



Schottky Barrier Rectifiers

■ Features

- Multilayer Metal -Silicon Potential Structure.
- Beautiful High Temperature Character.
- Have Over Voltage protect loop, high reliability.
- RoHs Product.

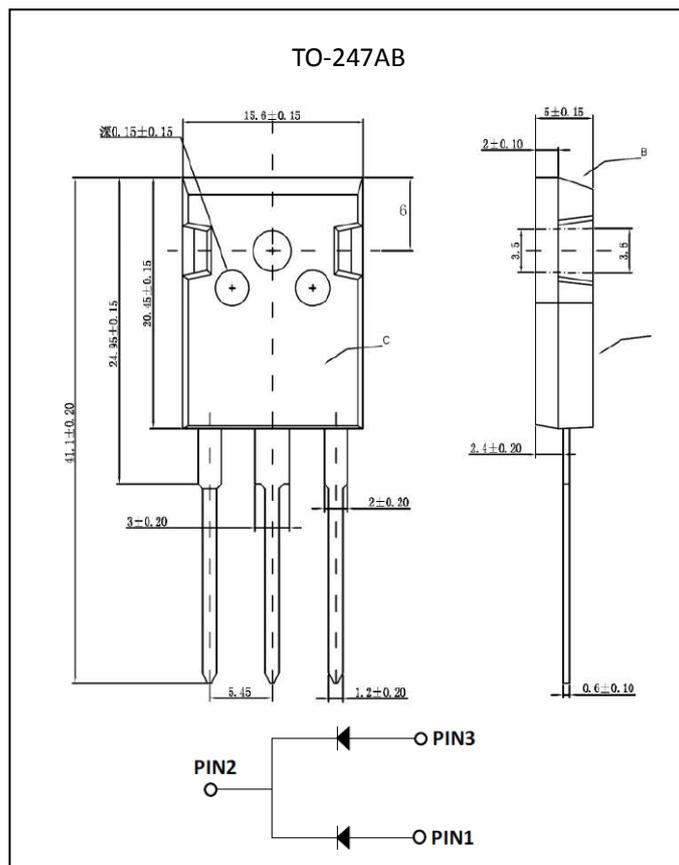
■ Applications

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

■ Marking Information

| Type | Package | Mark |
|-----------|----------|-----------|
| MBR6045PT | TO-247AB | MBR6045PT |

■ Outline Dimensions



■ Absolute Maximum Ratings

| Item | Symbol | Data | Unit |
|---|--------|-----------|------|
| Maximal Inverted Repetitive Peak Voltage | VRRM | 45 | V |
| *Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% duty cycle | IFAV | 60 | A |
| Typical Thermal Resistance (per leg Package =TO-247AB) | RθJc | 0.5 | °C/W |
| Forward Peak Surge Current(Rated Load 8.3 Half Mssine Wave-According to JEDEC Method) | IFSM | 300 | A |
| Maximum Rate of Voltage Change (at Rated VR) | dv/dt | 10000 | V/uS |
| Peak Repetitive Reverse Surge Current (2uS-1Khz) | IRRM | 0.5 | A |
| Operating Junction Temperature | TJ | -40- +150 | °C |
| Storage Temperature | TSTG | -40- +150 | °C |

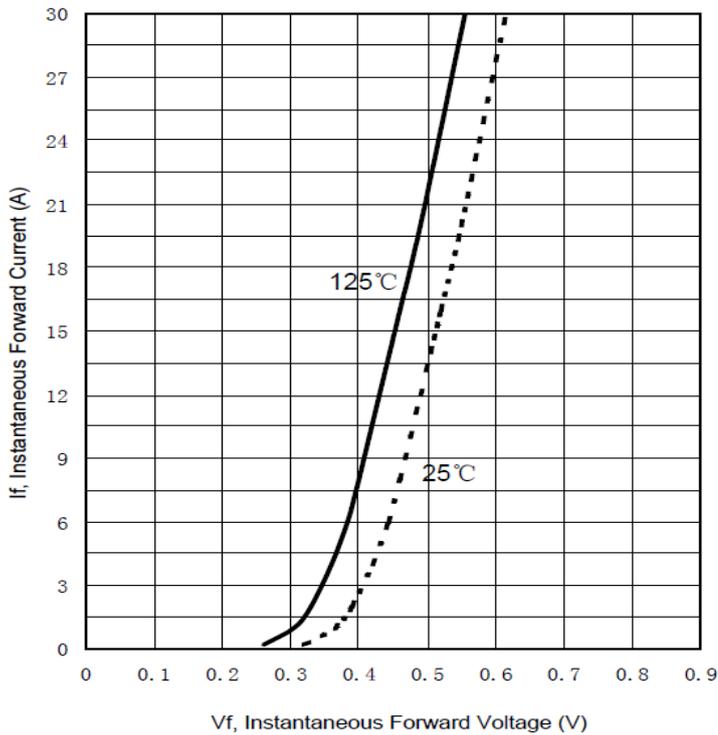
*IF(AV)= 30A×2

Electrical Characteristics (Ta=25°C Unless otherwise specified)

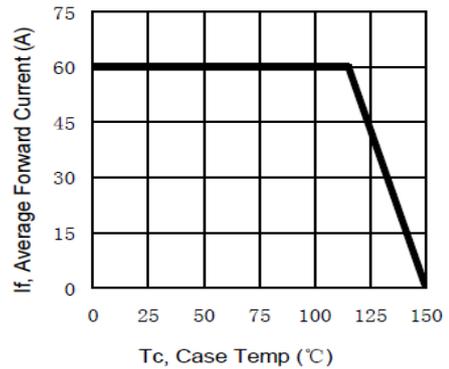
| Item | Test Condition | | TYP. | MAX | Unit |
|------|----------------|---------|------|------|------|
| IR | TJ =25°C | VR=VRRM | | 0.05 | mA |
| | TJ =125°C | | | 25 | mA |
| VF | TJ =25°C | IF=30A | 0.62 | 0.67 | V |
| | TJ =125°C | IF=30A | | 0.56 | V |

Characteristic Curves

The forward voltage and forward current curve



Current derating curve, per element



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

