

# Schottky Barrier Rectifier

# MBR2545

### FEATURES

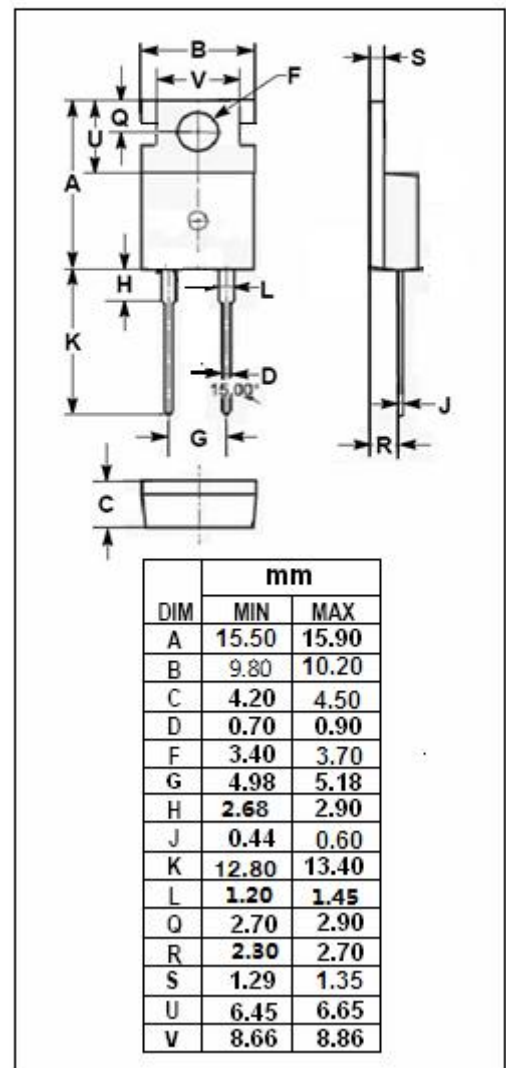
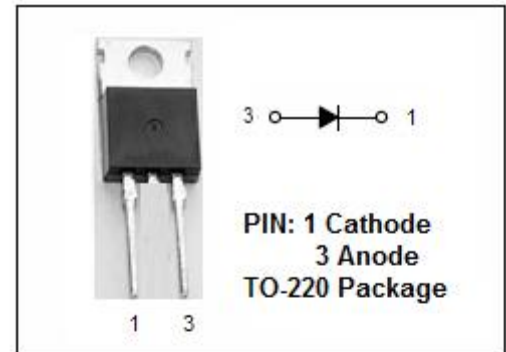
- Low forward voltage
- Guarding for stress protection
- 150°C operating junction temperature
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### MECHANICAL CHARACTERISTICS

- Case: TO-220 package
- Mounting position: Any

### ABSOLUTE MAXIMUM RATINGS (T<sub>a</sub>=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub>	Peak Repetitive Reverse Voltage	45	V
V <sub>RMS</sub>	Maximum RMS Voltage	31.5	V
V <sub>DC</sub>	Maximum DC Blocking Voltage	45	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	25	A
I <sub>FSM</sub>	Peak Forward Surge Current, 8.3 ms single halfsine-wave superimposed on rated load (JEDEC method)	150	A
T <sub>J</sub>	Junction Temperature	-65~150	°C
T <sub>stg</sub>	Storage Temperature Range	-65~150	°C



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## THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.4	°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> = 25A	0.63	V
I <sub>R</sub>	Maximum Instantaneous Reverse Current	Rated DC Voltage, TC = 25°C	0.2	mA

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