

Schottky Barrier Rectifier

MBR3030CT

FEATURES

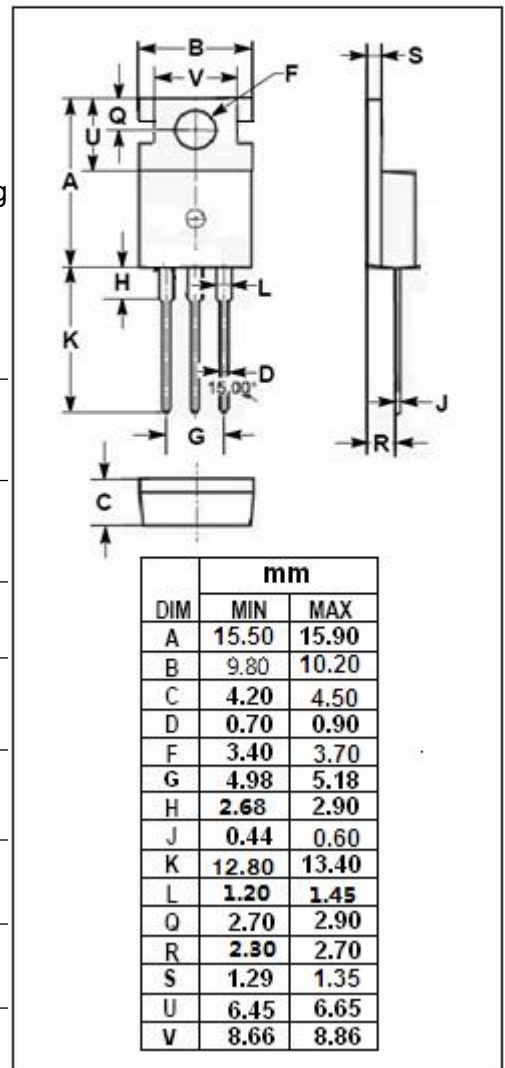
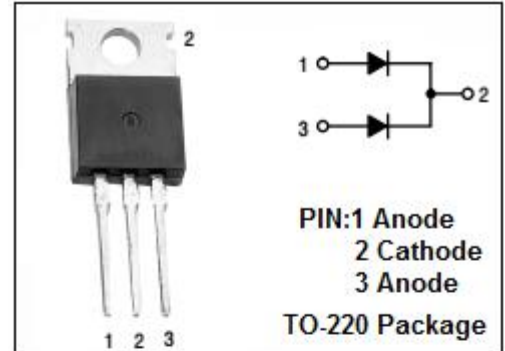
- Schottky Barrier Chip
- Dual Rectifier Conduction, Positive Center Tap
- Low Power Loss/High Efficiency
- High Current Capability, Low Forward Voltage Drop
- High Surge Capacity
- Guarding for Overvoltage protection
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low-voltage,high frequency inverters, free wheeling and polarity protection applications .

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	30	V
V _{R(RMS)}	RMS Reverse Voltage	21	V
I _{F(AV)}	Average Rectified Forward Current (Rated V _R) T _C = 100°C	30	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	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/ μ s



Schottky Barrier Rectifier**MBR3030CT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.5	°C/W

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width ≤ 300 μs, Duty Cycle ≤ 2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 15A ; T _C = 25°C I _F = 30A ; T _C = 25°C I _F = 30A ; T _C = 125°C	0.70 0.84 0.72	V
I _R	Maximum Instantaneous Reverse Current	Rated DC Voltage, T _C = 25°C Rated DC Voltage, T _C = 125°C	0.2 40	mA

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