



MBR840D~MBR8200D

D²PAK SURFACE MOUNTSCHOTTKY BARRIER RECTIFIER

VOLTAGE 40 to 200 Volts **CURRENT** 8 Ampere

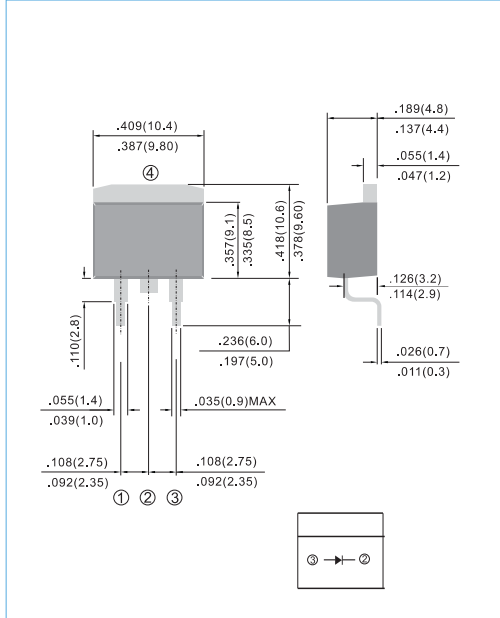
TO-263 / D²PAK Unit: inch (mm)

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low power loss, high efficiency.
- Low forward voltage, high current capability
- High surge capacity.
- For use in low voltage,high frequency inverters free wheeling , and polarity protection applications.
- In compliance with EU RoHS 2002/95/EC directives

MECHANICALDATA

- Case: TO-263/D²PAK molded plastic package
- Terminals: Lead solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Mounting Position: Any
- Weight: 0.0514 ounces, 1.46 grams.



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

| PARAMETER | SYMBOL | MBR840D | MBR845D | MBR850D | MBR860D | MBR880D | MBR890D | MBR8100D | MBR8150D | MBR8200D | UNITS |
|---|-----------------|-------------|---------|---------|---------|-------------|---------|----------|----------|----------|-----------------|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 40 | 45 | 50 | 60 | 80 | 90 | 100 | 150 | 200 | V |
| Maximum RMS Voltage | V_{RMS} | 28 | 31.5 | 35 | 42 | 56 | 63 | 70 | 105 | 140 | V |
| Maximum DC Blocking Voltage | V_{DC} | 40 | 45 | 50 | 60 | 80 | 90 | 100 | 150 | 200 | V |
| Maximum Average Forward (See Figure 1) | $I_{F(AV)}$ | 8 | | | | | | | | | A |
| Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method) | I_{FSM} | 150 | | | | | | | | | A |
| Maximum Forward Voltage at 8.0A | V_F | 0.70 | | 0.75 | | 0.80 | | | 0.90 | | V |
| Maximum DC Reverse Current $T_J=25^{\circ}C$ at Rated DC Blocking Voltage $T_J=100^{\circ}C$ | I_R | | | | | 0.05 | | | | | mA |
| Typical Thermal Resistance | $R_{\theta JC}$ | | | | | 3 | | | | | $^{\circ}C / W$ |
| Operating Junction and Storage Temperature Range | T_J, T_{STG} | -55 to +150 | | | | -65 to +175 | | | | | $^{\circ}C$ |

NOTES : Both Bonding and Chip structure are available.

PRELIMINARY



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RATING AND CHARACTERISTIC CURVES

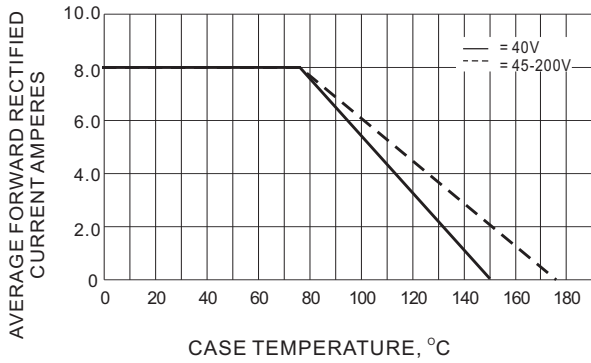


Fig.1- FORWARD CURRENT DERATING CURVE

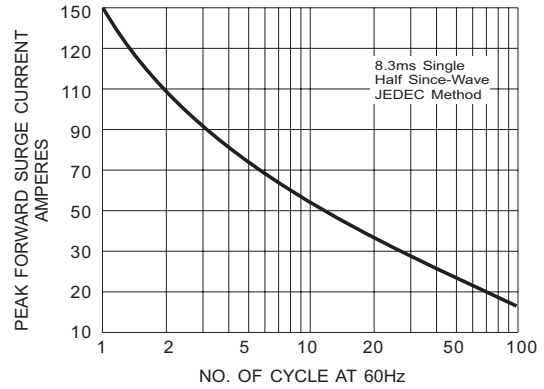


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

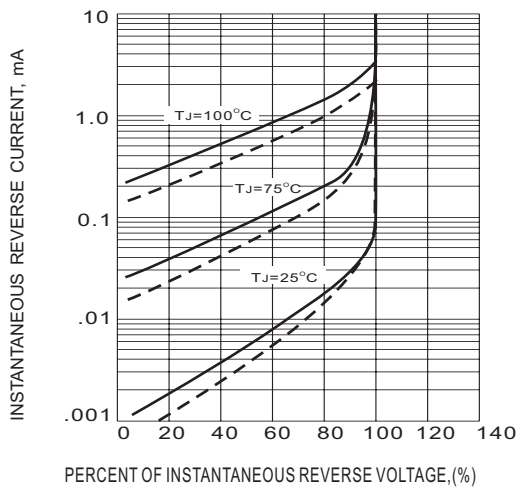


Fig.3- TYPICAL REVERSE CHARACTERISTICS

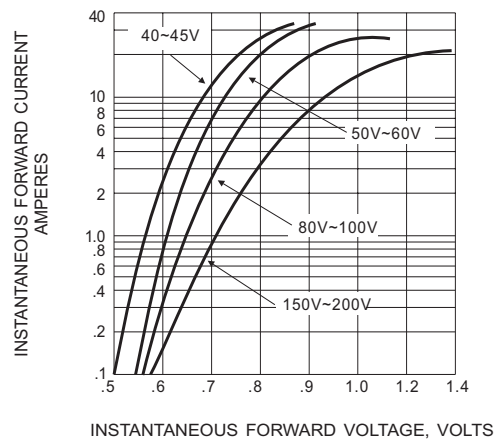
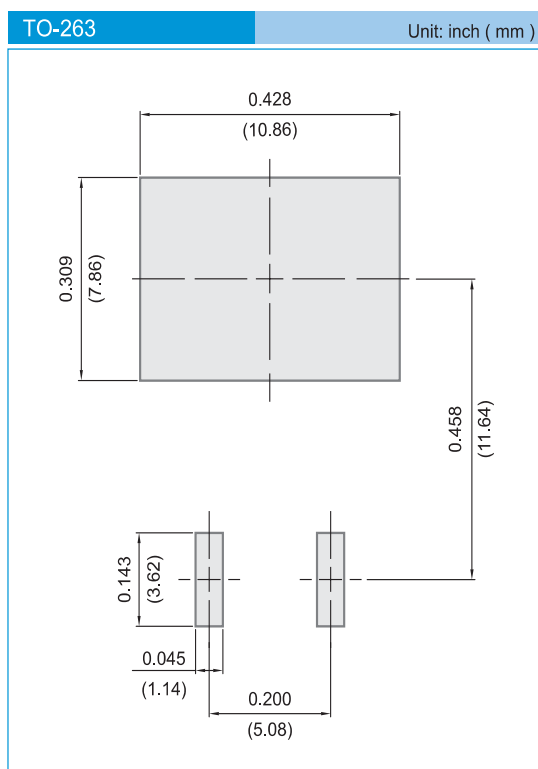


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

PRELIMINARY



MOUNTING PAD LAYOUT



ORDER INFORMATION

- Packing information
T/R - 0.8K per 13" plastic Reel

LEGAL STATEMENT

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