

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- High Efficiency
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- 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: 0.5°C/W Junction to Case

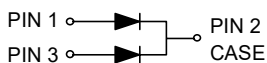
| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| MUR30120PT | MUR30120PT | 1200V | 840V | 1200V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|-------------------------------------|--|
| Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% Duty Cycle | $I_{F(AV)}$ | 30A | $T_C=110^\circ C$ |
| Peak Forward Surge Current | I_{FSM} | 100A | 8.3ms, Half Sine |
| Maximum Instantaneous Forward Voltage | V_F | 2.5V(Typ) 2.9V(Max) 2.6V(Max) | $I_F=15A; T_J=25^\circ C$ $I_F=15A; T_J=25^\circ C$ $I_F=15A; T_J=125^\circ C$ |
| Maximum Reverse Current At Rated DC Blocking Voltage | I_R | 0.01mA 3.5mA | $T_J=25^\circ C;$ $T_J=125^\circ C$ |
| Maximum Reverse Recovery Time | T_{RR} | 55ns | $I_F=0.5A; I_R=1.0A;$ $I_{RR}=0.25A$ |

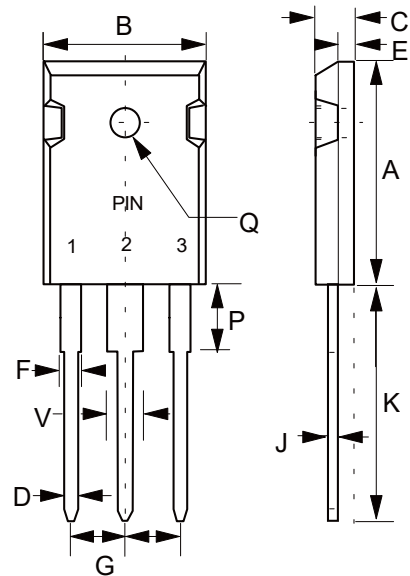
Note:1. High Temperature Solder Exemptions Applied, See EU Directive Annex 7a.

Internal Structure



**30 Amp
Super Fast
Recovery Rectifier
1200 Volts**

TO-247



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|-------|-------|-------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | 0.787 | 0.866 | 20.00 | 22.00 | |
| B | 0.598 | 0.638 | 15.20 | 16.20 | |
| C | 0.185 | 0.208 | 4.70 | 5.30 | |
| D | 0.035 | 0.059 | 0.90 | 1.50 | |
| E | 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 | |
| P | 0.122 | 0.189 | 3.10 | 4.80 | |
| Q | 0.118 | 0.150 | 3.00 | 3.80 | φ |
| V | 0.106 | 0.134 | 2.70 | 3.40 | |
| G | 0.197 | 0.224 | 5.00 | 5.70 | |

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

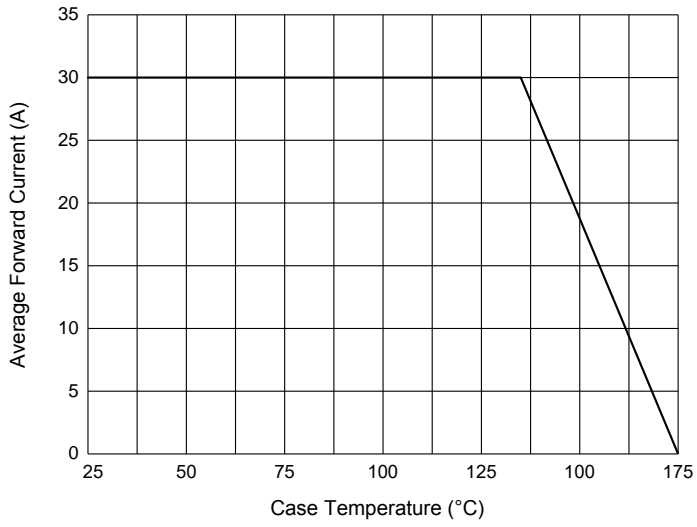


Fig. 2 - Typical Instantaneous Forward Characteristics

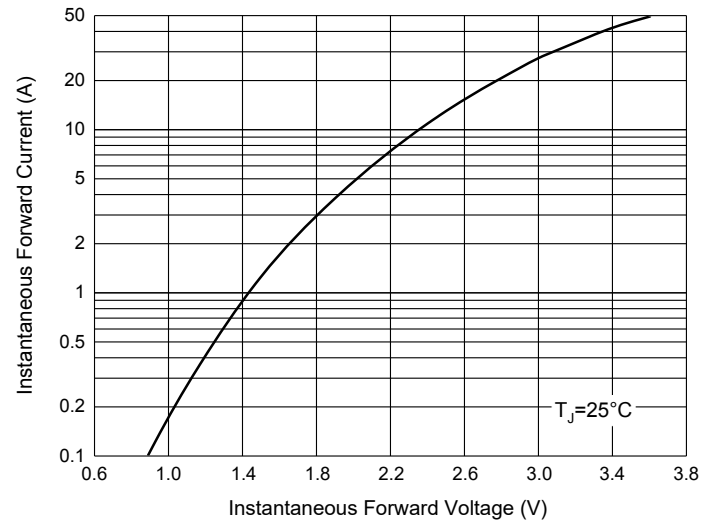
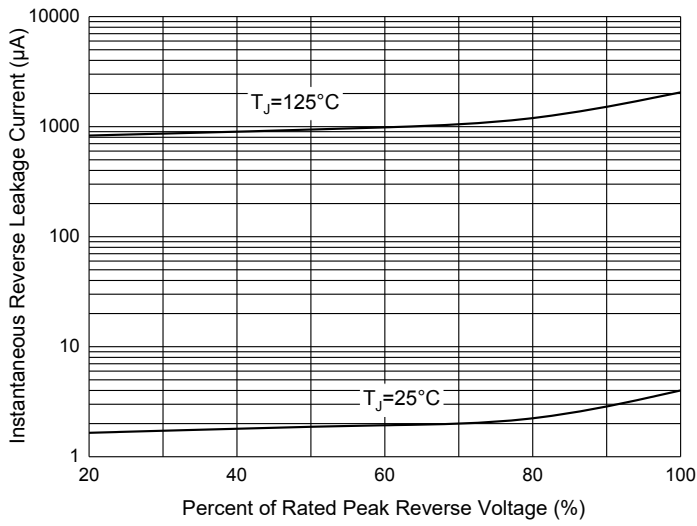


Fig. 3 - Typical Reverse Leakage Characteristics



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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