

**Micro Commercial Components** 

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# **MBR10150FCT**

10 Amp High Voltage Power Schottky Barrier Rectifier 150 Volts

## **Features**

- High Junction Temperature Capability
- Low Forward Voltage
- Marking: type number
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

# **Maximum Ratings**

- Operating Junction Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C

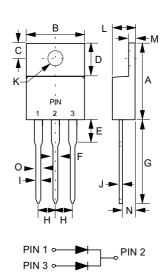
| MCC         | Maximum      | Maximum | Maximum  |
|-------------|--------------|---------|----------|
| Catalog     | Recurrent    | RMS     | DC       |
| Number      | Peak Reverse | Voltage | Blocking |
|             | Voltage      |         | Voltage  |
| MBR10150FCT | 150V         | 105V    | 150V     |

#### Electrical Characteristics @ 25°C Unless Otherwise Specified

| Average Forward Current                               | I <sub>F(AV)</sub> | 10 A | T <sub>C</sub> = 100°C                         |
|---|--------------------|------|--|
| Peak Forward Surge<br>Current                         | I <sub>FSM</sub>   | 120A | 8.3ms, half sine                               |
| Maximum<br>Instantaneous<br>Forward Voltage           | V <sub>F</sub>     | .92V | I <sub>F</sub> = 5A;<br>T <sub>J</sub> = 25°C  |
|   |                    | .75V | I <sub>F</sub> = 5A;<br>T <sub>J</sub> = 125°C |
| Maximum DC<br>Reverse Current At<br>Rated DC Blocking |                    |      |  |
| Voltage   | I <sub>R</sub>     | 50uA | T <sub>J</sub> = 25°C                          |

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

# **ITO-220AB**

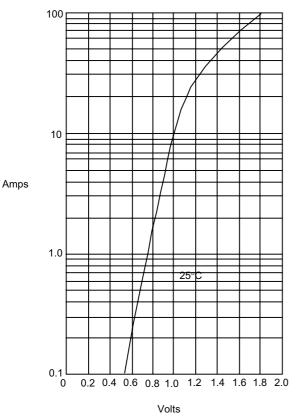


| DIMENSIONS |        |      |       |       |      |
|------------|--------|------|-------|-------|------|
|            | INCHES |      | ММ    |       |      |
| DIM        | MIN    | MAX  | MIN   | MAX   | NOTE |
| Α          | .583   | .606 | 14.80 | 15.40 |      |
| В          |        | .406 |       | 10.30 |      |
| С          | .100   | .112 | 2.55  | 2.85  |      |
| D          | .248   | .272 | 6.30  | 6.90  |      |
| E          |        | .161 |       | 4.10  |      |
| F          |        | .071 |       | 1.80  |      |
| G          | .512   | .543 | 13.00 | 13.80 |      |
| Н          | .100   |      | 2.55  |       |      |
|            | -      | .035 |       | 0.90  |      |
| J          |        | .032 |       | 0.80  |      |
| K          | .118   | .134 | 3.00  | 3.40  | Ø    |
| L          |        | .189 |       | 4.80  |      |
| M          |        | .130 |       | 3.30  |      |
| N          | .098   | .114 | 2.50  | 2.90  |      |
| 0          |        | .055 |       | 1.40  |      |

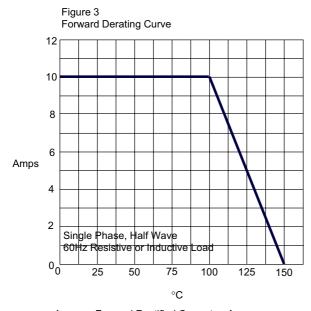


### **MBR10150FCT**

Figure 1
Maximum Forward Characteristics

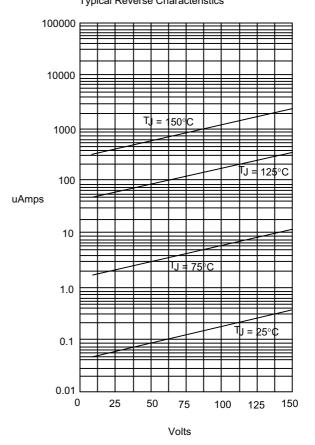


Instantaneous Forward Current - Amperes versus Instantaneous Forward Voltage - Volts

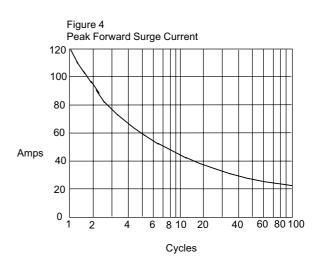


Average Forward Rectified Current - Amperes versus Ambient Temperature -°C

Figure 2 Micro Commercial Components
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current- MicroAmperes versus Rated Peak Reverse Voltage - Volts



Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles



## **Ordering Information**

| Device           | Packing        |
|------------------|----------------|
| (Part Number)-BP | Bulk;1Kpcs/Box |

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