

### **Features**

- Multilayer Metal -Silicon Potential Structure.
- Low Power Loss, High Efficiency
- · High Surge Capacity, High Current Capability
- Epoxy Meets UL 94 V-0 Flammability RatingLead Free Finish/ RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)

# **Maximum Ratings**

- Operating Junction Temperature Range: -50°C to +175°C
- Storage Temperature Range: -50°C to +175°C
- Typical Thermal Resistance: 0.5°C/WJunction to Case

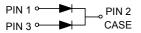
| MCC<br>Part Number | Device<br>Marking | Maximum<br>Recurrent<br>Peak Reverse<br>Voltage | Maximum<br>RMS<br>Voltage | Maximum DC<br>Blocking<br>Voltage |
|--------------------|-------------------|---|---------------------------|-----------------------------------|
| MBR60150PT         | MBR60150PT        | 150V  | 105V                      | 150V                              |

# Electrical Characteristics @ 25°C Unless Otherwise Specified

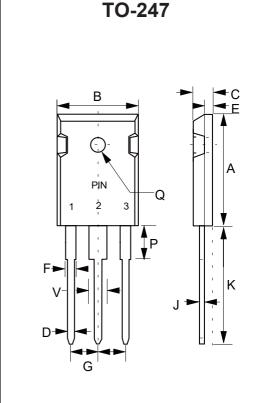
| Average Forward<br>Current                                 | I <sub>F(AV)</sub> | 60A                               |   |
|--|--------------------|-----------------------------------|---|
| Peak Forward Surge<br>Current                              | I <sub>FSM</sub>   | 400A                              | 8.3ms,Half Sine Wave  |
| Maximum<br>Instantaneous<br>Forward Voltage                | V <sub>F</sub>     | 0.90V(Max)<br>0.83V(Typ)<br>0.72V | I <sub>FM</sub> =30A;<br>T <sub>J</sub> =25°C<br>I <sub>FM</sub> =30A;<br>T <sub>J</sub> =125°C |
| Maximum Reverse<br>Current at Rated DC<br>Blocking Voltage | I <sub>R</sub>     | 0.01mA<br>2mA                     | T <sub>J</sub> =25°C<br>T <sub>J</sub> =125°C   |

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

### **Internal Structure**



# 60 Amp **Schottky Barrier** Rectifier 150 Volts



| DIMENSIONS |        |       |       |       |      |
|------------|--------|-------|-------|-------|------|
| DIM        | INCHES |       | MM    |       | NOTE |
|            | MIN    | MAX   | MIN   | MAX   | NOTE |
| Α          | 0.787  | 0.866 | 20.00 | 22.00 |      |
| В          | 0.598  | 0.638 | 15.20 | 16.20 |      |
| С          | 0.185  | 0.208 | 4.70  | 5.30  |      |
| D          | 0.035  | 0.059 | 0.90  | 1.50  |      |
| Е          | 0.059  | 0.094 | 1.50  | 2.40  |      |
| F          | 0.067  | 0.091 | 1.70  | 2.30  |      |
| J          | 0.019  | 0.031 | 0.48  | 0.80  |      |
| K          | 0.748  | 0.833 | 19.00 | 21.15 |      |
| Р          | 0.122  | 0.189 | 3.10  | 4.80  |      |
| Q          | 0.118  | 0.150 | 3.00  | 3.80  | Ф    |
| V          | 0.106  | 0.134 | 2.70  | 3.40  |      |
| G          | 0.197  | 0.224 | 5.00  | 5.70  |      |



# **Curve Characteristics**

Fig. 2 - Typical Instantaneous Forward Characteristics

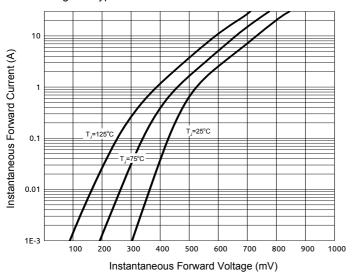


Fig. 2 - Typical Reverse Leakage Characteristics

Toology 1000

T\_=125°C

T\_=75°C

1000

T\_=25°C

Instantaneous Reverse Voltage (V)



# **Ordering Information**

| Device        | Packing                               |  |  |
|---------------|---------------------------------------|--|--|
| MBR60150PT-BP | Tube:30pcs/Tube, 360pcs/Box,1.8K/Ctn; |  |  |

Note: Adding "-HF" Suffix For Halogen Free, eg. MBR60150PT-BP-HF

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