

Features

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

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +175°C
- Typical Thermal Resistance: 2 °C/W Junction to Case

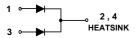
| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|-------------------|---|---------------------------|--------------------------------------|
| MBRB20200CT | MBRB20200CT | 200V | 140V | 200V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Average Forward Current | I _{F(AV)} | 20A | T _C =125°C |
|--|--------------------|----------------|---|
| Peak Forward Surge Current | I _{FSM} | 150A | 8.3ms,Half Sine Wave |
| Maximum Instantaneous Forward Voltage | V _F | 0.95V 0.80V | I _{FM} =10A; T _J =25°C I _{FM} =10A; T _J =125°C |
| Maximum Reverse Current At Rated DC Blocking Voltage | I _R | 10µA 1mA | Tյ=25°C Tյ=125°C |

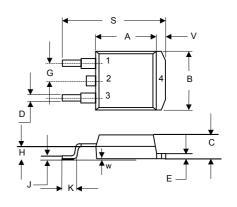
Note:1. High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 7a.

Internal Structure



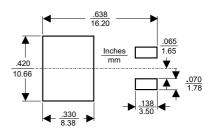
20 Amp High Voltage Power Schottky Barrier Rectifier 200 Volts

D²-PAK



| DIMENSIONS | | | | | |
|------------|--------|-------|-------|-------|------|
| DIM | INCHES | | MM | | NOTE |
| | MIN | MAX | MIN | MAX | NOTE |
| Α | 0.331 | 0.370 | 8.40 | 9.40 | |
| В | 0.378 | 0.417 | 9.60 | 10.60 | |
| С | 0.165 | 0.189 | 4.20 | 4.80 | |
| D | 0.027 | 0.037 | 0.68 | 0.94 | |
| E | 0.045 | 0.055 | 1.14 | 1.40 | |
| G | 0.010 | | 2.54 | | TYP. |
| Н | 0.096 | 0.134 | 2.43 | 3.40 | |
| J | 0.011 | 0.025 | 0.28 | 0.64 | |
| K | 0.071 | 0.131 | 1.80 | 3.32 | |
| S | 0.575 | 0.625 | 14.60 | 15.87 | |
| V | 0.042 | 0.058 | 1.07 | 1.47 | |
| W | 0.000 | 0.010 | 0.00 | 0.25 | |

Suggested Solder Pad Layout





Curve Characteristics

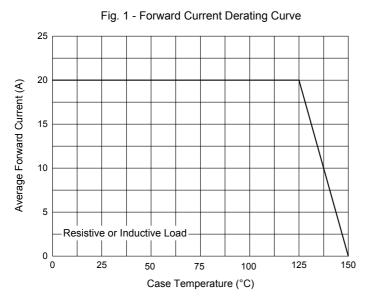
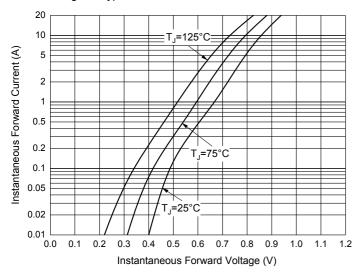


Fig. 3 - Typical Instantaneous Forward Characteristics



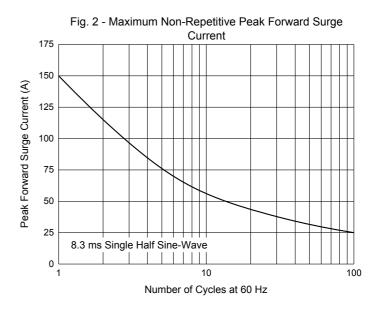
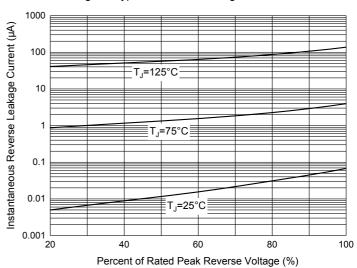


Fig. 4 - Typical Reverse Leakage Characteristics





Ordering Information

| Device | Packing | | |
|----------------|------------------------|--|--|
| Part Number-TP | Tape&Reel: 800pcs/Reel | | |
| Part Number-BP | Tube: 5Kpcs/Ctn | | |

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

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