


30A SCHOTTKY BARRIER RECTIFIER


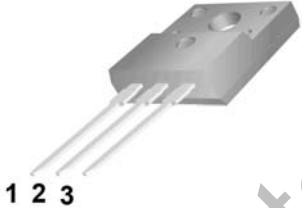



MBRF3045SCT

Features:

- Low power loss, high efficiency.
High surge capacity
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- Metal silicon junction, majority carrier conduction.
- High current Capability, low forward voltage drop.
- Guard ring for over voltage protection.

TO-220F

1.Anode 2.Cathode 3. Anode

Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|--|-------------|----------|--------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 45 | V |
| Maximum RMS Voltage | V_{RMS} | 31.5 | V |
| Maximum DC Blocking Voltage | $V_{R(DC)}$ | 45 | V |
| Maximum Average Forward Current | $I_{F(AV)}$ | 30 | A |
| Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 240 | A |
| Maximum Forward Voltage @IF=15A Tj=25°C | V_F | 0.70 | V |
| Maximum DC Reverse Current | I_R | Tj=25°C | 0.2 mA |
| | | Tj=125°C | 20 mA |
| Maximum Operating Junction Temperature | T_j | 150 | °C |
| Storage Temperature | T_{stg} | -40~+150 | °C |

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

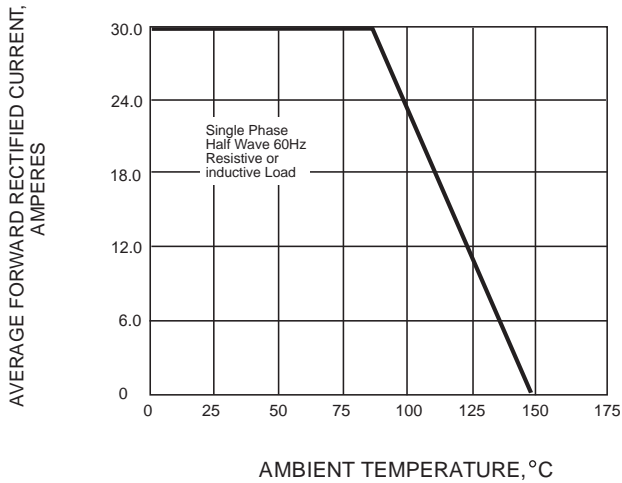


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

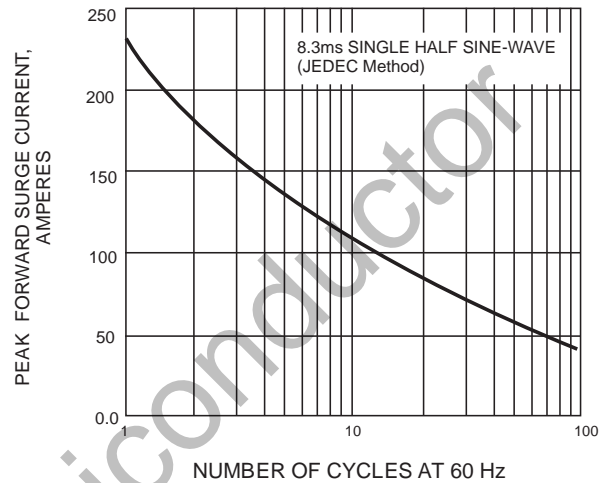


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

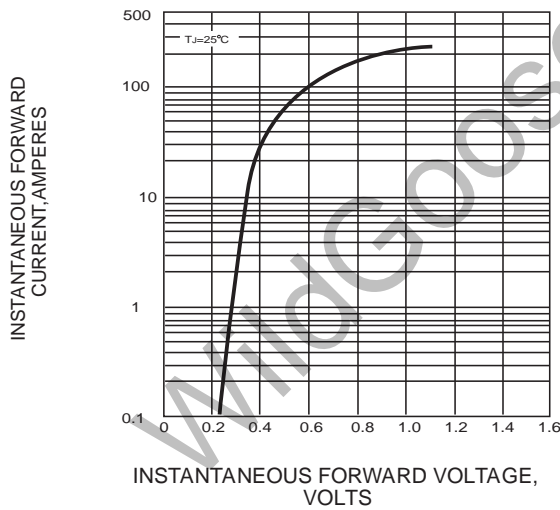
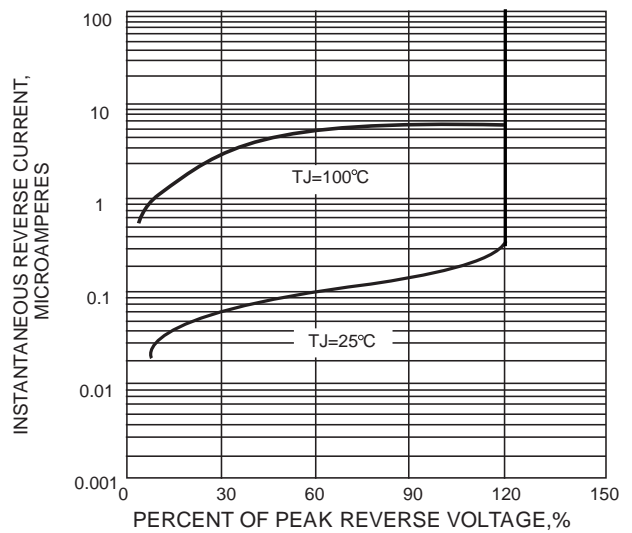


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



Package Dimension

TO-220F

Unit: mm

