

# Schottky Barrier Rectifier

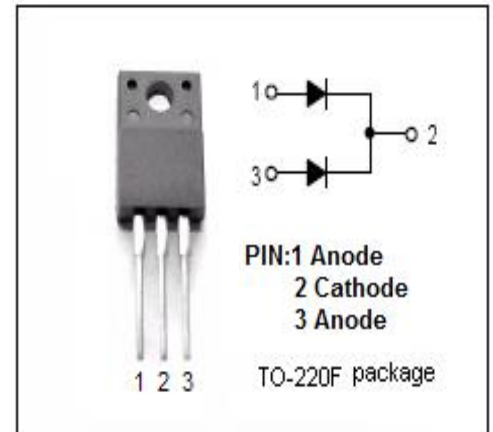
# MBR2060F

### FEATURES

- With TO-220F packaging
- High junction temperature capability
- Low forward voltage
- High current capability
- Low power loss, high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

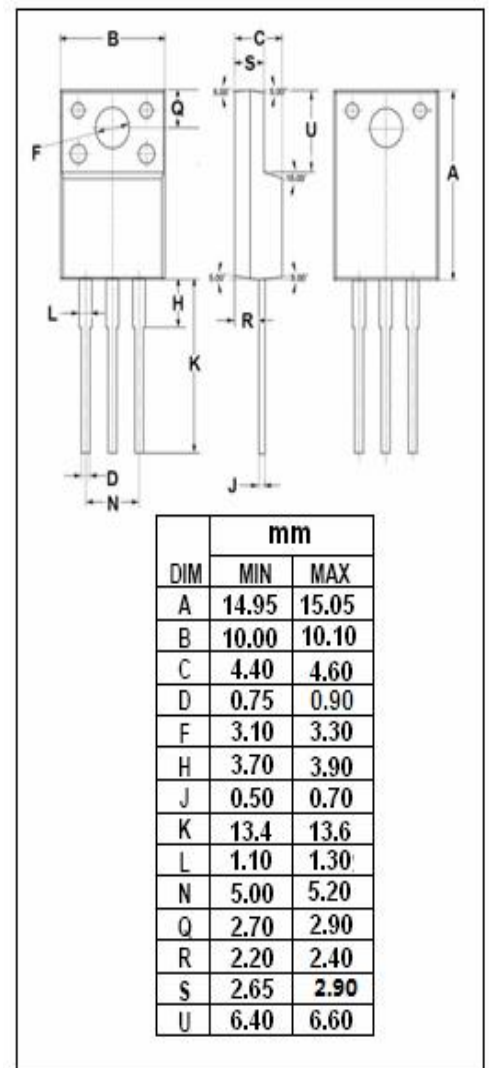
### APPLICATIONS

- Switching power supply
- Free-Wheeling diodes
- Reverse battery protection
- Center tap configuration



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

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RMS</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage RMS Voltage DC Blocking Voltage	60	V
I <sub>F(AV)</sub>	Average Rectified Forward Current @T <sub>c</sub> =110°C	20	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current (10ms single half sine-wave superimposed on rated load conditions)	150	A
T <sub>J</sub>	Junction Temperature	-40~150	°C
T <sub>stg</sub>	Storage Temperature Range	-40~150	°C



**Schottky Barrier Rectifier****MBR2060F****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	4.0	$^{\circ}C/W$

**ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300  $\mu$  s, Duty Cycle  $\leq$  1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
$V_F$	Maximum Instantaneous Forward Voltage	$I_F=10A; T_j=25^{\circ}C$ $I_F=10A; T_j=125^{\circ}C$	0.7 0.65	V
$I_R$	Maximum Instantaneous Reverse Current	$V_R= rated\ V_{RRM}; T_j=25^{\circ}C$ $V_R= rated\ V_{RRM}; T_j=125^{\circ}C$	0.05 50	mA

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