

Power Schottky Rectifier - 20Amp 100Volt

Features

- Plastic package has Underwriters Laboratory Flammability Classifications 94V-0
- High Junction Temperature Capability
- Low forward voltage, high current capability
- High surge capacity
- Low power loss, high efficiency
- ESD performance human body mode > 8 KV
- Halogen-Free

Application

- AC/DC Switching Adaptor and other Switching Power Supply

Absolute maximum ratings

| Symbol | Ratings | Unit | Conditions |
|-----------------------------------|-------------|------|-----------------------------------|
| I _{F(AV)} | 20 | A | Average Forward Current |
| V _{RRM} | 100 | V | Repetitive Peak Reverse Voltage |
| I _{FSM} | 150 | A | Peak Forward Surge Current |
| V _F | 0.69 | V | Forward Voltage Drop |
| T _j , T _{stg} | -50 to +175 | °C | Operating and Storage Temperature |

Electrical characteristics

| Parameters | Symbol | Ratings | Conditions |
|--|---------------------|----------|---|
| Maximum Instantaneous Forward Voltage | V _F | 0.85V | Per Leg at I _F = 10A T _c = 25°C |
| | | 0.69V | T _c = 125°C |
| Maximum Reverse Leakage Current | I _R | 0.05mA | Per Leg at V _R = 100V T _c = 25°C |
| | | 10mA | T _c = 125°C |
| Typical Thermal Resistance, Junction to Case | R _{θ(j-c)} | 2.2 °C/W | Per Leg TO-220AB |
| | | 4.5 °C/W | ITO-220AB |

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MBR20C100CTH/FCTH

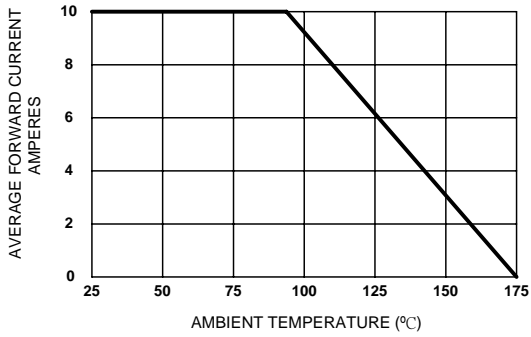


Figure 1. Forward Current Derating Curve

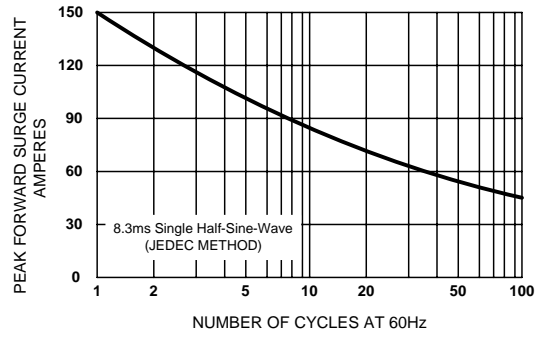


Figure 2. Maximum Non-repetitive Surge Current

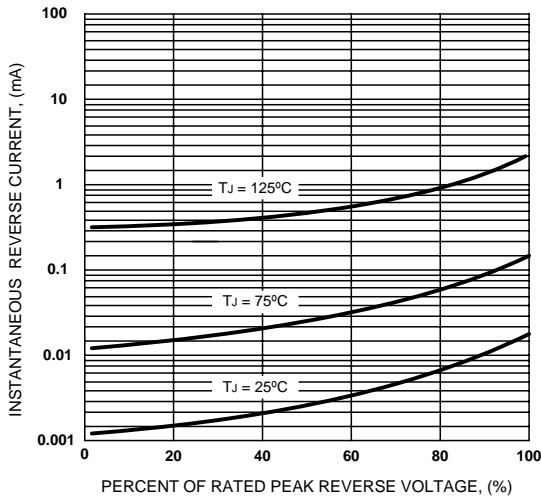


Figure 3. Typical Reverse Characteristics

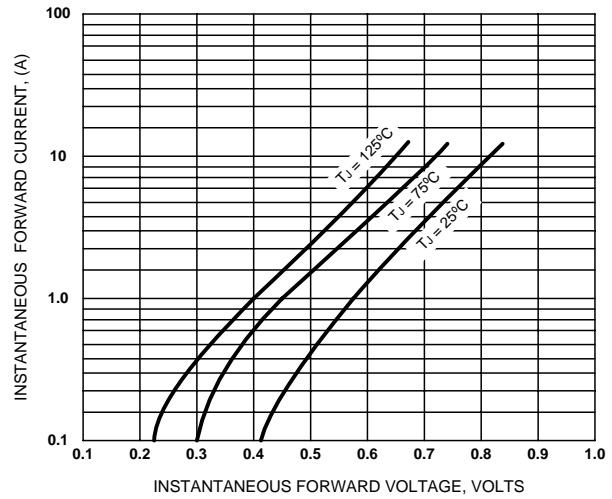


Figure 4. Typical Forward Characteristics

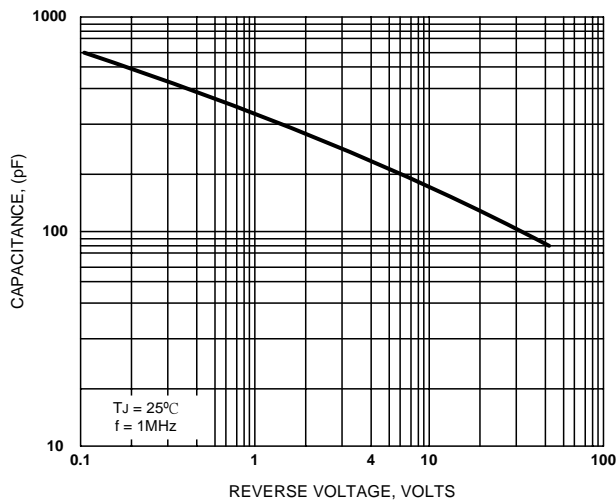


Figure 5. Typical Junction Capacitance

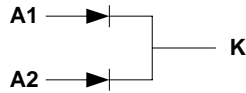
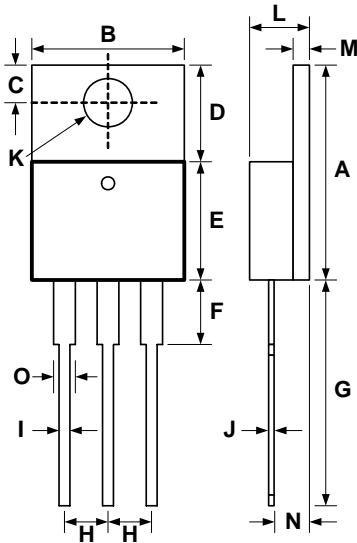


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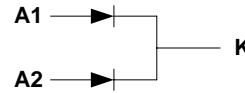
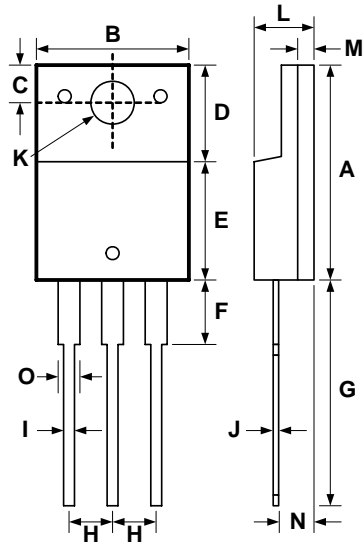
T0-220AB



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|-------|-------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | .579 | .606 | 14.70 | 15.40 | |
| B | .392 | .411 | 9.95 | 10.45 | |
| C | .114 | .126 | 2.90 | 3.20 | |
| D | .248 | .272 | 6.30 | 6.90 | |
| E | .325 | .350 | 8.25 | 8.90 | |
| F | .153 | .173 | 3.90 | 4.40 | |
| G | .492 | .551 | 12.50 | 14.00 | |
| H | .096 | .108 | 2.45 | 2.75 | |
| I | .028 | .039 | 0.70 | 1.00 | |
| J | .010 | .022 | 0.25 | 0.55 | |
| K | .146 | .157 | 3.70 | 4.00 | |
| L | .167 | .187 | 4.25 | 4.75 | |
| M | .045 | .057 | 1.15 | 1.45 | |
| N | .089 | .114 | 2.25 | 2.90 | |
| O | .047 | .055 | 1.20 | 1.40 | |

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IT0-220AB



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|-------|-------|------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | .577 | .600 | 14.65 | 15.25 | |
| B | .386 | .406 | 9.80 | 10.30 | |
| C | .106 | .122 | 2.70 | 3.10 | |
| D | .258 | .274 | 6.55 | 6.95 | |
| E | .315 | .331 | 8.00 | 8.40 | |
| F | .110 | .161 | 2.80 | 4.10 | |
| G | .508 | .551 | 12.90 | 14.00 | |
| H | .089 | .106 | 2.25 | 2.70 | |
| I | .020 | .028 | 0.50 | 0.70 | |
| J | .020 | .028 | 0.50 | 0.70 | |
| K | .120 | .138 | 3.05 | 3.50 | |
| L | .169 | .185 | 4.30 | 4.70 | |
| M | .039 | .051 | 1.00 | 1.30 | |
| N | .079 | .112 | 2.00 | 2.85 | |
| O | .043 | .055 | 1.10 | 1.40 | |