

# Schottky Barrier Rectifier

# MBRF1060

## FEATURES

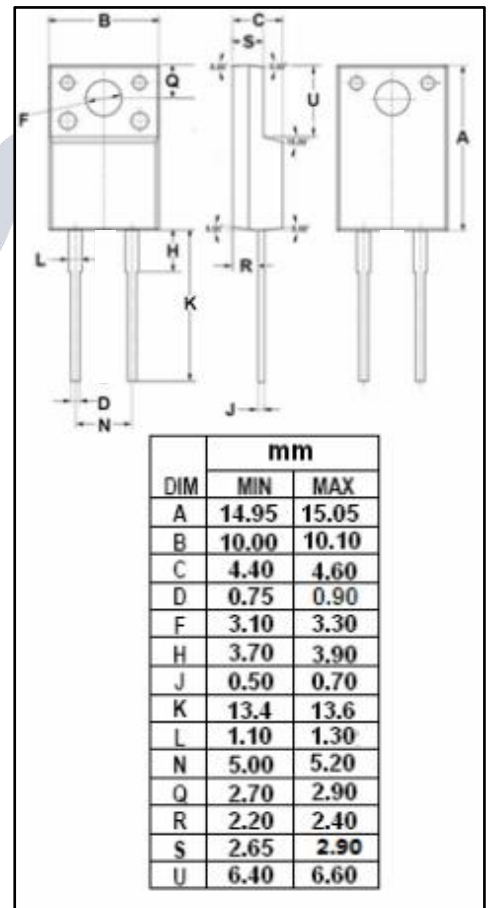
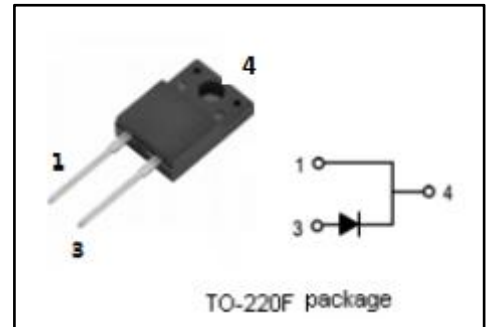
- Low Forward Voltage
- High Operating Junction Temperature
- Extremely low reverse leakage
- Optimized VF vs. IR trade off for high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

- High frequency switching
- High efficiency SMPS
- Automotive

## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub>	Peak Repetitive Reverse Voltage	60	V
I <sub>F(AV)</sub>	Average Rectified Forward Current (Rated V <sub>R</sub> ) T <sub>C</sub> = 135°C	10	A
I <sub>FSM</sub>	Non-repetitive Peak Surge Current (8.3ms single half-wave)	150	A
T <sub>J</sub>	Junction Temperature	-65~175	°C
T <sub>stg</sub>	Storage Temperature Range	-65~175	°C
dv/dt	Voltage Rate of Change (Rated V <sub>R</sub> )	10000	V/μs



**Schottky Barrier Rectifier****MBRF1060****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	4	°C/W

**ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300us, Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V <sub>F</sub>	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 10A ; T <sub>C</sub> = 25°C I <sub>F</sub> = 10A ; T <sub>C</sub> = 125°C I <sub>F</sub> = 20A ; T <sub>C</sub> = 25°C I <sub>F</sub> = 20A ; T <sub>C</sub> = 125°C	0.8 0.7 0.95 0.85	V
I <sub>R</sub>	Maximum Instantaneous Reverse Current	V <sub>R</sub> =60V, T <sub>C</sub> = 25°C V <sub>R</sub> =60V, T <sub>C</sub> = 125°C	0.1 15	mA

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