

## Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- High Frequency Operation
- High Surge Forward Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Planar Structure Die and Soft Recovery Characteristics

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +175°C
- Storage Temperature Range: -55°C to +175°C
- Typical Thermal Resistance: 0.4°C/W Junction to Case

| MCC<br>Part Number | Device<br>Marking | Maximum<br>Recurrent<br>Peak Reverse<br>Voltage | Recurrent RMS |       |
|--------------------|-------------------|---|---------------|-------|
| MUR60120B          | MUR60120B         | 1200V   | 840V          | 1200V |

## Electrical Characteristics @ 25°C Unless Otherwise Specified

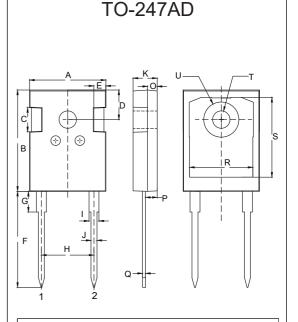
| Average Rectified<br>Forward Current<br>(Rated VR-20Khz<br>Square Wave) - 50%<br>Duty Cycle | I <sub>F(AV)</sub> | 60A              | T <sub>C</sub> =90⁰C  |  |
|---|--------------------|------------------|---|--|
| Peak Forward Surge<br>Current   | I <sub>FSM</sub>   | 500A             | 8.3ms,Half Sine   |  |
| Maximum<br>Instantaneous<br>Forward Voltage   | V <sub>F</sub>     | 3.3V             | I <sub>F</sub> =60A; T <sub>A</sub> =25⁰C                             |  |
| Maximum Reverse<br>Current At Rated<br>DC Blocking<br>Voltage                               | I <sub>R</sub>     | 0.015mA<br>0.5mA | T <sub>A</sub> =25ºC;<br>T <sub>A</sub> =125ºC                        |  |
| Maximum Reverse<br>Recovery Time  | t <sub>rr</sub>    | 85ns             | I <sub>F</sub> =0.5A; I <sub>R</sub> =1.0A;<br>I <sub>RR</sub> =0.25A |  |

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

Internal Structure

PIN 1 • CASE

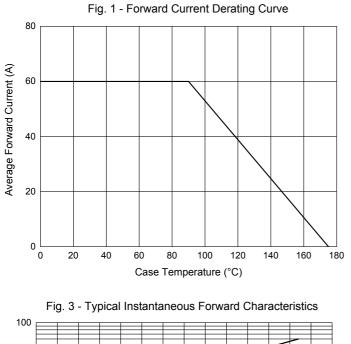


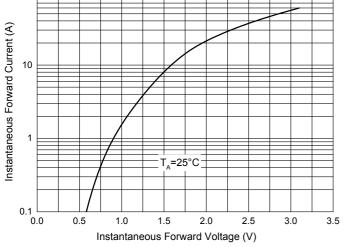


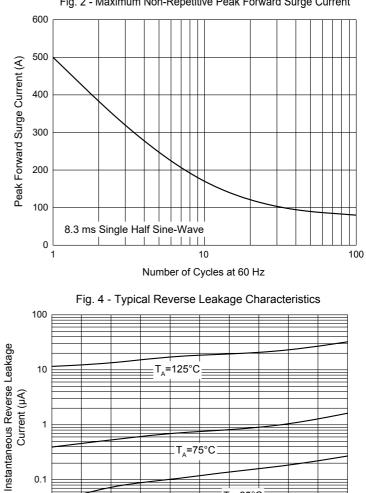
| DIM | INCHES |       | MM    |       | NOTE |
|-----|--------|-------|-------|-------|------|
|     | MIN    | MAX   | MIN   | MAX   | NOTE |
| А   | 0.602  | 0.642 | 15.30 | 16.30 |      |
| В   | 0.799  | 0.839 | 20.30 | 21.30 |      |
| С   | 0.189  | 0.205 | 4.80  | 5.20  |      |
| D   | 0.2    | 242   | 6.    | 15    | BSC. |
| Е   | 0.091  | 0.106 | 2.30  | 2.70  |      |
| F   | 0.768  | 0.807 | 19.50 | 20.50 |      |
| G   |        | 0.189 |       | 4.80  |      |
| Н   | 0.4    | 128   | 10    | .88   | BSC. |
| Ι   | 0.075  | 0.087 | 1.91  | 2.21  |      |
| J   | 0.044  | 0.054 | 1.11  | 1.36  |      |
| Κ   | 0.189  | 0.205 | 4.80  | 5.20  |      |
| 0   | 0.073  | 0.085 | 1.85  | 2.15  |      |
| Ρ   | 0.087  | 0.103 | 2.21  | 2.61  |      |
| Q   | 0.020  | 0.030 | 0.51  | 0.75  |      |
| R   | 0.512  | 0.535 | 13.00 | 13.60 |      |
| S   | 0.640  | 0.663 | 16.25 | 16.85 |      |
| Т   | 0.134  | 0.150 | 3.40  | 3.80  | Φ    |
| U   |        | 0.287 |       | 7.30  | Φ    |



# **Curve Characteristics**







T<sub>A</sub>=75°C

Peak Reverse Voltage (V)

600

T<sub>₄</sub>=25°C

1000

1200

800

0.1

0.01 200

400



# **Ordering Information**

| Device         | Packing                                   |  |  |
|----------------|---|--|--|
| Part Number-BP | Bulk:30pcs/Tube,360pcs/Box,1.8Kpcs/Carton |  |  |

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

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