

Schottky Barrier Rectifier

MBR6040PT

FEATURES

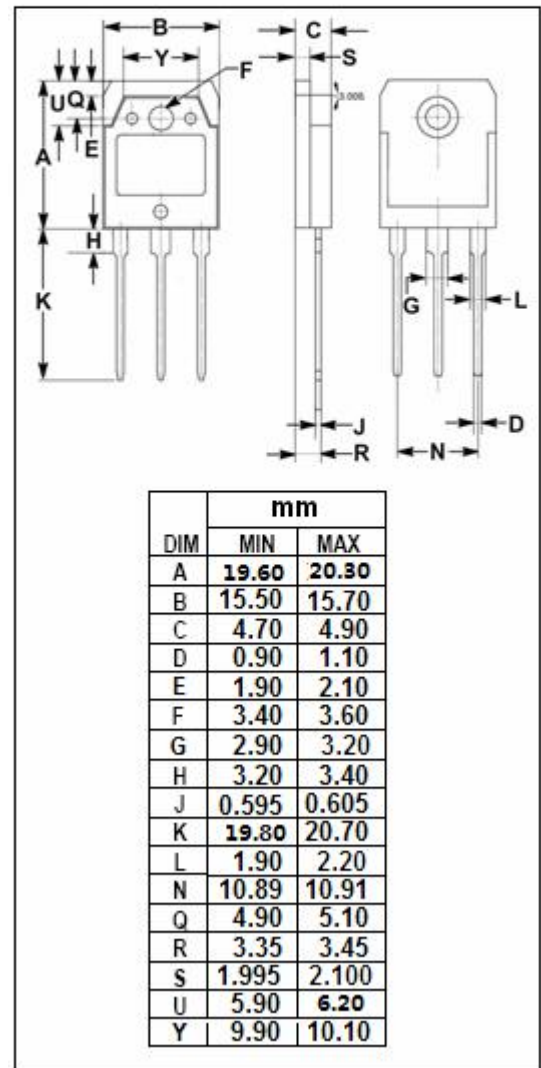
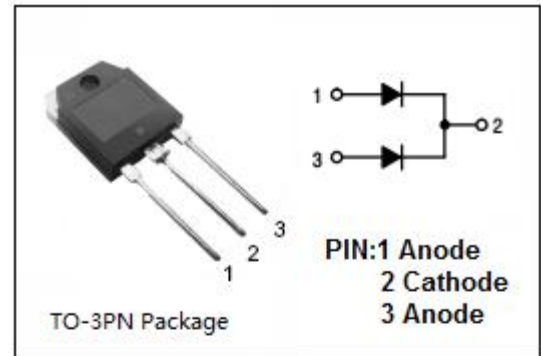
- Plastic material used carriers Unerwriter Laboratory
- Metal silicon rectifier, majonty carrier conduction
- Low Power Loss,High Efficiency
- Guard ring for transient protection
- High Surge Capability,High Current Capability
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For use in 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	40	V
V _{R(RMS)}	RMS Reverse Voltag	28	V
I _{F(AV)}	Average Rectified Forward Current	60	A
I _{FSM}	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	500	A
I _{RRM}	Peak Repetitive Reverse Surge Current (20 μ s, 1.0kHz)	1.0	A
T _J	Junction Temperature	-65~150	°C
T _{stg}	Storage Temperature Range	-65~175	°C
dv/dt	Voltage Rate of Change (Rated V _R)	1,000	V/ μ s



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THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal Resistance, Junction to Case	1.2	°C/W

ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μ s, Duty Cycle ≤ 1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 30A ; T _c = 25°C	0.62	V
		I _F = 30A ; T _c = 125°C	0.55	
		I _F = 60A ; T _c = 125°C	0.75	
I _R	Maximum Instantaneous Reverse Current	V _R = V _{RWM} ; T _c = 25°C	1.0	mA
		V _R = V _{RWM} ; T _c = 125°C	100	

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