

Schottky Barrier Rectifier

MBR1640CT

FEATURES

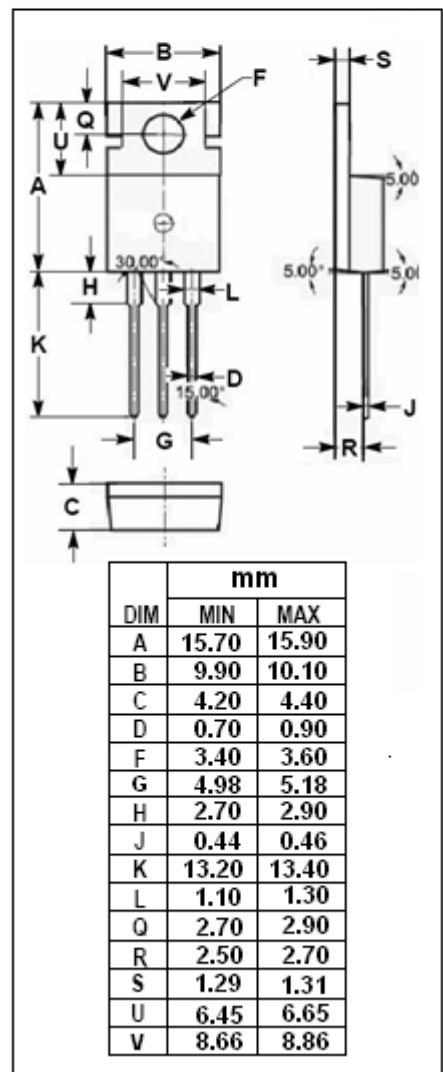
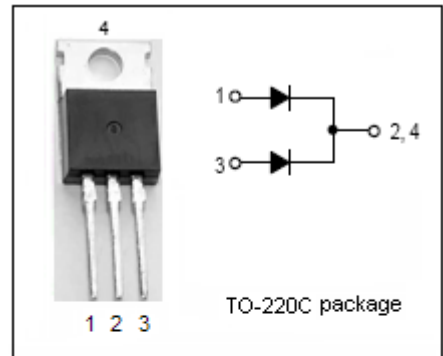
- Low Forward Voltage
- 150°C Operating Junction Temperature
- Guaranteed Reverse Avalanche
- Low Power Loss/High Efficiency
- High Surge Capacity
- Low Stored Charge Majority Carrier Conduction

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(T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|--------------------|--|---------|------|
| V _{RRM} | Peak Repetitive Reverse Voltage | 40 | V |
| V _{RMS} | RMS Voltage | 28 | |
| V _R | DC Blocking Voltage | 40 | |
| I _{F(AV)} | Average Rectified Forward Current (Rated V _R) T _C = 100°C | 16 | A |
| I _{FSM} | Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions | 125 | A |
| I _{RRM} | Peak Repetitive Reverse Current (2.0 μs, 1.0kHz) | 0.5 | A |
| T _J | Junction Temperature | -55~150 | °C |
| T _{stg} | Storage Temperature Range | -55~175 | °C |



Schottky Barrier Rectifier**MBR1640CT****THERMAL CHARACTERISTICS**

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

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

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|--------|---------------------------------------|---|--------------|------|
| V_F | Maximum Instantaneous Forward Voltage | $I_F= 8A ; T_C= 25^{\circ}C$ $I_F= 8A ; T_C= 125^{\circ}C$ | 0.70 0.57 | V |
| I_R | Maximum Instantaneous Reverse Current | Rated DC Voltage, $T_C= 25^{\circ}C$ Rated DC Voltage, $T_C= 100^{\circ}C$ | 0.1 50 | mA |