

## 20A SCHOTTKY BARRIER RECTIFIER

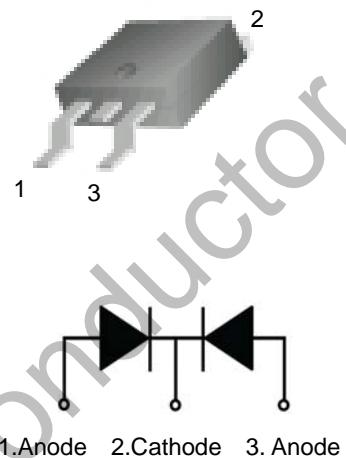


MBRD20200CT

**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-252

**Absolute Maximum Ratings** ( $T_a=25^\circ\text{C}$  unless otherwise noted)

| Parameter   | Symbol      | Value    | Unit |
|---|-------------|----------|------|
| Maximum Recurrent Peak Reverse Voltage  | $V_{RRM}$   | 200      | V    |
| Maximum RMS Voltage   | $V_{RMS}$   | 140      | V    |
| Maximum DC Blocking Voltage   | $V_{R(DC)}$ | 200      | V    |
| Maximum Average Forward Current   | $I_{F(AV)}$ | 20       | A    |
| Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | $I_{FSM}$   | 200      | A    |
| Maximum Forward Voltage @10A  | $V_F$       | 0.95     | V    |
| Maximum DC Reverse Current<br><br>T <sub>j</sub> =25°C<br>T <sub>j</sub> =125°C                   | $I_R$       | 0.1      | mA   |
|   |             | 20       | mA   |
| Maximum Operating Junction Temperature  | $T_j$       | 150      | °C   |
| Storage Temperature   | $T_{stg}$   | -50~+150 | °C   |

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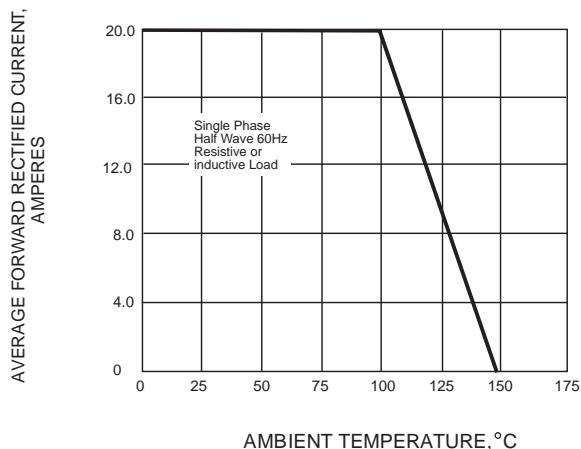
**Typical Characteristics****RATING AND CHARACTERISTIC CURVES**

Fig.1 FORWARD CURRENT ERATING CURVE

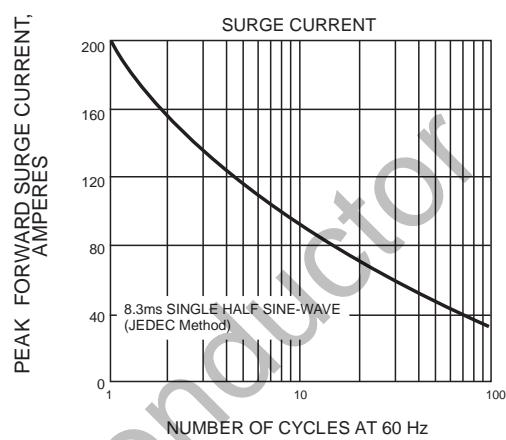


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

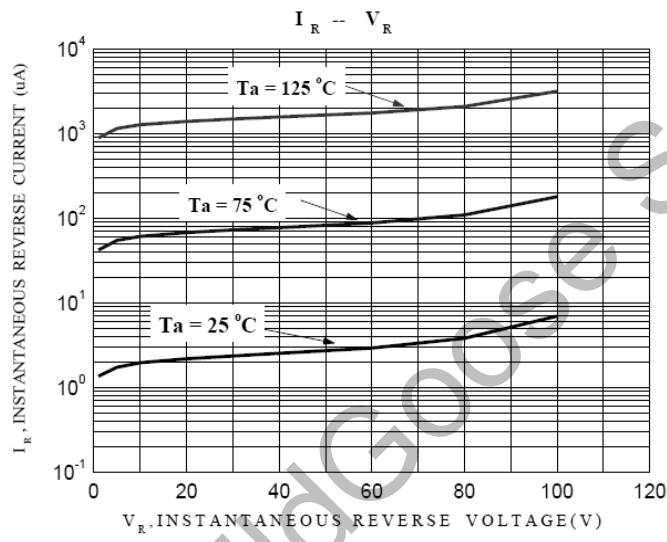


Fig.3 TYPICAL REVERSE CHARACTERISTIC

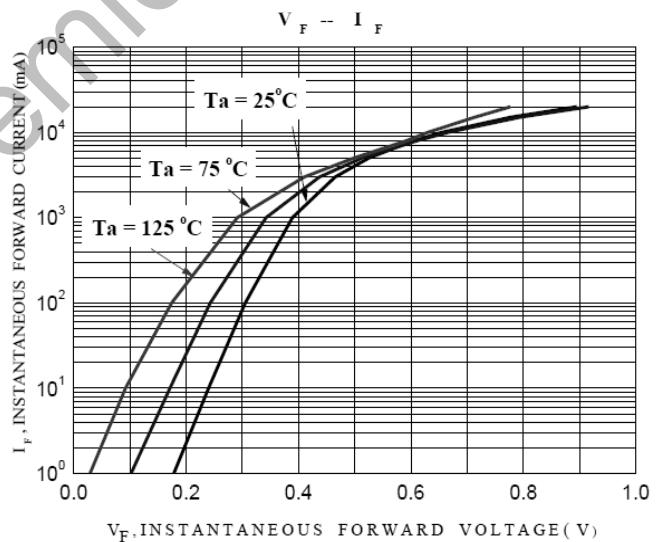
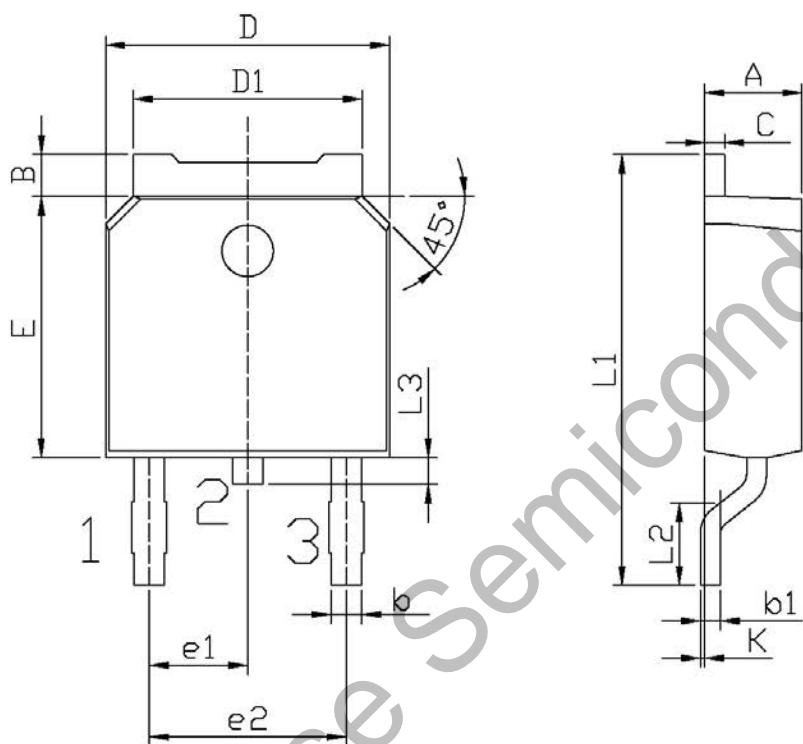


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

Package Dimension

TO-252

Unit:mm



| Symbol | Dimensions In Millimeters |      | Symbol | Dimensions In Millimeters |       |
|--------|---------------------------|------|--------|---------------------------|-------|
|        | Min                       | Max  |        | Min                       | Max   |
| A      | 2.20                      | 2.40 | E      | 5.95                      | 6.25  |
| B      | 0.95                      | 1.25 | e1     | 2.24                      | 2.34  |
| b      | 0.70                      | 0.90 | e2     | 4.43                      | 4.73  |
| b1     | 0.45                      | 0.55 | L1     | 9.85                      | 10.35 |
| C      | 0.45                      | 0.55 | L2     | 1.25                      | 1.75  |
| D      | 6.45                      | 6.75 | L3     | 0.60                      | 0.90  |
| D1     | 5.20                      | 5.40 | K      | 0.00                      | 0.10  |