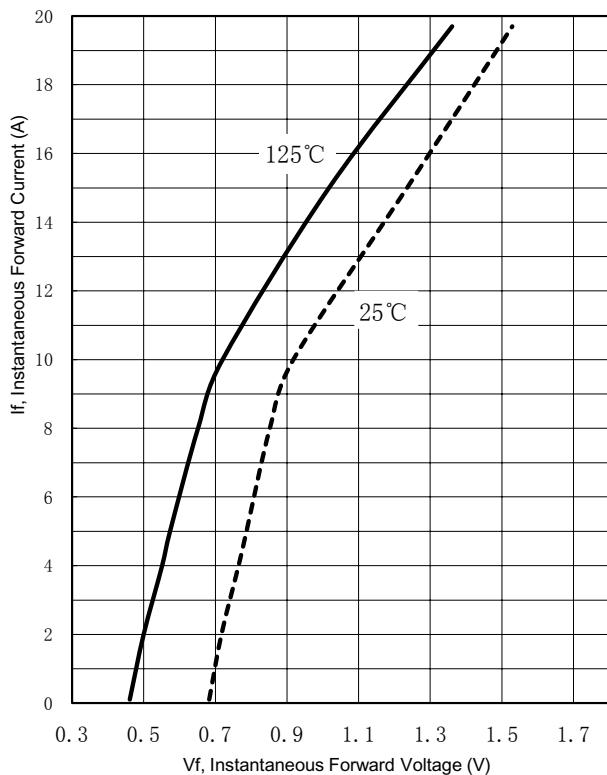
*IF(AV)= 10A×2

II. Schottky Rectifier

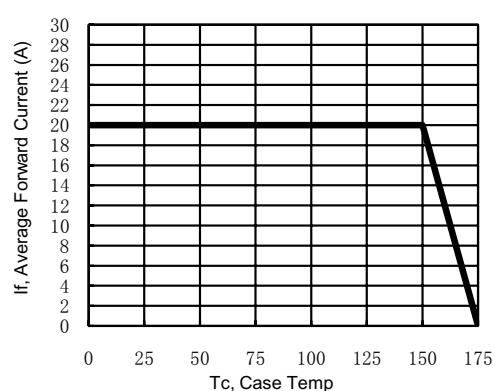
High-Voltage Schottky Diodes

MBR20200/MBR20200F

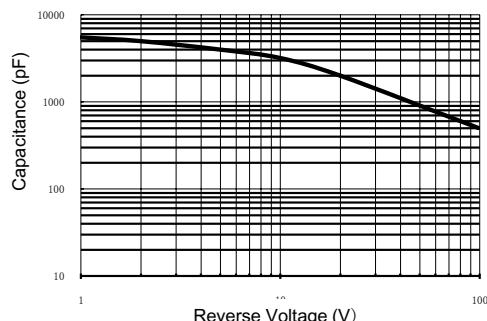
The forward voltage and forward current curve.



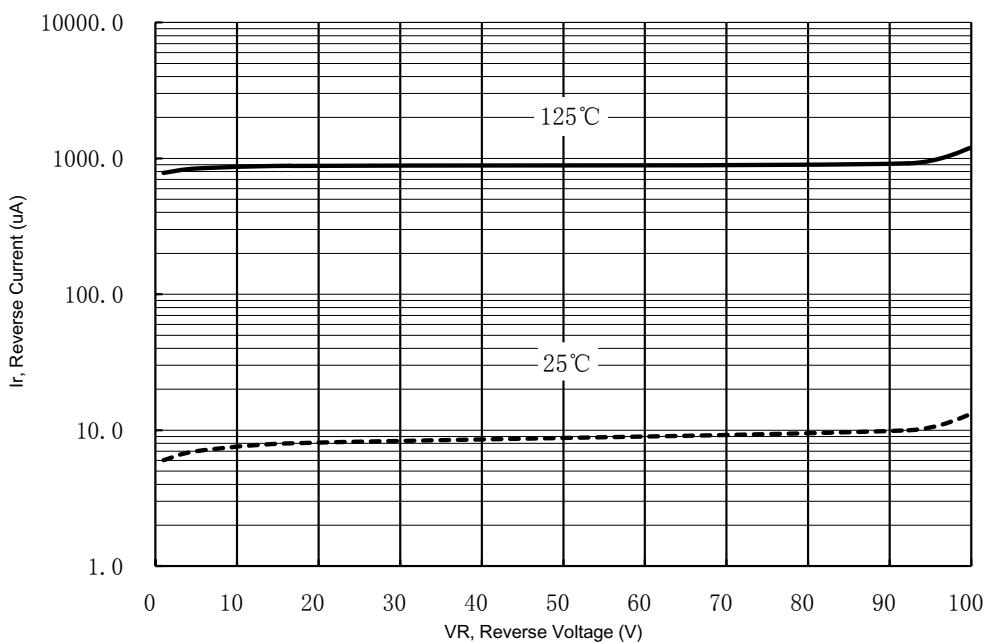
Current Derating Curve, Per Element



The crunode capacitance curve



The reverse leak current and the reverse voltage (single-device) curve.



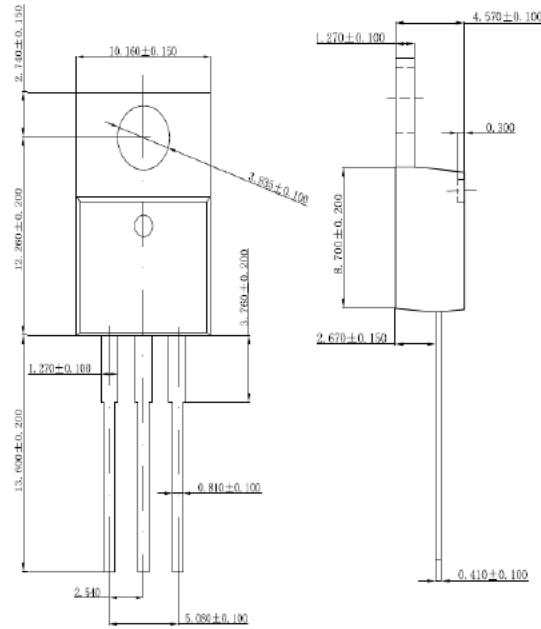
II. Schottky Rectifier

High-Voltage Schottky Diodes

MBR20200/MBR20200F

Package Outline Dimensions millimeters

TO-220AB



ITO-220AB

