

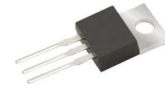


MBR10150CTSH

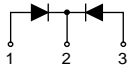
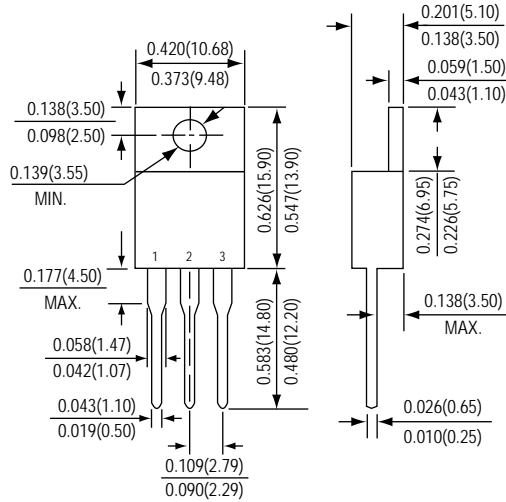
SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 150 Volts

Forward Current - 10 Amperes



TO-220AB



FEATURES

- * Halogen-free type
- * Compliance to RoHS product
- * Low power loss & high efficiency
- * High surge capability
- * 10 Amperes total (5 Amperes per diode leg)
- * High surge current capability
- * Epitaxial construction
- * Plastic Material-UL Recognition Flammability Classification 94V-0

MECHANICAL DATA

Case : JEDEC TO-220AB molded plastic body
Terminals : Plated Leads, solderable per MIL-STD-750, Method 2026
Polarity : Molded on body
Mounting Position : Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| Ratings at 25 °C ambient temperature unless otherwise specified. | SYMBOLS | MBR10150CTSH | UNITS |
|--|---------|-------------------------------------|-------|
| Maximum repetitive peak reverse voltage | VRRM | 150 | Volts |
| Maximum RMS voltage | VRMS | 105 | |
| Maximum DC blocking voltage | VDC | 150 | |
| Maximum average forward rectified current | I (AV) | 10 | Amps |
| Peak repetitive forward current (rated VR, square wave, 20KHz) | IFM | 10 | Amps |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 175 | Amps |
| Maximum instantaneous forward voltage @ IF= 5 A | VF | Tj=25°C 0.88 Tj=125°C 0.72 | Volts |
| Maximum DC reverse current at rated DC blocking voltage | IR | @Tj=25°C 0.005 @Tj=125°C 1 | mA |
| Typical junction capacitance (Note) | CJ | 150 | pF |
| Typical thermal resistance | R JA | 15 | / W |
| Operating junction temperature | TJ | 175 | |
| Storage temperature range | TSTG | -55 to +200 | |

Note : Measured at 1.0MHz and applied reverse voltage of 4.0V.

RATINGS AND CHARACTERISTIC CURVES OF MBR10150CTSH

FIG.1 - FORWARD CURRENT DERATING CURVE

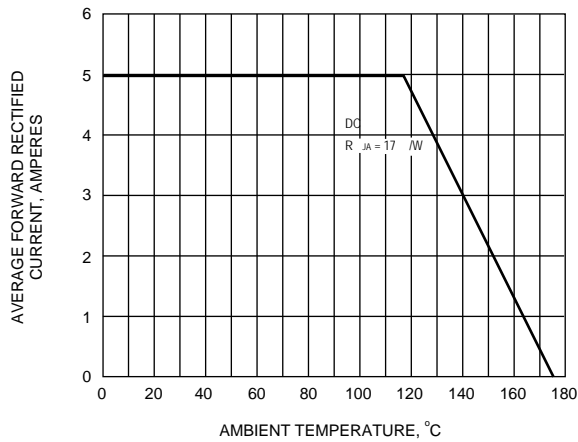


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

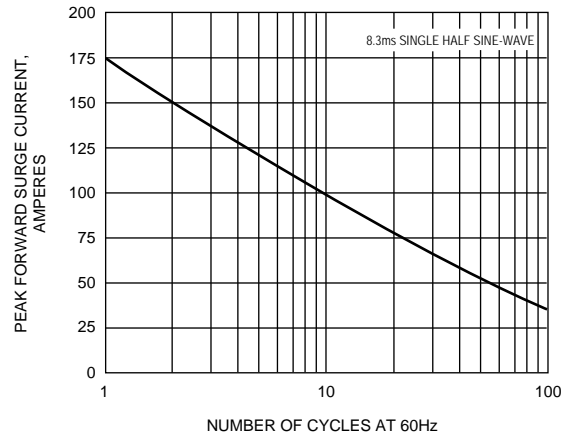


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

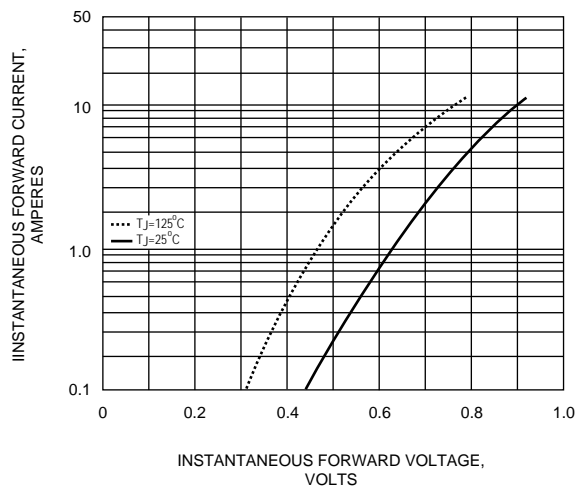


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

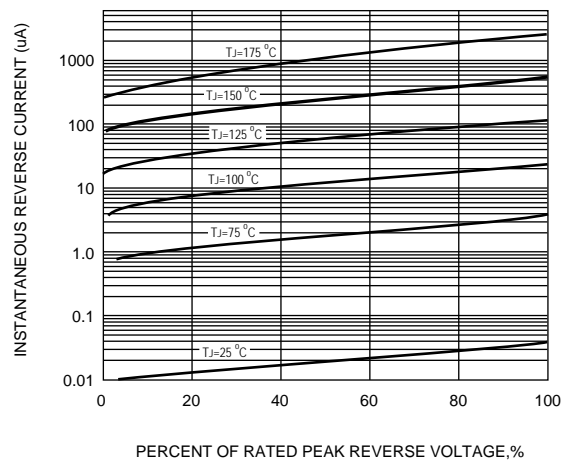
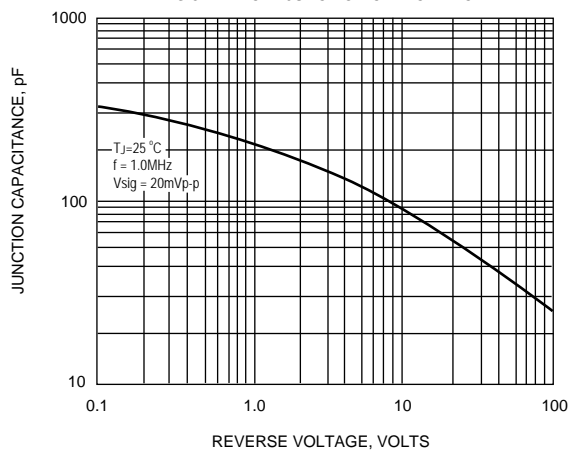


FIG.5 - TYPICAL JUNCTION CAPACITANCE



PACKING INFORMATION

| Package | Packing Qty. | | | Inner Box Size (mm) | Carton Size (mm) |
|----------|---------------|---------------------|------------------|------------------------|---------------------|
| | Tube (pcs) | Inner box (kpcs) | Carton (kpcs) | | |
| TO-220AB | 50 | 4 | 8 | 570 x 147 x 150 | 585 x 316 x 164 |