

Schottky Barrier Rectifier

HBR20100CT

FEATURES

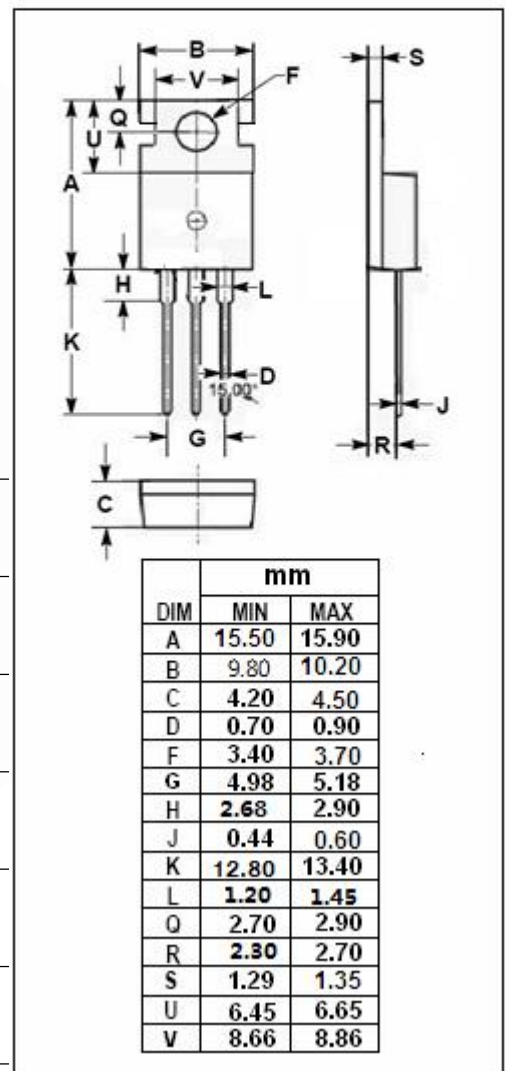
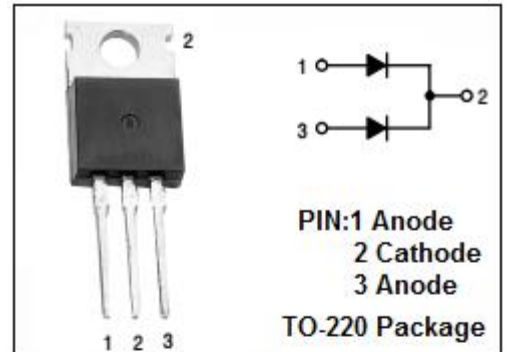
- Common Cathode Structure
- Low Power Loss/High Efficiency
- High Operating Junction Temperature
- Guarding for Overvoltage protection, High reliability
- 100% avalanche tested
- RoHS product
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- High Frequency switch power Supply
- Free wheeling diodes and polarity protection applications

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|--|--|----------|------|
| V _{RRM} V _{RMS} V _R | Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage | 100 | V |
| I _{F(AV)} | Average Rectified Forward Current (Per Leg) (Total) | 10 20 | A |
| I _{FSM} | Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions | 180 | A |
| T _J | Junction Temperature | 175 | °C |
| T _{stg} | Storage Temperature Range | -40~150 | °C |



Schottky Barrier Rectifier**HBR20100CT****THERMAL CHARACTERISTICS**

| SYMBOL | PARAMETER | MAX | UNIT |
|---------------|--------------------------------------|-----|---------------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case | 1.9 | $^{\circ}C/W$ |

ELECTRICAL CHARACTERISTICS

| SYMBOL | PARAMETER | CONDITIONS | MAX | UNIT |
|--------|---------------------------------------|--------------------------------------|------|---------|
| V_F | Maximum Instantaneous Forward Voltage | $I_F = 10A ; T_j = 25^{\circ}C$ | 0.85 | V |
| | | $I_F = 10A ; T_j = 125^{\circ}C$ | 0.72 | |
| I_R | Maximum Instantaneous Reverse Current | $V_R = V_{RWM} ; T_j = 25^{\circ}C$ | 10 | μA |
| | | $V_R = V_{RWM} ; T_j = 125^{\circ}C$ | 5 | mA |