

Schottky Barrier Rectifier

MBR2045

FEATURES

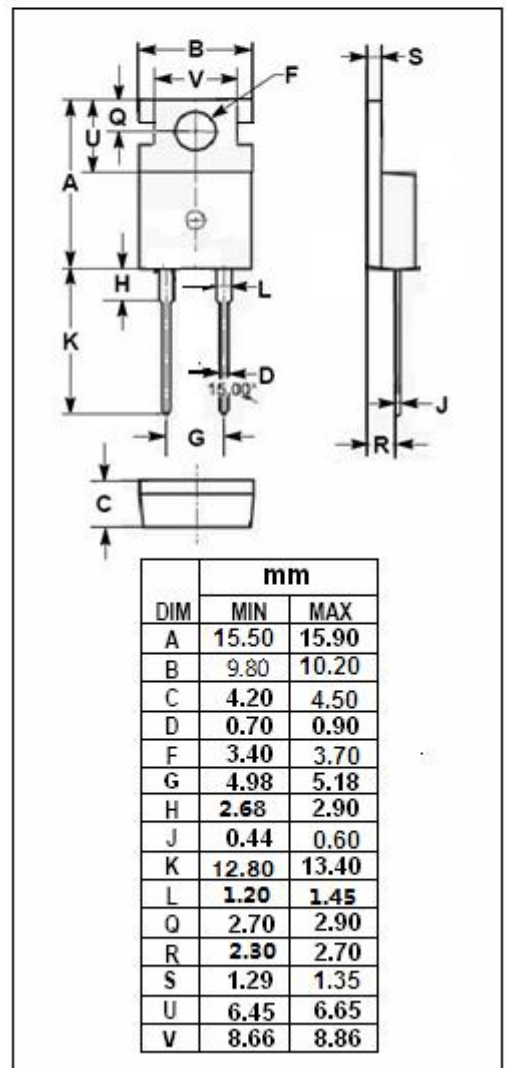
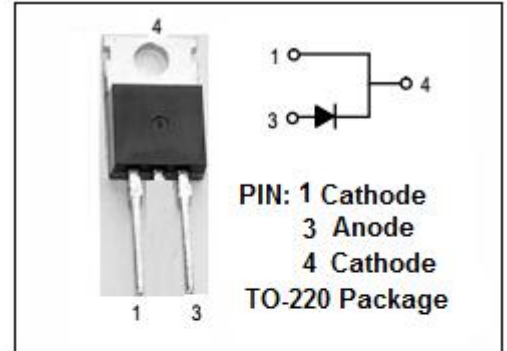
- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss high efficiency
- High Surge Capability, High Current Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

MAXIMUM RATINGS

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

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	45	V
V _{R(RMS)}	RMS Reverse Voltage	31.5	V
I _{F(AV)}	Average Rectified Forward Current (Rated V _R) T _C = 135°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	-55~150	°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 μ s, Duty Cycle ≤1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V _F	Maximum Instantaneous Forward Voltage	I _F = 20A ; T _C = 25°C	0.63	V
I _R	Maximum Instantaneous Reverse Current	Rated DC Voltage, T _C = 25°C Rated DC Voltage, T _C = 125°C	0.1 5.0	mA

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