

Features

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

Maximum Ratings

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

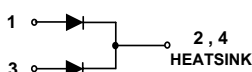
| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| MBRB10200CT | MBRB10200CT | 200V | 140V | 200V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|--------------|---|
| Average Forward Current | $I_{F(AV)}$ | 10A | $T_c=125^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 150A | 8.3ms, Half Sine |
| Maximum Instantaneous Forward Voltage | V_F | 0.9V 0.7V | $I_{FM}=5.0\text{A}; T_J=25^\circ\text{C}$ $I_{FM}=5.0\text{A}; T_J=125^\circ\text{C}$ |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | I_R | 10μA 2mA | $T_J=25^\circ\text{C}$ $T_J=125^\circ\text{C}$ |

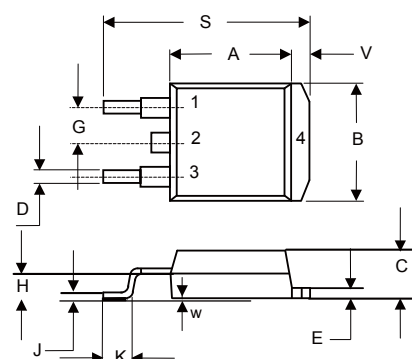
Note:1. High Temperature Solder Exemptions Applied, see EU Directive Annex Notes 7a.

Internal Structure



10 Amp High Voltage Power Schottky Barrier Rectifier 200 Volts

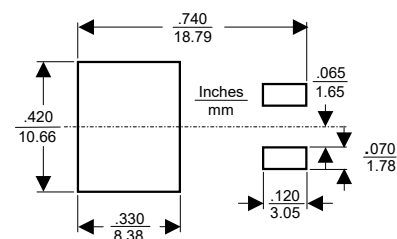
D²-PAK



DIMENSIONS

| DIM | INCHES | | MM | | NOTE |
|-----|--------|-------|-------|-------|------|
| | MIN | MAX | MIN | MAX | |
| A | 0.320 | 0.359 | 8.13 | 9.14 | |
| B | 0.374 | 0.453 | 9.50 | 11.50 | |
| C | 0.160 | 0.200 | 4.06 | 5.10 | |
| D | 0.020 | 0.038 | 0.51 | 0.96 | |
| E | 0.045 | 0.055 | 1.14 | 1.40 | |
| G | 0.083 | 0.110 | 2.10 | 2.80 | |
| H | 0.096 | 0.134 | 2.43 | 3.40 | |
| J | 0.011 | 0.025 | 0.28 | 0.64 | |
| K | 0.090 | 0.131 | 2.29 | 3.32 | |
| S | 0.575 | 0.652 | 14.22 | 16.55 | |
| V | 0.042 | 0.058 | 1.07 | 1.47 | |
| W | 0.000 | 0.008 | 0.00 | 0.20 | |

Suggested Solder Pad Layout



Curve Characteristics

Fig. 1 - Forward Current Derating Curve

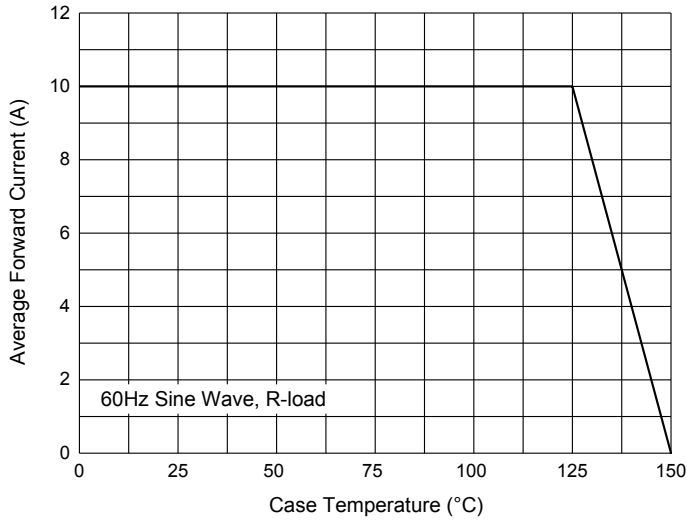


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

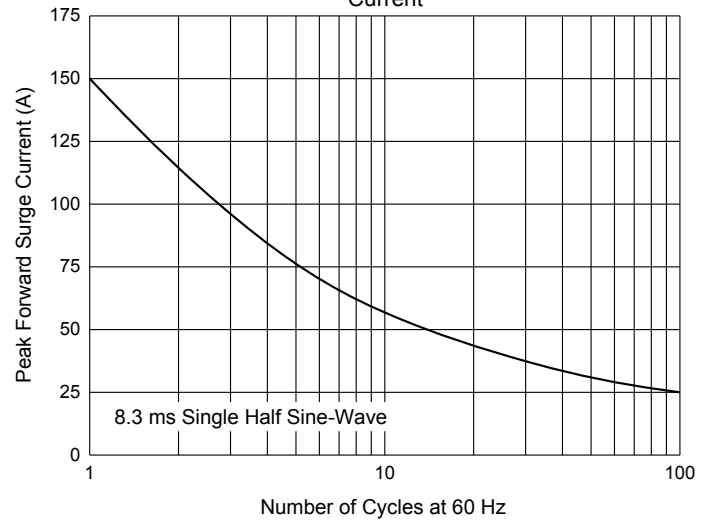


Fig. 3 - Typical Instantaneous Forward Characteristics

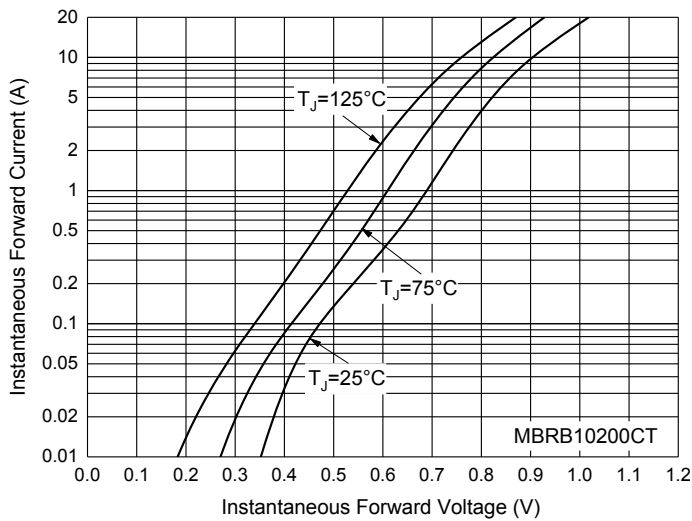
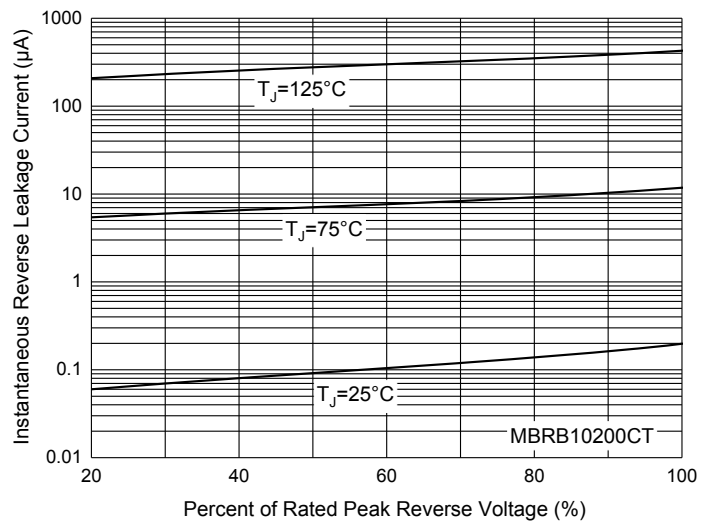


Fig. 4 - Typical Reverse Leakage Characteristics



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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