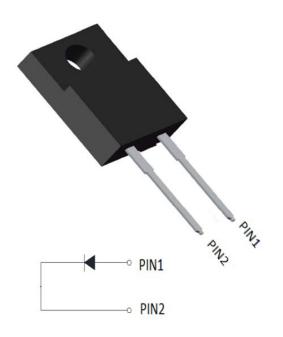




Ultra-Fast Recovery Rectifier Diodes



Features

- High frequency operation
- High surge forward current capability
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Adopt GPP chip
- Passivation for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

Mechanical Data

 Package: ITO-220AC
 Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant

• **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102

• Polarity: As marked

■Maximum Ratings (T_a=25°C Unless otherwise specified)

| PARAMETER | SYMBOL | UNIT | MUR2060F-B1-0000S |
|--|------------------|------------------|-------------------|
| Device Marking Code | | | MUR2060F |
| Repetitive Peak Reverse Voltage | VRRM | ٧ | 600 |
| Average Rectified Output Current @60Hz half sine- wave, R-load, Tc(FIG.1), | lo | А | 20 |
| Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, Ta=25°C | IFSM | А | 200 |
| Current Squared Time @1ms≤t<8.3ms Tj=25℃ | l ² t | A ² s | 166 |
| Storage Temperature | T _{stg} | °C | -55 ~ +150 |
| Junction Temperature | Tj | °C | -55 ~ +150 |

■Electrical Characteristics (Ta=25°C Unless otherwise specified)

| Elicetrical Griding (18 20 0 Grides Griding Specifica) | | | | | |
|--|--------|------|---|-------------------|--|
| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | MUR2060F-B1-0000S | |
| Maximum instantaneous forward voltage drop per diode | VFM | V | IFM=20.0A | 1.5 | |
| Maximum DC reverse current at | IRRM1 | uA | VRM=VRRM T _a =25℃ | 10 | |
| rated DC blocking voltage per diode | IRRM2 | | VRM=VRRM T _a =125℃ | 500 | |
| Reverse Recovery Time | Trr | ns | I _F =0.5A I _{RM} =1A I _{RR} =0.25A | 50 | |

■Thermal Characteristics (T_a=25°C Unless otherwise specified)

| PARAMETER | | SYMBOL UNIT | | MUR2060F-B1-0000S | |
|--------------------|---------------------------|------------------|-----|-------------------|--|
| Thermal Resistance | Between junction and case | $R_{\theta J-C}$ | °CW | 2.5 | |

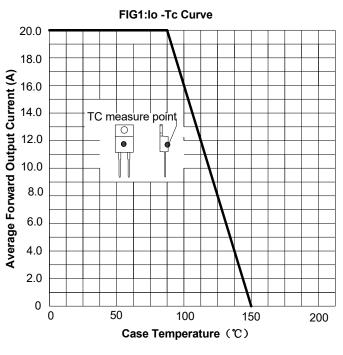


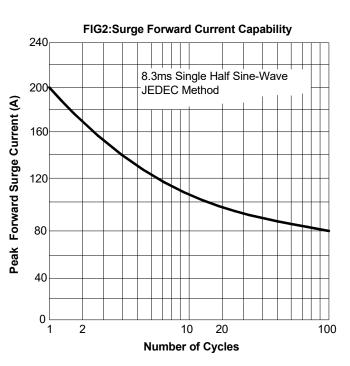
MUR2060F-B1-0000S

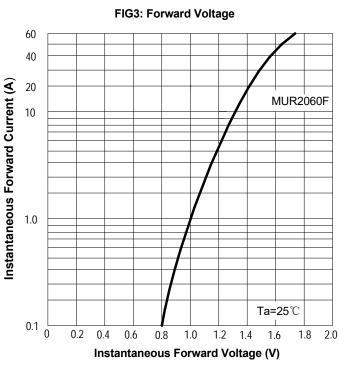
■Ordering Information (Example)

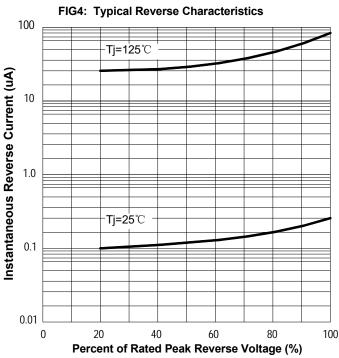
| PREFERED P/N | UNIT WEIGHT(g) | MINIIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|-------------------|------------------|--------------------------|-------------------------|----------------------------|---------------|
| MUR2060F-B1-0000S | Approximate 1.42 | 50 | 1000 | 5000 | Tube |

■Characteristics (Typical)





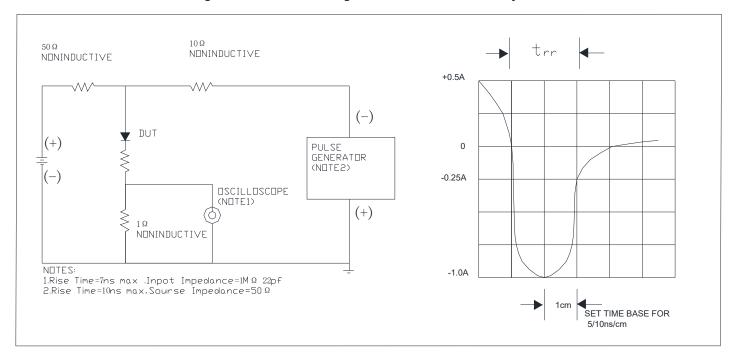




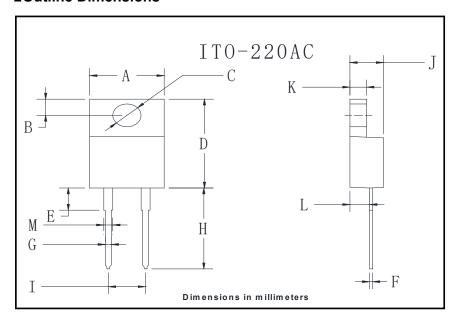


MUR2060F-B1-0000S

FIG.5 Diagram of circuit and Testing wave form of reverse recovery time



■Outline Dimensions



| ITO-220AC | | | | | |
|-----------|------|------|--|--|--|
| Dim | Min | Max | | | |
| Α | 9.7 | 10.7 | | | |
| В | 2.15 | 3.25 | | | |
| С | 2.6 | 3.8 | | | |
| D | 14.4 | 15.9 | | | |
| Е | 3.1 | 4.5 | | | |
| F | 0.4 | 0.8 | | | |
| G | 0.4 | 0.9 | | | |
| Н | 12.7 | 14.2 | | | |
| I | 3.6 | 5.9 | | | |
| J | 3.9 | 5.1 | | | |
| K | 2.1 | 3.56 | | | |
| L | 2.1 | 3.2 | | | |
| М | 1.0 | 1.8 | | | |



MUR2060F-B1-0000S

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