



**SCHOTTKY BARRIER RECTIFIERS**

REVERSE VOLTAGE - 20 to 200 Volts  
FORWARD CURRENT - 10.0 Amperes

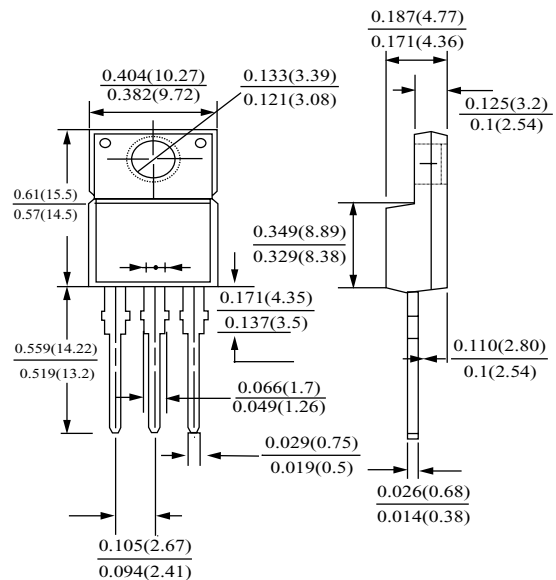
**FEATURES**

- Metal-Semiconductor junction with guard ring
- Epitaxial construction
- Low forward voltage drop
- High current capability
- The plastic material carries UL recognition 94V-0
- For use in low voltage,high frequency inverters,free wheeling,and polarity protection applications

**MECHANICAL DATA**

- Case : ITO-220AB molded plastic
- Polarity : Color band denotes cathode
- Weight : 1.689 grams
- Mounting position : Any

**ITO-220AB**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

| PARAMETER  | SYMBOL           | MBR 1020FCT | MBR 1040FCT | MBR 1050FCT | MBR 1060FCT | MBR 1080FCT | MBR 10100FCT | MBR 10150FCT | MBR 10200FCT | UNIT |
|--|------------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|------|
| Maximum repetitive peak reverse voltage  | VRRM             | 20          | 40          | 50          | 60          | 80          | 100          | 150          | 200          | V    |
| Maximum RMS voltage  | VRMS             | 14          | 28          | 35          | 42          | 56          | 70           | 105          | 140          | V    |
| Maximum DC blocking voltage  | VDC              | 20          | 40          | 50          | 60          | 80          | 100          | 150          | 200          | V    |
| Maximum average forward rectified current (Per leg)                                | IF               | 10.0<br>5.0 |             |             |             |             |              |              |              | A    |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | IFSM             | 120.0       |             |             |             |             |              |              |              | A    |
| Maximum instantaneous I <sub>F</sub> =5A@25°C                                      | VF               | 0.70        | 0.75        | 0.85        | 0.92        |             |              |              |              | V    |
| Forward Voltage I <sub>F</sub> =5A@100°C   |                  | 0.60        | 0.65        | 0.75        | 0.80        |             |              |              |              |      |
| Maximum DC Reverse Current @TA=25°C  | IR               | 0.1         |             |             |             |             |              |              |              | mA   |
| at Rated DC Blocking Voltage @TA=100°C   |                  | 10.0        |             |             |             |             |              |              |              |      |
| Typical Junction Capacitance   | C <sub>J</sub>   | 270         | 200         | 150         | 100         |             |              |              |              | pF   |
| Typical Thermal Resistance   | R <sub>θJC</sub> | 3           |             |             |             |             |              |              |              | °C/W |
| Operating Temperature Range  | T <sub>J</sub>   | -55 to +150 |             |             |             |             |              |              |              | °C   |
| Storage Temperature Range  | T <sub>STG</sub> | -55 to +175 |             |             |             |             |              |              |              | °C   |



FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

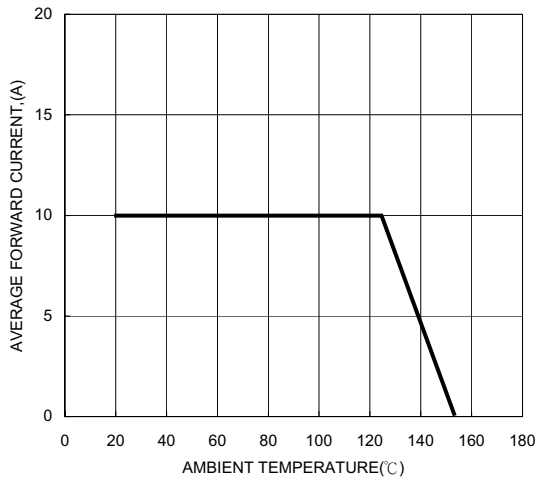


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

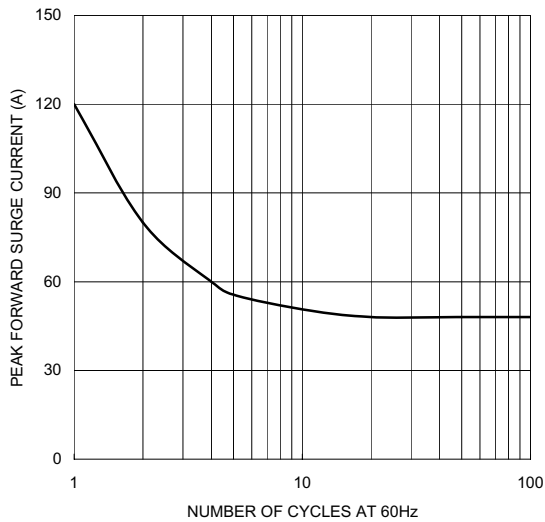


FIG. 5-TYPICAL JUNCTION CAPACITANCE

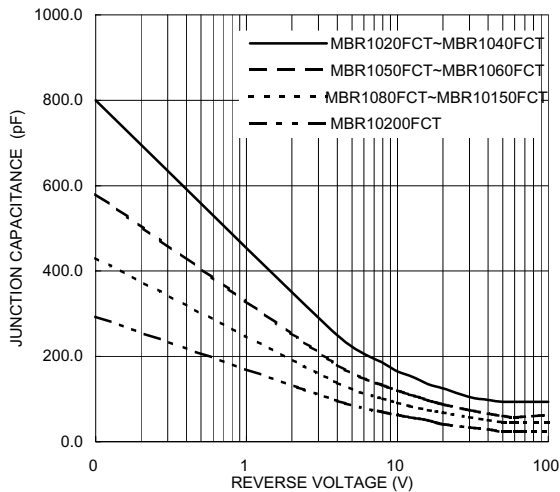


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

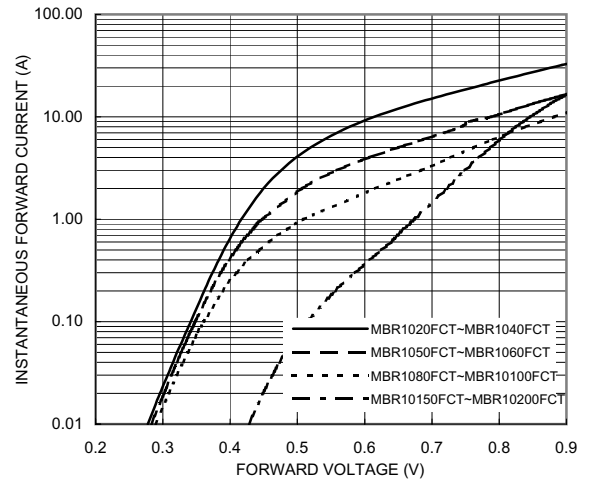


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

