

### **Features**

- High Frequency Operation
- Lead Free Finish/RoHS Compliant(Note 1)("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Typical Thermal Resistance: 4°C/W Junction to Case

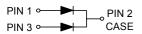
| MCC<br>Part Number | Device<br>Marking | Maximum<br>Recurrent<br>Peak Reverse<br>Voltage | Maximum<br>RMS<br>Voltage | Maximum<br>DC<br>Blocking<br>Voltage |
|--------------------|-------------------|---|---------------------------|--------------------------------------|
| MBR30200FCTH       | MBR30200FCTH      | 200V  | 140V                      | 200V                                 |

## Electrical Characteristics @ 25°C Unless Otherwise Specified

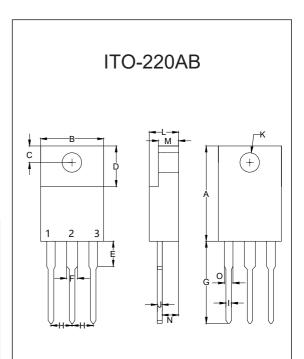
| Average Forward<br>Current                              | I <sub>F(AV)</sub> | 30A                              | T <sub>C</sub> =80°C   |
|---|--------------------|----------------------------------|--|
| Peak Forward Surge<br>Current                           | I <sub>FSM</sub>   | 250A                             | 8.3ms,Half Sine  |
| Maximum<br>Instantaneous<br>Forward Voltage             | V <sub>F</sub>     | 0.88V<br>0.76V<br>1.00V<br>0.90V | I <sub>FM</sub> =15A,T <sub>A</sub> =25°C<br>I <sub>FM</sub> =15A,T <sub>A</sub> =125°C<br>I <sub>FM</sub> =30A,T <sub>A</sub> =25°C<br>I <sub>FM</sub> =30A,T <sub>A</sub> =125°C |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I <sub>R</sub>     | 0.01mA<br>10mA                   | T <sub>A</sub> =25°C;<br>T <sub>A</sub> =125°C   |
| Typical Junction<br>Capacitance                         | Сл                 | 320pF                            | Measured at<br>1.0MHz, V <sub>R</sub> =4.0V  |

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

#### Internal Structure:



# 30 Amp Schottky Barrier Rectifier 200 Volts



| DIMENSIONS |        |       |       |       |      |  |
|------------|--------|-------|-------|-------|------|--|
|            | INCHES |       | MM    |       |      |  |
| DIM        | MIN    | MAX   | MIN   | MAX   | NOTE |  |
| Α          | 0.567  | 0.642 | 14.40 | 16.30 |      |  |
| В          |        | 0.421 |       | 10.70 |      |  |
| С          | 0.085  | 0.128 | 2.15  | 3.25  |      |  |
| D          | 0.248  | 0.272 | 6.30  | 6.90  |      |  |
| E          |        | 0.177 |       | 4.50  |      |  |
| F          |        | 0.071 |       | 1.80  |      |  |
| G          | 0.500  | 0.539 | 12.70 | 14.20 |      |  |
| Н          | 0.100  |       | 2.55  |       |      |  |
| 1          |        | 0.035 |       | 0.90  |      |  |
| J          |        | 0.032 |       | 0.80  |      |  |
| K          | 0.102  | 0.150 | 2.60  | 3.80  | Ф    |  |
| L          |        | 0.201 |       | 5.10  |      |  |
| М          |        | 0.140 |       | 3.56  |      |  |
| N          | 0.083  | 0.126 | 2.10  | 3.20  |      |  |
| 0          |        | 0.071 |       | 1.80  |      |  |



### **Curve Characteristics**

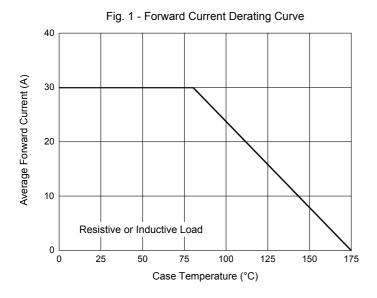
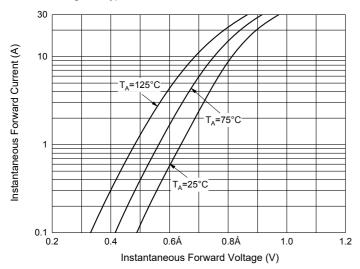


Fig. 3 - Typical Instantaneous Forward Characteristics



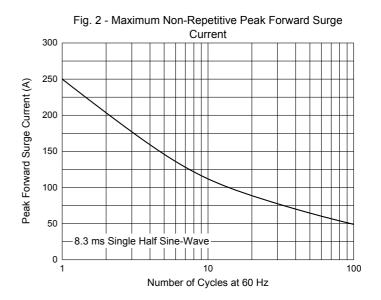
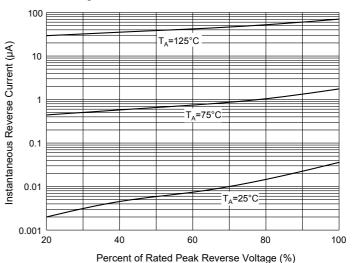


Fig. 4 - Instantaneous Reverse Characteristics





## **Ordering Information**

| Device         | Packing                                |  |
|----------------|--|--|
| Part Number-BP | Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/Carton |  |

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

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