

Schottky Barrier Rectifier

MBR30100CT

FEATURES

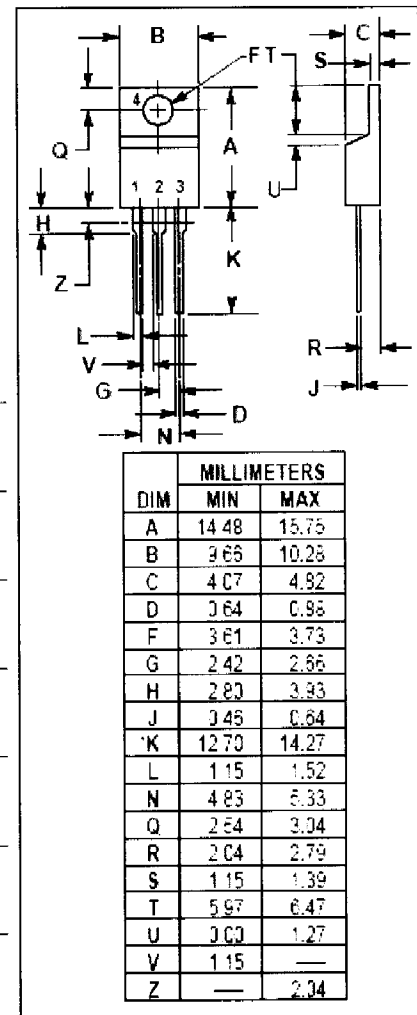
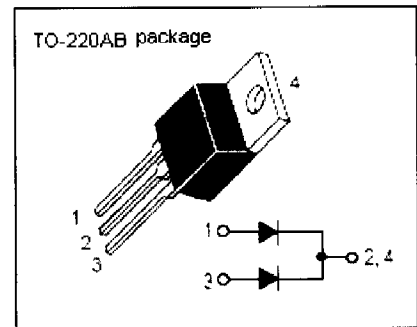
- Dual Rectifier Conduction, Positive Center Tap
- Low Power Loss/High Efficiency
- High Current Capability, Low Forward Voltage Drop
- High Surge Capacity
- Guarding for Overvoltage protection
- For AC/DC switching adaptor and other switching power supply applications.

MECHANICAL CHARACTERISTICS

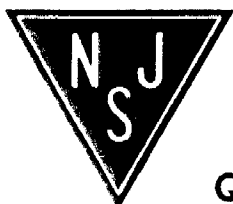
- Case: Epoxy, Molded
- Finish: All External Surfaces Corrosion Resistant and Terminal Leads are Readily Solderable

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|--------------------|--|---------|------|
| V _{RRM} | Peak Repetitive Reverse Voltage | 100 | V |
| I _{F(AV)} | Average Rectified Forward Current T _C = 100°C | 30 | A |
| I _{FSM} | Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions | 200 | A |
| T _J | Junction Temperature | -55~150 | °C |
| T _{stg} | Storage Temperature Range | -55~175 | °C |
| dv/dt | Voltage Rate of Change (Rated V _R) | 10,000 | V/μs |



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Schottky Barrier Rectifier**MBR30100CT****THERMAL CHARACTERISTICS**

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|--------------------------------------|------|---------------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 3.25 | $^{\circ}C/W$ |

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

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|--------|---------------------------------------|---|-----------|------|
| V_F | Maximum Instantaneous Forward Voltage | $I_F= 15A ; T_C= 25^{\circ}C$ | 0.85 | V |
| I_R | Maximum Instantaneous Reverse Current | Rated DC Voltage, $T_C= 25^{\circ}C$ Rated DC Voltage, $T_C= 100^{\circ}C$ | 0.2 40 | mA |