

Schottky Barrier Rectifier

MBR60100PT

FEATURES

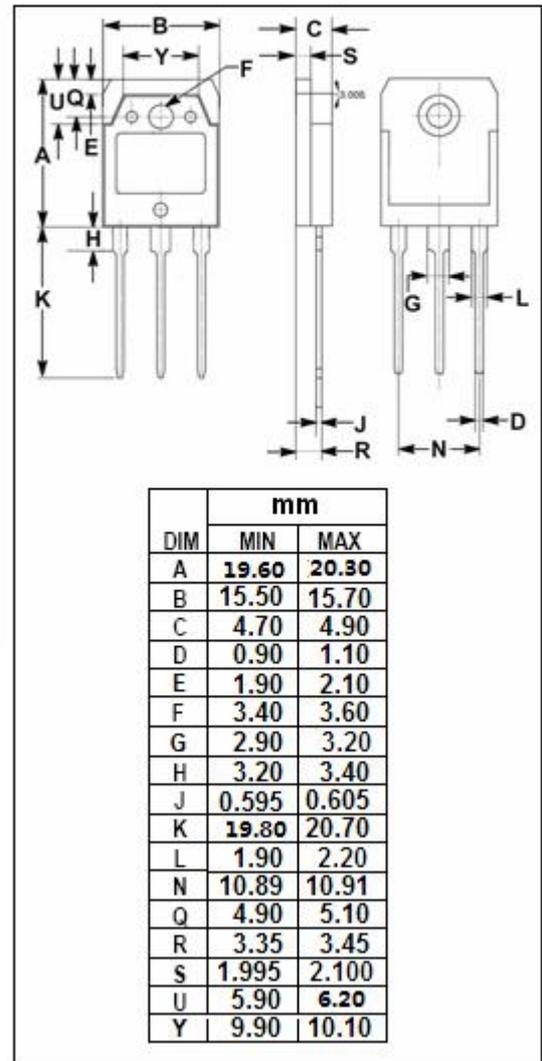
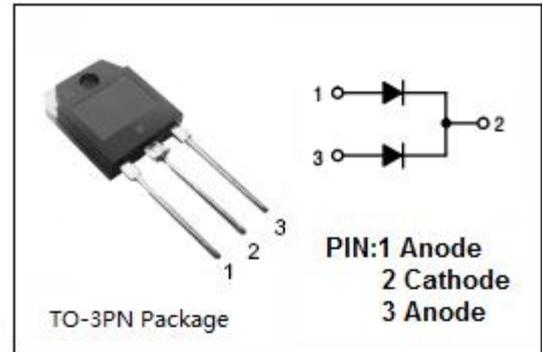
- Plastic material used carriers Unerwriter Laboratory
- Metal silicon rectifier, majonty carrier conduction
- Low Power Loss,High Efficiency
- Guard ring for transient protection
- High Surge Capability,High Current Capability
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device 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 <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	100	V
V <sub>R(RMS)</sub>	RMS Reverse Voltag	70	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	60	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	420	A
I <sub>RRM</sub>	Peak Repetitive Reverse Surge Current (20 μ s, 1.0kHz)	1.0	A
T <sub>J</sub>	Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-65~175	°C
dv/dt	Voltage Rate of Change (Rated V <sub>R</sub> )	1,000	V/ μ s



**Schottky Barrier Rectifier****MBR60100PT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.2	°C/W

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>F</sub>	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 30A ; T <sub>c</sub> = 25°C	0.84	V
		I <sub>F</sub> = 60A ; T <sub>c</sub> = 125°C	0.98	
I <sub>R</sub>	Maximum Instantaneous Reverse Current	V <sub>R</sub> = V <sub>RWM</sub> ; T <sub>c</sub> = 25°C	1.0	mA
		V <sub>R</sub> = V <sub>RWM</sub> ; T <sub>c</sub> = 125°C	10	