



Micro Commercial Components

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MBR1620FCT THRU MBR16100FCT

Features

- High Surge Capability
- Low Forward Voltage Drop
- Marking : type number
- Low Power Loss, High Efficiency
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0

Maximum Ratings

- Operating Temperature: -50°C to +125°C
- Storage Temperature: -50°C to +125°C
- Maximum Thermal Resistance: $R_{\theta JC} = 2.0^{\circ}\text{C}/\text{W}$

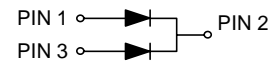
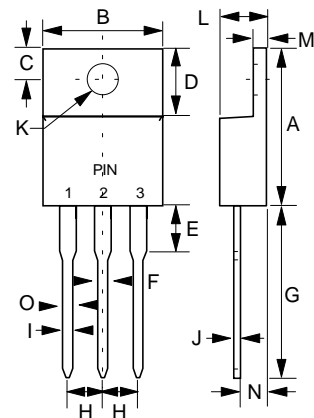
| MCC Part Number | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------------------------------|---------------------|-----------------------------|
| MBR1620FCT | 20V | 14V | 20V |
| MBR1630FCT | 30V | 21V | 30V |
| MBR1640FCT | 40V | 28V | 40V |
| MBR1650FCT | 50V | 35V | 50V |
| MBR1660FCT | 60V | 42V | 60V |
| MBR1680FCT | 80V | 56V | 80V |
| MBR16100FCT | 100V | 70V | 100V |

Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---------------------------------------------------------|-------------|----------------|-----------------------------------------------------------|
| Average Forward Current | $I_{F(AV)}$ | 16 A | $T_C = 90^{\circ}\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 150A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V_F | .55V | $I_{FM} = 8.0\text{A per leg}$ |
| MBR1620FCT-1640FCT | | .75V | |
| MBR1650FCT-1660FCT MBR1680FCT-16100FCT | | .85V | |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 0.5mA 100mA | $T_C = 25^{\circ}\text{C}$ $T_C = 100^{\circ}\text{C}$ |

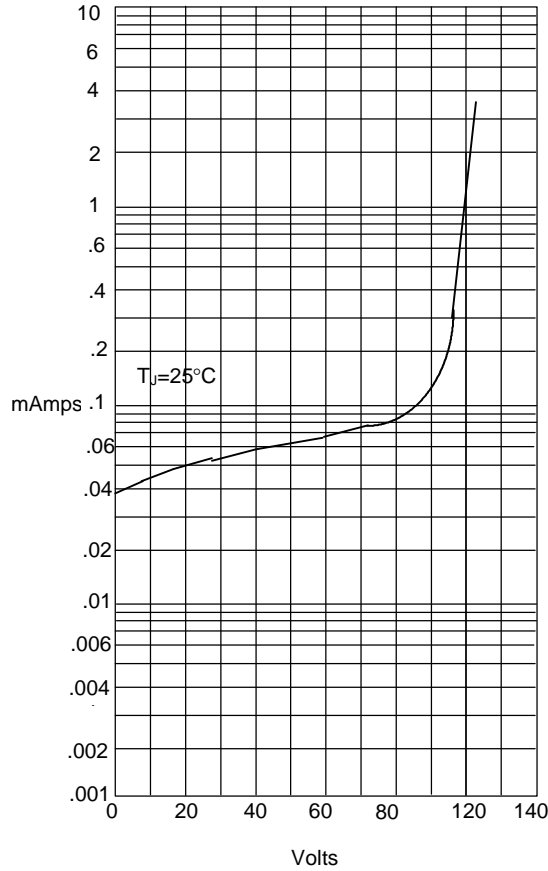
16 Amp Schottky Rectifier 20-100 Volts

ITO-220AB



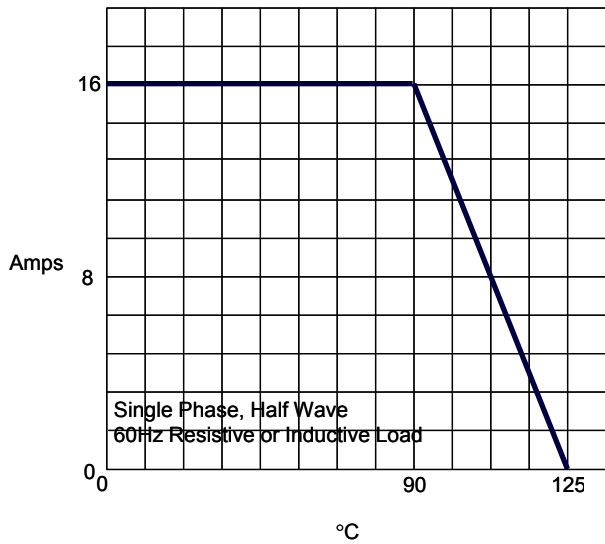
| DIM | INCHES | | MM | | NOTE |
|-----|--------|------|-------|-------|------|
| | MIN | MAX | MIN | MAX | |
| A | .583 | .606 | 14.80 | 15.40 | |
| B | --- | .406 | --- | 10.30 | |
| C | .100 | .112 | 2.55 | 2.85 | |
| D | .248 | .272 | 6.30 | 6.90 | |
| E | --- | .161 | --- | 4.10 | |
| F | --- | .071 | --- | 1.80 | |
| G | .512 | .543 | 13.00 | 13.80 | |
| H | .100 | | 2.55 | | |
| I | --- | .035 | --- | 0.90 | |
| J | --- | .032 | --- | 0.80 | |
| K | .118 | .134 | 3.00 | 3.40 | ∅ |
| L | --- | .189 | --- | 4.80 | |
| M | --- | .130 | --- | 3.30 | |
| N | .098 | .114 | 2.50 | 2.90 | |
| O | --- | .055 | --- | 1.40 | |

Figure 1
Typical Reverse Characteristics



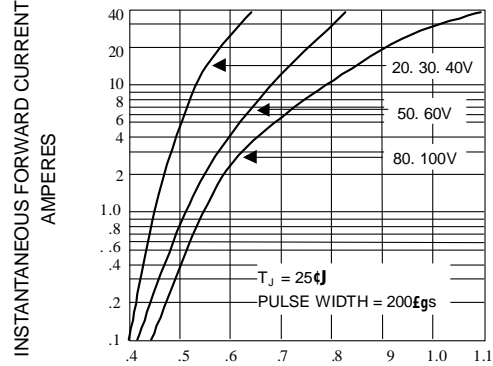
Instantaneous Reverse Leakage Current - MicroAmperes versus
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3
Forward Derating Curve



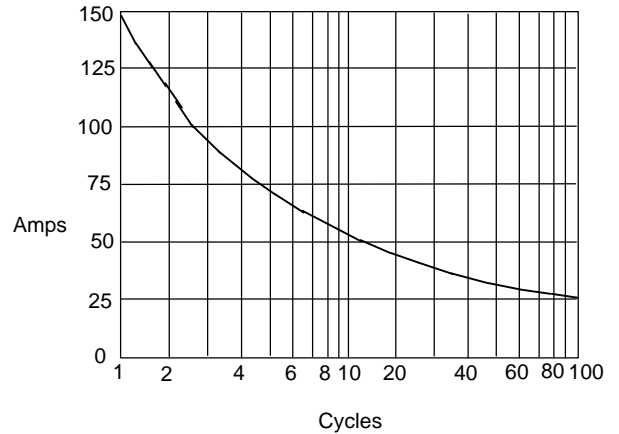
Average Forward Rectified Current - Amperes versus
Ambient Temperature - $^\circ\text{C}$

Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC



INSTANTANEOUS FORWARD CHARACTERISTIC

Figure 4
Peak Forward Surge Current



Peak Forward Surge Current - Amperes versus
Number Of Cycles At 60Hz - Cycles



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