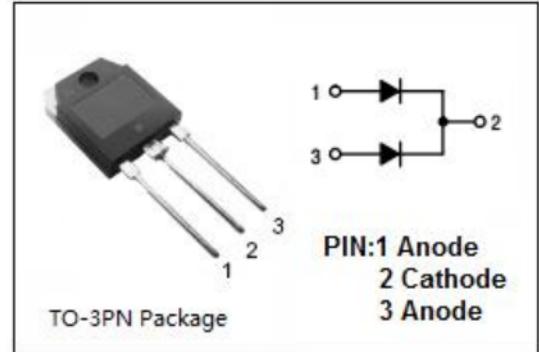


Schottky Barrier Rectifier

MBR60100PT

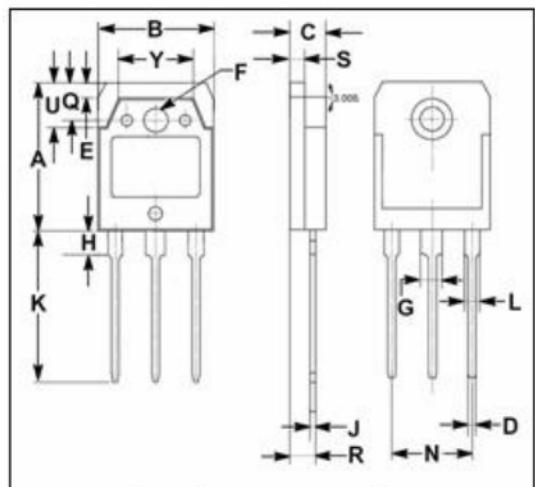
FEATURES

- Plastic material used carriers Unerwriter Laboratory
- Metal silicon rectifier, majority 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(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{RRM}	Peak Repetitive Reverse Voltage		
V _{RWM}	Working Peak Reverse Voltage	100	V
V _R	DC Blocking Voltage		
V _{R(RMS)}	RMS Reverse Voltage	70	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	420	A
I _{IRRM}	Peak Repetitive Reverse Surge Current (20 μ s, 1.0kHz)	1.0	A
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature Range	-65~175	°C
dv/dt	Voltage Rate of Change (Rated V _R)	1,000	V/μ s

Schottky Barrier Rectifier**MBR60100PT****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 $\leq 1\%$)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F = 30A ; T_c = 25^\circ C$	0.84	V
		$I_F = 60A ; T_c = 125^\circ C$	0.98	
I_R	Maximum Instantaneous Reverse Current	$V_R = V_{RWM} ; T_c = 25^\circ C$	1.0	mA
		$V_R = V_{RWM} ; T_c = 125^\circ C$	10	