

Schottky Barrier Rectifier

HBR10100CT

FEATURES

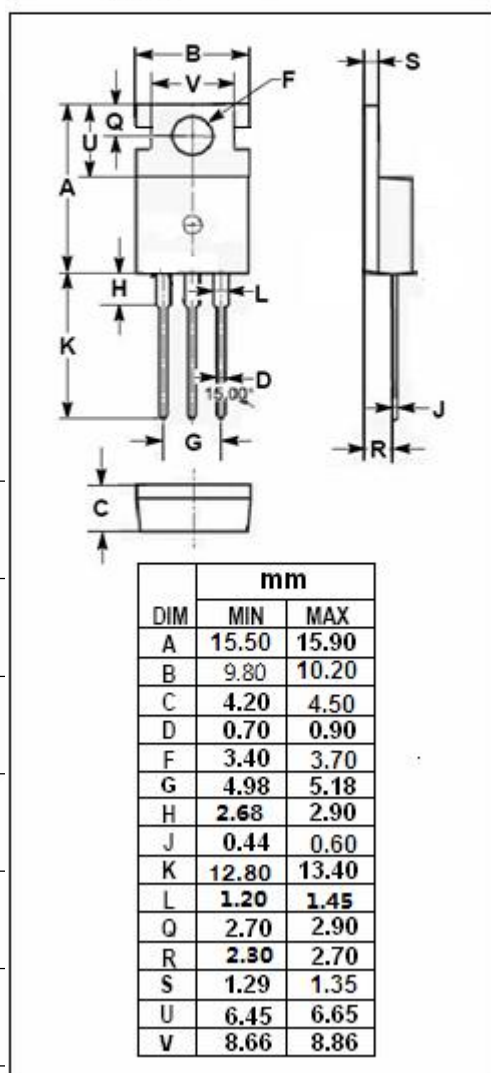
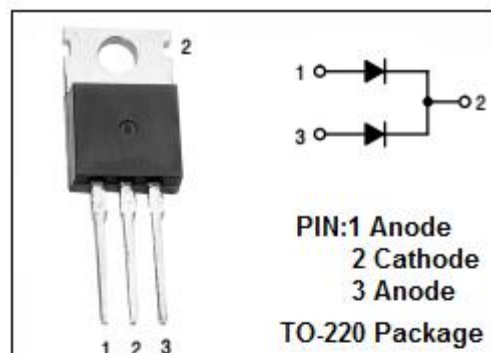
- Common Cathode Structure
- Low Power Loss/High Efficiency
- High Operating Junction Temperature
- Guarding for Overvoltage protection, High reliability
- 100% avalanche tested
- RoHS product
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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)	5 10	A
I _{FSM}	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	80	A
T _J	Junction Temperature	175	°C
T _{stg}	Storage Temperature Range	-40~150	°C



Schottky Barrier Rectifier**HBR10100CT****THERMAL CHARACTERISTICS**

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

ELECTRICAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F = 5\text{A}; T_j = 25^{\circ}\text{C}$	0.83	V
		$I_F = 5\text{A}; T_j = 125^{\circ}\text{C}$	0.7	
		$I_F = 10\text{A}; T_j = 25^{\circ}\text{C}$	0.9	
		$I_F = 10\text{A}; T_j = 125^{\circ}\text{C}$	0.8	
I_R	Maximum Instantaneous Reverse Current	$V_R = V_{RWM}; T_j = 25^{\circ}\text{C}$	10	μA
		$V_R = V_{RWM}; T_j = 125^{\circ}\text{C}$	5	mA