

Schottky Barrier Rectifier
MBRB20H60CT
FEATURES

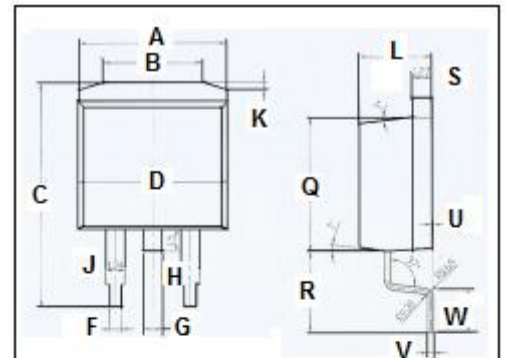
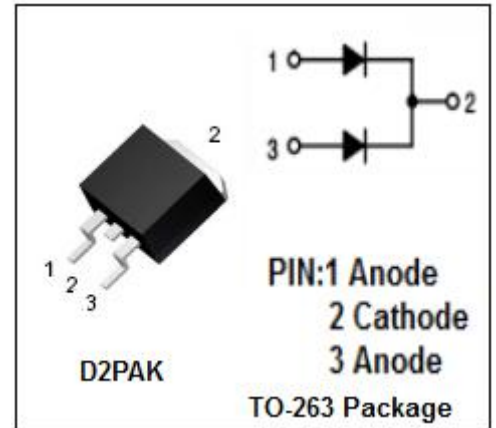
- Low Forward Voltage
- Guard -Ring for Stress Protection
- High Surge Capability
- 175°C Operating Junction Temperature
- Pb-Free Package is Available
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

MECHANICAL CHARACTERISTICS

- Case: Epoxy, Molded
- Low forward voltage drop, low power loss and high efficiency

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 | 60 | V |
| I _{F(AV)} | Average Rectified Forward Current (Rated V _R) T _C = 125°C | 20 | A |
| I _{FSM} | Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions | 150 | A |
| T _J | Junction Temperature | 175 | °C |
| T _{stg} | Storage Temperature Range | -65~175 | °C |
| dv/dt | Voltage Rate of Change (Rated V _R) | 10,000 | V/μs |



| DIM | mm | |
|-----|-------|-------|
| | MIN | MAX |
| A | 10 | |
| B | 6.6 | 6.8 |
| C | 15.23 | 15.25 |
| D | 10.15 | 10.17 |
| F | 0.76 | 0.78 |
| G | 1.26 | 1.28 |
| H | 1.4 | 1.6 |
| J | 1.33 | 1.35 |
| K | 0.4 | 0.6 |
| L | 4.6 | 4.8 |
| Q | 8.69 | 8.71 |
| R | 5.28 | 5.30 |
| S | 1.26 | 1.28 |
| U | 0.0 | 0.2 |
| V | 0.37 | 0.39 |
| W | 2.80 | 2.82 |

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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 μs, Duty Cycle ≤ 2.0%)

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|----------------|---------------------------------------|--|------|------|
| V _F | Maximum Instantaneous Forward Voltage | I _F = 10A ; T _c = 25°C | 0.71 | V |
| | | I _F = 10A ; T _c = 125°C | 0.61 | |
| | | I _F = 20A ; T _c = 25°C | 0.85 | |
| | | I _F = 20A ; T _c =125°C | 0.71 | |
| I _R | Maximum Instantaneous Reverse Current | V _R = V _{RWM} ; T _c = 25°C | 0.1 | mA |
| | | V _R = V _{RWM} ; T _c = 125°C | 12 | |

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