

Schottky Barrier Rectifier

MBR5200

FEATURES

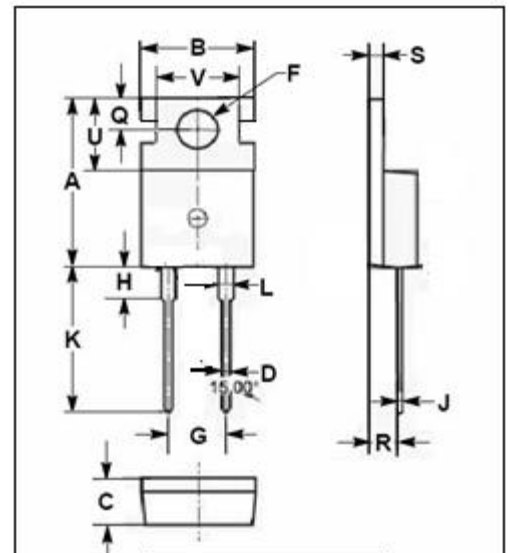
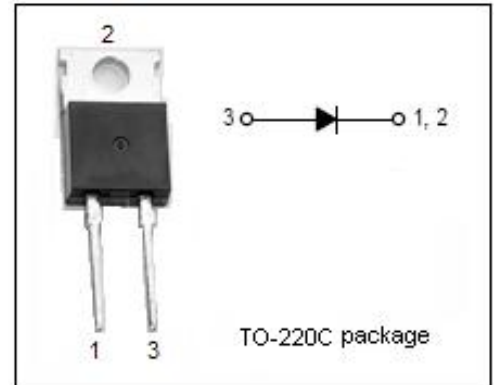
- Low Forward Voltage
- Guaranteed Reverse Avalanche
- Low Power Loss/High Efficiency
- High Surge Capacity
- Low Stored Charge Majority Carrier Conduction
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

MECHANICAL CHARACTERISTICS

- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable
- Lead Temperature for Soldering Purposes: 260°C Max. for 10 Seconds

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|--|--|---------|------|
| V _{RRM} V _{RWM} V _R | Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | 200 | V |
| I _{F(AV)} | Average Rectified Forward Current (Rated V _R) T _C = 133°C | 5 | A |
| I _{FSM} | Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz) | 120 | A |
| T _J | Junction Temperature | -65~175 | °C |
| T _{stg} | Storage Temperature Range | -65~175 | °C |



| DIM | mm | |
|-----|-------|-------|
| | MIN | MAX |
| A | 15.50 | 15.90 |
| B | 9.80 | 10.20 |
| C | 4.20 | 4.50 |
| D | 0.70 | 0.90 |
| F | 3.40 | 3.70 |
| G | 4.98 | 5.18 |
| H | 2.68 | 2.90 |
| J | 0.44 | 0.60 |
| K | 12.80 | 13.40 |
| L | 1.20 | 1.45 |
| Q | 2.70 | 2.90 |
| R | 2.30 | 2.70 |
| S | 1.29 | 1.35 |
| U | 6.45 | 6.65 |
| V | 8.66 | 8.86 |

Schottky Barrier Rectifier**MBR5200****THERMAL CHARACTERISTICS**

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|--------------------------------------|-----|------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 2.0 | °C/W |

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μ s, Duty Cycle \leq 2%)

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|--------|---------------------------------------|---|-----------|------|
| V_F | Maximum Instantaneous Forward Voltage | $I_F = 5A$ | 0.9 | V |
| I_R | Maximum Instantaneous Reverse Current | Rated DC Voltage, $T_C = 125^\circ C$ Rated DC Voltage, $T_C = 25^\circ C$ | 20 0.1 | mA |

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