

## MBR1640FCT~MBR16200FCT

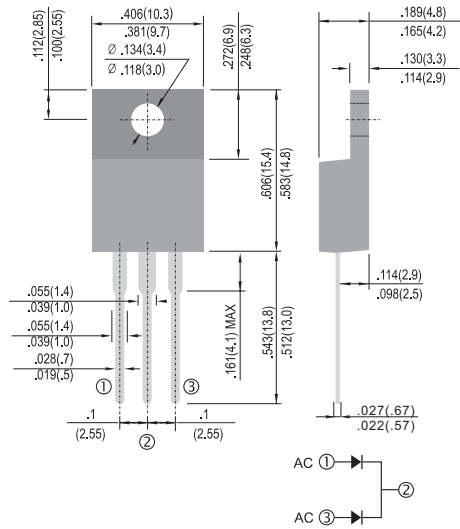
**ISOLATION SCHOTTKY BARRIER RECTIFIERS**

**VOLTAGE 40 to 200 Volts    CURRENT 16 Amperes**



ITO-220AB

Unit: inch ( mm )



**FEATURES**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- For use in low voltage, high frequency inverters free wheeling , and polarity protection applications.
- In compliance with EU RoHS 2002/95/EC directives

**MECHANICAL DATA**

- Case: ITO-220AB full molded plastic package
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any

**MAXIMUM RATINGS**

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

| PARAMETER   | SYMBOL          | MBR 1640FCT | MBR 1645FCT | MBR 1650FCT | MBR 1660FCT | MBR 1680FCT | MBR 1690FCT | MBR 16100FCT | MBR 16150FCT | MBR 16200FCT | UNITS |                 |
|---|-----------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|--------------|-------|-----------------|
| Maximum Recurrent Peak Reverse Voltage  | $V_{RRM}$       | 40          | 45          | 50          | 60          | 80          | 90          | 100          | 150          | 200          | V     |                 |
| Maximum RMS Voltage   | $V_{RMS}$       | 28          | 31.5        | 35          | 42          | 56          | 63          | 70           | 105          | 140          | V     |                 |
| Maximum DC Blocking Voltage   | $V_{DC}$        | 40          | 45          | 50          | 60          | 80          | 90          | 100          | 150          | 200          | V     |                 |
| Maximum Average Forward (See Figure 1)  | $I_{F(AV)}$     | 16<br>8     |             |             |             |             |             |              |              |              |       | A               |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method) | $I_{FSM}$       | 200         |             |             |             |             |             |              |              |              |       | A               |
| Maximum Forward Voltage at 8.0A per leg   | $V_F$           | 0.55        |             | 0.7         |             | 0.85        |             | 0.95         |              |              |       | V               |
| Maximum DC Reverse Current at $T_j=25^{\circ}C$<br>Rated DC Blocking Voltage $T_j=100^{\circ}C$   | $I_R$           | 0.2<br>20   |             |             |             |             |             |              |              |              |       | mA              |
| Typical Thermal Resistance  | $R_{\theta JC}$ | 2.0         |             |             |             |             |             |              |              |              |       | $^{\circ}C / W$ |
| Operating Junction and Storage Temperature Range  | $T_j, T_{STG}$  | -55 to +125 |             |             |             |             | -55 to +150 |              |              |              |       | $^{\circ}C$     |

NOTES : Both Bonding and Chip structure are available.

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**RATING AND CHARACTERISTIC CURVES**

