

Schottky Barrier Rectifier

MBR2040CT

FEATURES

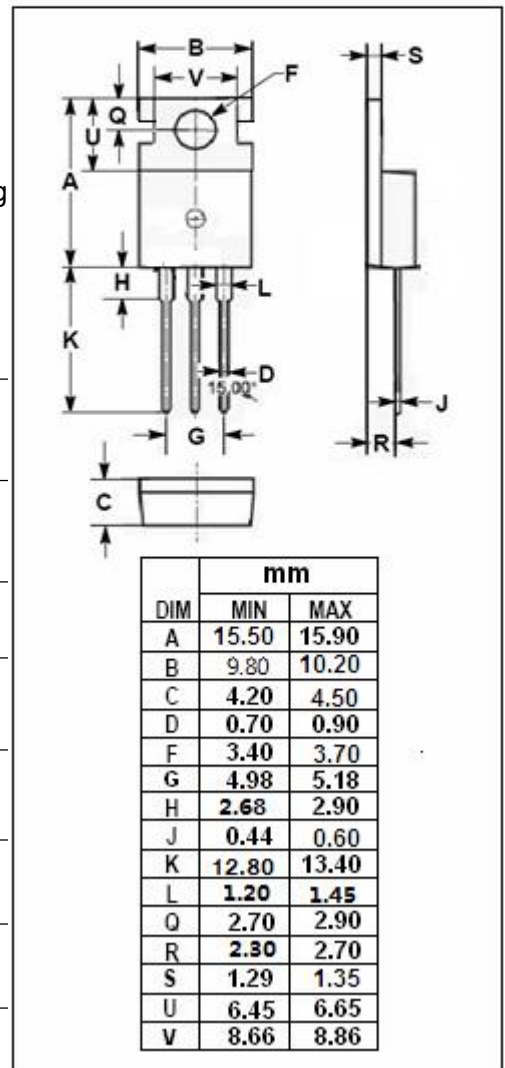
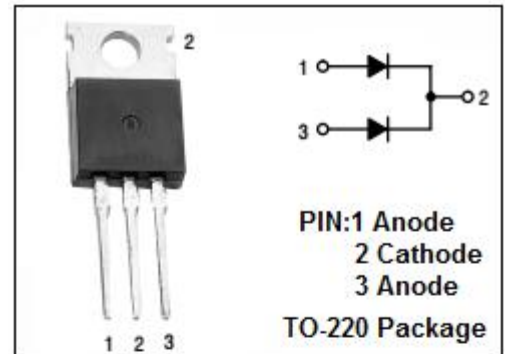
- Schottky Barrier Chip
- Low Power Loss/High Efficiency
- High current capability, low forward voltage drop
- High surge capability
- Guardring for overvoltage protection
- High temperature soldering guaranteed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and 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 _R RM V _R WM V _R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	40	V
V _R (RMS)	RMS Reverse Voltage	28	V
I _F (AV)	Average Rectified Forward Current (Rated V _R) T _C = 120°C	20	A
I _{FSM}	Nonrepetitive Peak Surge Current (Surge applied at rated load conditions half-wave, single phase, 60Hz)	150	A
T _J	Junction Temperature	-55~150	°C
T _{stg}	Storage Temperature Range	-55~175	°C



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	2.0	°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 = 10A ; T _C = 25°C I _F = 20A ; T _C = 25°C I _F = 20A ; 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	0.1 50	mA

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