

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Low Forward Voltage Drop
- Fast Reverse Recovery Time
- Planar Structure Die and Soft Recovery Characteristics

Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 4°C/W Junction to Case

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|-------------------|-------------------------------------------------|---------------------------|-----------------------------------|
| MURS1060FL | MURS1060FL | 600V | 420V | 600V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| Average Rectified Forward Current | I _{F(AV)} | 10A | T _C = 100°C |
|------------------------------------------------------------|--------------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Peak Forward Surge Current | I _{FSM} | 100A | 8.3ms,Half Sine |
| Maximum Instantaneous Forward Voltage | V _F | 1.1V(Typ) 1.3V(Max) 1.1V(Max) | I _F =10A;T _J =25°C I _F =10A;T _J =25°C I _F =10A;T _J =150°C |
| Maximum Reverse Current At Rated DC Blocking Voltage | I _R | 5μΑ 200μΑ | T _J =25°C; T _J =150°C |
| Typical Junction Capacitance | CJ | 115pF | Measured at 1.0MHz, V _R =4.0V |

Dynamic Recovery Characteristics @ 25°C Unless Otherwise Specified

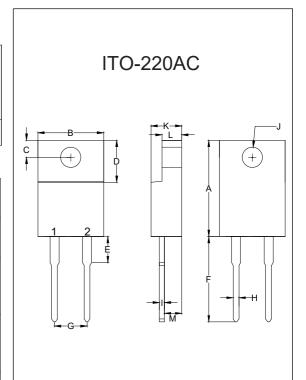
| Reverse Recovery | t _{rr} | 40ns(Typ.) 75ns(Max.) | I _F =0.5A; I _R =1.0A; I _{RR} =0.25A | |
|-------------------------|------------------|-----------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| Time | | 160ns(Typ.) 250ns(Typ.) | T _J =25°C T _J =125°C | $I_F = 10 \text{ A}$ $di_F/dt = 200 \text{ A/}\mu\text{s}$ $V_R = 200 \text{ V}$ |
| Peak recovery current | I _{RRM} | 6.5A(Typ.) 10A(Typ.) | T _J =25°C T _J =125°C | |
| Reverse recovery charge | Q _{rr} | 565nC(Typ.) 1250nC(Typ.) | T _J =25°C T _J =125°C | |

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

Internal Structure



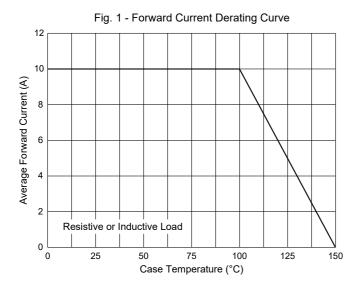
10 Amp FRED Rectifiers 600 Volts

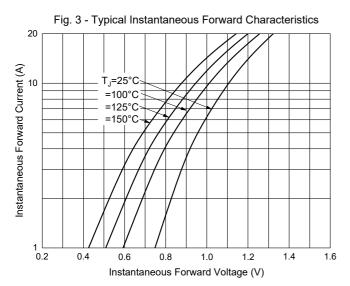


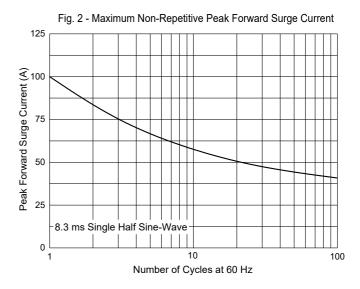
| DIMENSIONS | | | | | |
|------------|--------|-------|-------|-------|------|
| DIM | INCHES | | MM | | NOTE |
| DIM | MIN | MAX | MIN | MAX | NOTE |
| Α | 0.567 | 0.606 | 14.40 | 15.40 | |
| В | | 0.406 | | 10.30 | |
| С | 0.100 | 0.112 | 2.55 | 2.85 | |
| D | 0.248 | 0.272 | 6.30 | 6.90 | |
| E | | 0.161 | | 4.10 | |
| F | 0.500 | 0.543 | 12.70 | 13.80 | |
| G | 0.2 | 0.200 | | 10 | |
| Н | | 0.035 | | 0.90 | |
| I | | 0.032 | | 0.80 | |
| J | 0.102 | 0.134 | 2.60 | 3.40 | Ф |
| K | | 0.189 | | 4.80 | |
| L | | 0.123 | | 3.10 | |
| М | 0.098 | 0.114 | 2.50 | 2.90 | |

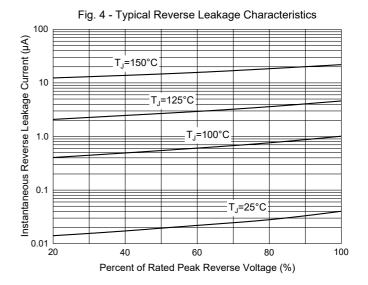


Curve Characteristics











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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