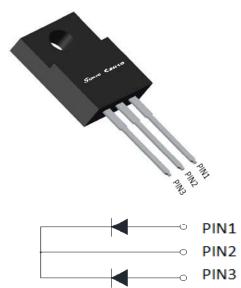


MBR2060FCT

Schottky Diodes



Features

- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring 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-220AB

Molding compound meets UL 94 V-0 flammability

• Terminals: Tin plated leads, solderable per J-STD-

002 and JESD22-B102 • Polarity: As marked

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

| = maximum (tatings (ta = 5 = 0 most state most specimes) | | | | | |
|--|------------------|------------------|--------------------|--|--|
| PARAMETER | SYMBOL | UNIT | MBR2060FCT | | |
| Device marking code | | | MBR2060FCT | | |
| Repetitive Peak Reverse Voltage | VRRM | V | 60 | | |
| Average Rectified Output Current @60Hz sine wave, R-load, Ta=25°C | IO | Α | 20 | | |
| Surge(Non-repetitive)Forward Current @60H _Z half sine-wave,1 cycle, T _a =25°C | IFSM | Α | 150 | | |
| Current Squared Time @1ms≤t<8.3ms Tj=25˚ℂ, | l ² t | A ² s | 94 | | |
| Storage Temperature | T _{Stg} | °C | -55 ~ + 150 | | |
| Junction Temperature | Tj | $^{\circ}$ | -55 ~ + 150 | | |

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

| PARAMETER | SYMBOL | UNIT | TEST CONDITIONS | MBR2060FCT |
|---|--------|------|-----------------------------------|------------|
| Maximum instantaneous forward voltage drop per diode | VFM | V | IFM=10.0A | 0.72 |
| Maximum DC reverse current at rated DC blocking voltage per- diode | IRRM1 | mA | VRM=VRRM T _a =25℃ | 0.2 |
| | IRRM2 | | VRM=VRRM T _a =125°C | 50 |



MBR2060FCT

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

| PARAMETER | | SYMBOL | UNIT | MBR2060FCT |
|--------------------|---------------------------|-------------------|------|------------|
| Thermal Resistance | Between junction and case | R _{θJ-C} | °CMV | 4.0 |

■Ordering Information (Example)

| PREFERED P/N | UNIT WEIGHT(g) | MINIIMUM PACKAGE(pcs) | INNER BOX QUANTITY(pcs) | OUTER CARTON QUANTITY(pcs) | DELIVERY MODE |
|--------------|-----------------|--------------------------|----------------------------|----------------------------|---------------|
| MBR2060FCT | Approximate 1.6 | 50 | 1000 | 5000 | Tube |

■Characteristics (Typical)

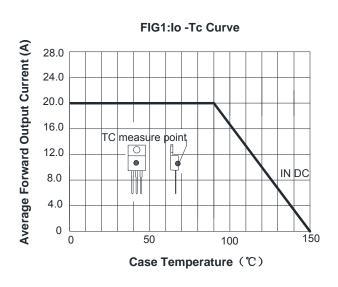


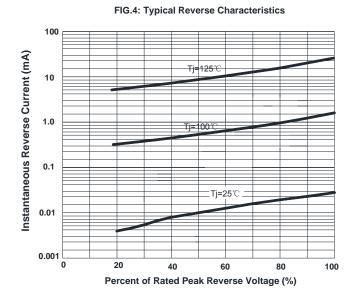
FIG2:Surge Forward Current Capability

175
150
125
8.3ms Single
Half Sine-Wave
JEDEC Method

75
50
25
1 2 5 10 20 50 100

Number of Cycles

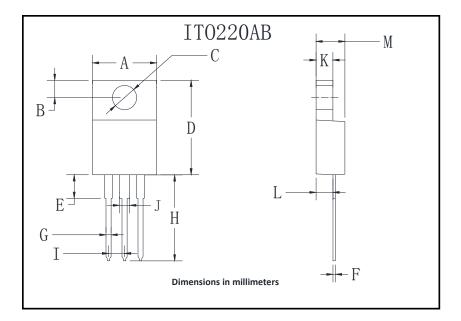
FIG3: Forward Voltage 100 Instantaneous Forward Current (A) 20 10 5.0 1.0 0.5 0.2 0.1 0 0.1 0.2 1.1 1.2 0.5 0.6 0.7 0.8 0.9 1.0 Instantaneous Forward Voltage (V)





MBR2060FCT

■Outline Dimensions



| ITO-220AB | | | | |
|-----------|------|------|--|--|
| 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 | 0.8 | | |
| Н | 12.7 | 14.2 | | |
| I | 1.80 | 2.95 | | |
| J | 1.4 | 1.8 | | |
| K | 2.1 | 3.56 | | |
| L | 2.1 | 3.2 | | |
| М | 3.9 | 5.1 | | |

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