

Features

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

Maximum Ratings

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

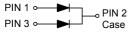
| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|-------------------|---|---------------------------|--------------------------------------|
| MBRL20150CT | MBRL20150CT | 150V | 105V | 150V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

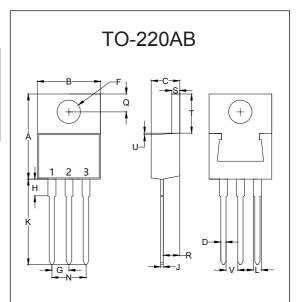
| Average Forward Current | I _{F(AV)} | 20A | T _C =90°C |
|---|--------------------|---------------------|---|
| Peak Forward Surge Current | I _{FSM} | 200A | 8.3ms,Half Sine |
| Current Squared Time | l²t | 167A ² S | 1ms≤t<8.3ms T _J =25℃, Ratin g of Per Diode |
| Maximum Instantaneous Forward Voltage | V _F | 0.85V | I _{FM} =10A; T _A =25°C |
| Peak Reverse Current | I _R | 0.01mA 1mA | T _A =25°C; T _A =100°C |

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

Internal Structure



20 Amp Low VF Schottky Barrier Rectifier 150 Volts



| DIMENSIONS | | | | | |
|------------|--------|-------|-------|-------|------|
| DIM | INCHES | | MM | | NOTE |
| | MIN | MAX | MIN | MAX | NOTE |
| Α | 0.560 | 0.625 | 14.22 | 15.88 | |
| В | 0.380 | 0.429 | 9.65 | 10.90 | |
| С | 0.140 | 0.201 | 3.56 | 5.10 | |
| D | 0.020 | 0.045 | 0.51 | 1.14 | |
| F | 0.131 | 0.170 | 3.34 | 4.31 | Ф |
| G | 0.079 | 0.121 | 2.01 | 3.07 | |
| Н | | 0.250 | | 6.35 | |
| J | 0.011 | 0.025 | 0.28 | 0.64 | |
| K | 0.500 | 0.580 | 12.70 | 14.73 | |
| L | 0.045 | 0.060 | 1.14 | 1.52 | |
| N | 0.158 | 0.242 | 4.02 | 6.14 | |
| Q | 0.087 | 0.135 | 2.22 | 3.43 | |
| R | 0.080 | 0.126 | 2.04 | 3.19 | |
| S | 0.045 | 0.055 | 1.14 | 1.39 | |
| Т | 0.230 | 0.270 | 5.84 | 6.86 | |
| U | | 0.050 | | 1.27 | |
| V | 0.045 | | 1.15 | | |



Curve Characteristics

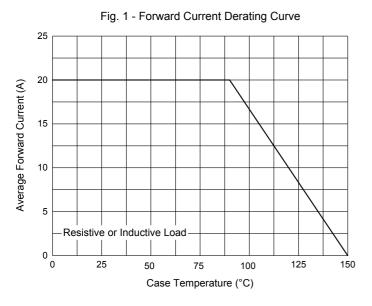


Fig. 3 - Typical Instantaneous Forward Characteristics

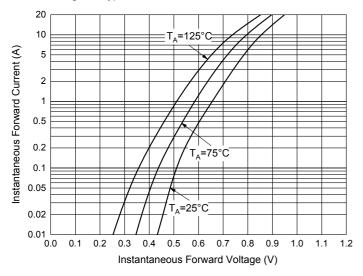


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

225

175

150

150

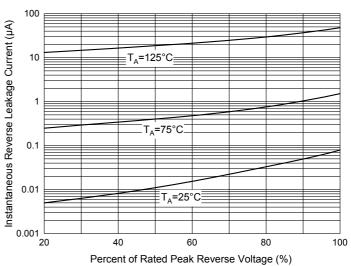
125

8.3 ms Single Half Sine-Wave

1 10 100

Number of Cycles at 60 Hz

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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