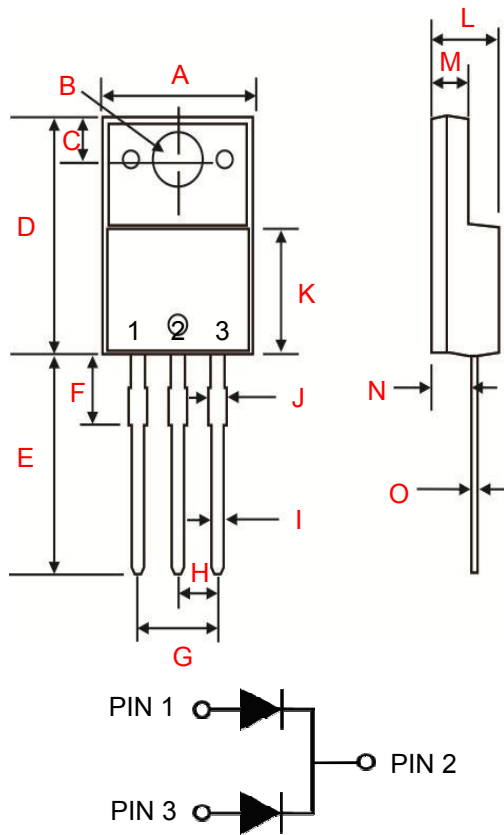


High Power Schottky Barrier Rectifier

Package Outline Dimensions (millimeters)



| ITO-220AB | | |
|------------------------------|----------|-------|
| Dim. | Min. | Max. |
| A | 9.90 | 10.10 |
| B | 2.90 | 3.50 |
| C | 2.55 | 2.85 |
| D | 14.80 | 15.40 |
| E | 13.00 | 13.80 |
| F | 3.45 | 3.75 |
| G | 5.10 BSC | |
| H | 2.55 BSC | |
| I | 0.30 | 0.90 |
| J | 1.00 | 1.55 |
| K | 8.40 | 8.60 |
| L | 4.20 | 4.80 |
| M | 2.90 | 3.30 |
| N | 2.50 | 2.90 |
| O | 0.6 BSC | |
| All Dimensions in millimeter | | |

Features

- High Current Capability
- Low Switching Noise
- High Surge Capability
- Low Power Loss & High Efficiency
- Guard Ring Protection
- Pd-free lead plating & Halogen-free part

Mechanical

- Molded Plastic Low profile ITO-220AB
- Plastic materials used carries underwriters laboratory flammability classification 94V-0
- Lead Temperature for Soldering Purposes : 265°C Max. for 10 Seconds
- Device Weight : Approximated 2.25 grams

Maximum Ratings & Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise specified)

| Parameter | Symbol | MBR 2040FCT | MBR 2060FCT | Units |
|---|-----------|-------------|-------------|-------|
| DC Blocking Voltage | V_{RM} | 40 | 60 | |
| Working Peak Reverse Voltage | V_{RWM} | 28 | 42 | Volts |
| Peak Repetitive Reverse Voltage | V_{RRM} | 40 | 60 | |
| Average Rectified Output Current (Total Device) | I_O | 20 | | Amps |
| Non-Repetitive Peak Forward Surge Current (Per Leg) (Surge applied at rated load conditions half wave, single phase, 60Hz) | I_{FSM} | 150 | | Amps |
| Instantaneous Forward Voltage (Per Leg) $I_F = 10A, T_A = 25^\circ\text{C}$ | V_F | 0.65 | 0.8 | Volts |
| Instantaneous Reverse Current (Per Leg) $V_R = V_{RRM}, T_A = 25^\circ\text{C}$ $V_R = V_{RRM}, T_A = 125^\circ\text{C}$ | I_R | 0.1 10 | | mA |

NOTE : 1. Thermal resistance from junction to case per leg, with heatsink(1.35" x 0.95" x 0.18") Al-plate.

Thermal Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise specified) (Per Leg)

| Parameter | Symbol | Value | Units |
|---|----------------|--------------|-----------------------------|
| Maximum Thermal Resistance Junction to Case | $R\theta_{JC}$ | 6.0 | $^\circ\text{C} / \text{W}$ |
| Operating & Storage Junction Temperature | T_J | 150 | $^\circ\text{C}$ |
| | T_{STG} | - 65 to +150 | |

Ratings and Characteristics Curves ($T_A = 25^\circ\text{C}$ unless otherwise specified)

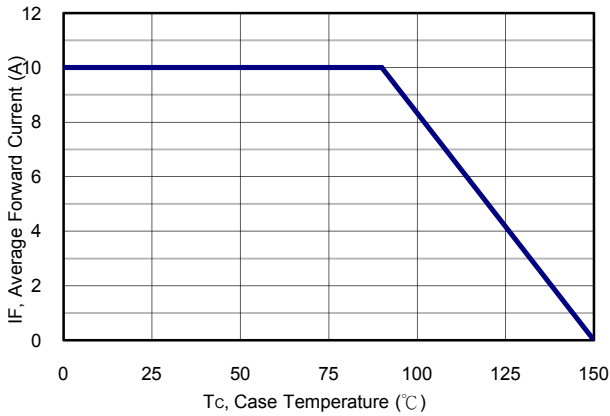


Figure 1: Current Derating Curves (Per Leg)

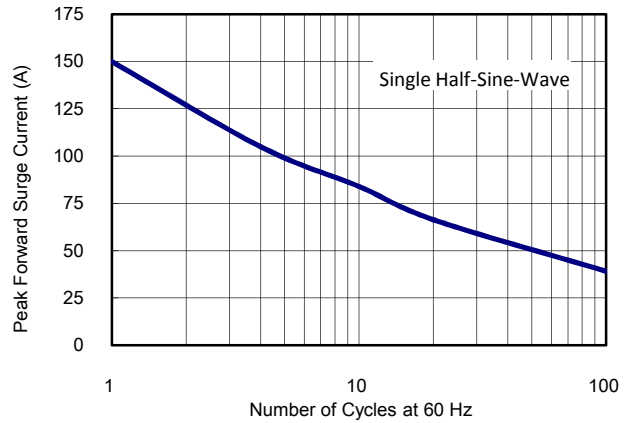


Figure 2: Peak Forward Surge Current (Per Leg)

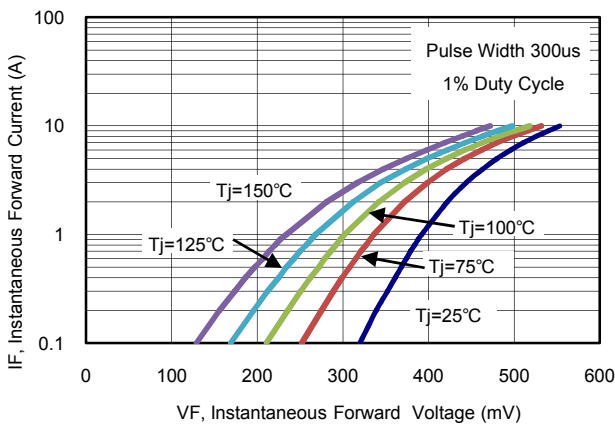


Figure 3: Typical Forward Characteristics (MBR2040FCT) (Per Leg)

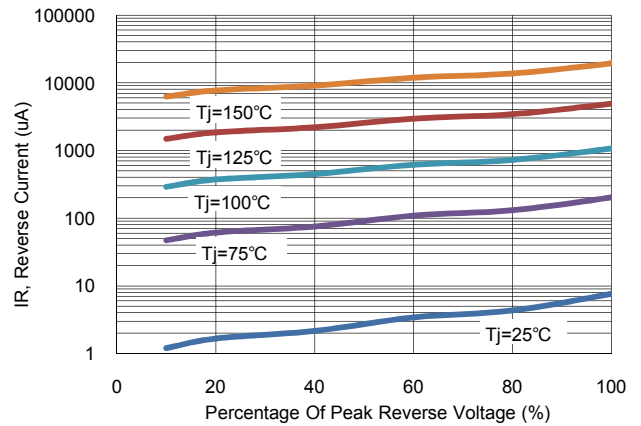


Figure 4: Typical Reverse Characteristics (MBR2040FCT) (Per Leg)

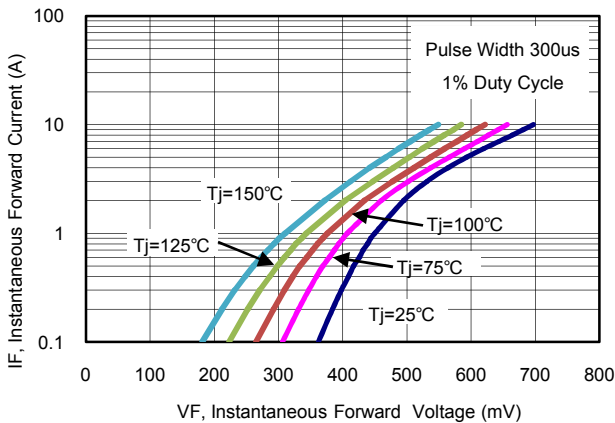


Figure 5: Typical Forward Characteristics (MBR2060FCT) (Per Leg)

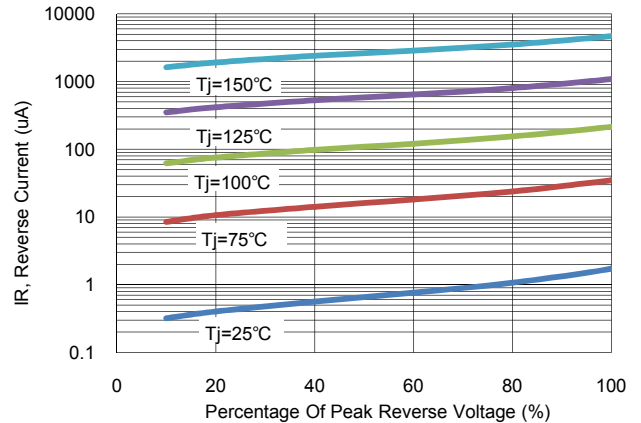
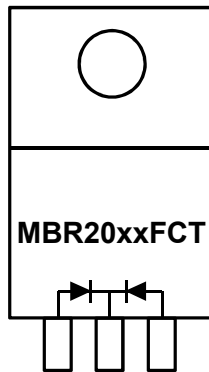


Figure 6: Typical Reverse Characteristics (MBR2060FCT) (Per Leg)

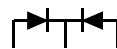
Ordering information

| Part Number | Package | Delivery mode |
|-------------------------|-----------|------------------|
| MBR2040FCT / MBR2060FCT | ITO-220AB | 50 pieces / Tube |

Marking Code Information



MBR20xxFCT = Product Type Marking Code

 = polarity

Disclaimer

All product specifications and data are subject to change without notice.

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