

Features

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

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance Per Leg:1.7 °C/W Junction to Case

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|-------------------|---|---------------------------|--------------------------------------|
| MBR30200FCT | MBR30200FCT | 200V | 140V | 200V |

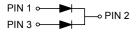
Electrical Characteristics @ 25°C Unless Otherwise Specified

| Average Forward Current | I _{F(AV)} | 30A | T _C =105°C |
|---|--------------------|----------------------------------|---|
| Peak Forward Surge Current | I _{FSM} | 200A | 8.3ms,Half Sine |
| Maximum Instantaneous Forward Voltage(note2) | V _F | 0.95V 1.05V 0.80V 0.92V | I_{FM} =15A I_{FM} =30A T_{J} =25°C I_{FM} =15A I_{FM} =30A T_{J} =125°C |
| Maximum Reverse Current at Working Peak Reverse Voltage | I _R | 0.1mA 1.0mA | T _J =25°C T _J =125°C |

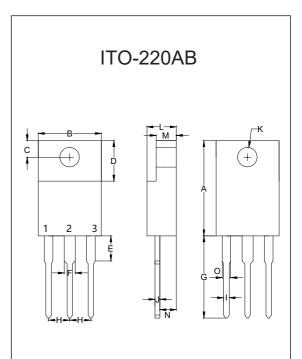
Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

2. Pulse test: 300us pulse width, 1% duty cycle

Internal Structure



30 Amp Schottky Barrier Rectifier 200Volts



| DIMENSIONS | | | | | |
|------------|--------|-------|-------|-------|------|
| DIM | INCHES | | MM | | NOTE |
| DIIVI | 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 | |
| Е | | 0.177 | | 4.50 | |
| F | | 0.071 | | 1.80 | |
| G | 0.500 | 0.539 | 12.70 | 14.20 | |
| Ι | 0.100 | | 2.55 | | |
| | | 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 | |
| Ν | 0.083 | 0.126 | 2.10 | 3.20 | |
| 0 | | 0.071 | | 1.80 | · |



Curve Characteristics

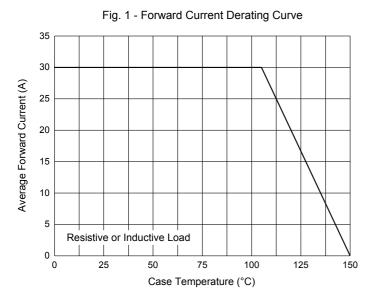
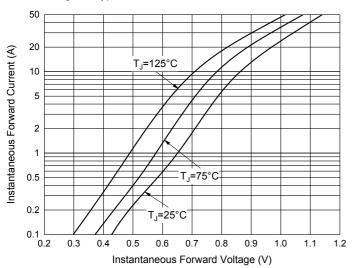


Fig. 3 - Typical Instantaneous Forward Characteristics



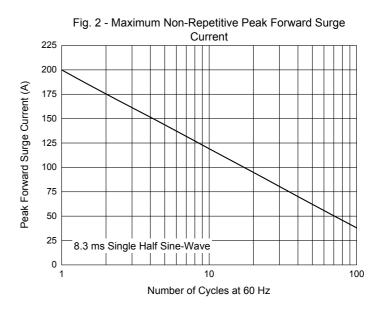
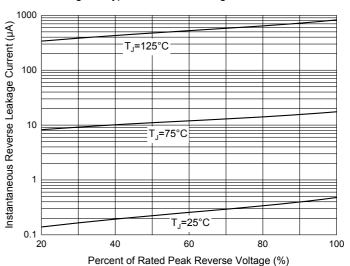


Fig. 4 - Typical Reverse Leakage Characteristics





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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