

Schottky Barrier Rectifier

MBR1530

FEATURES

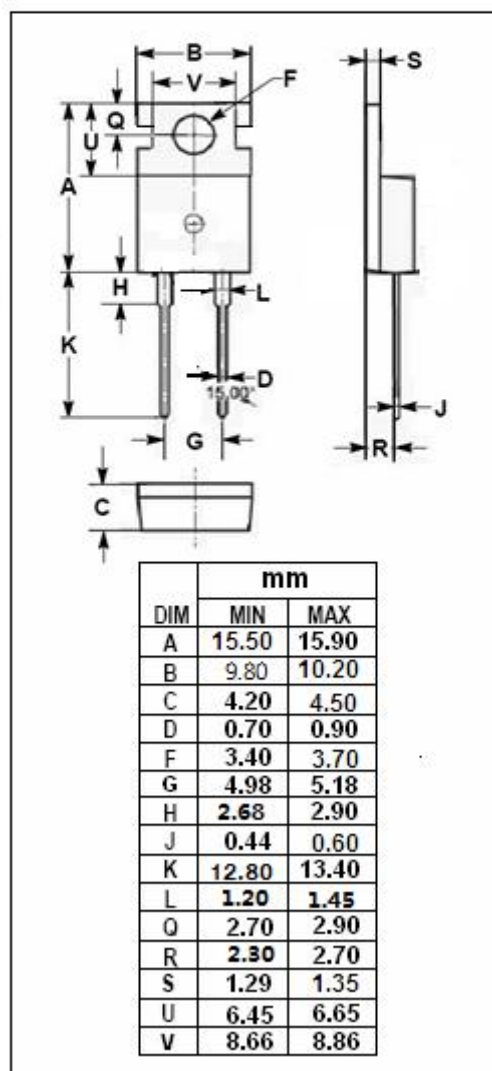
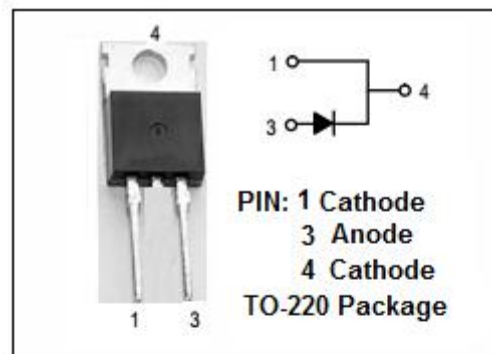
- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss high efficiency
- High Surge Capability, High Current Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

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	30	V
V _{R(RMS)}	RMS Reverse Voltage	21	V
I _{F(AV)}	Average Rectified Forward Current (Rated V _R) T _C = 125°C	15	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



Schottky Barrier Rectifier**MBR1530****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.5	$^{\circ}\text{C}/\text{W}$

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

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F = 15\text{A}$; $T_C = 25^{\circ}\text{C}$ $I_F = 15\text{A}$; $T_C = 125^{\circ}\text{C}$	0.84 0.75	V
I_R	Maximum Instantaneous Reverse Current	Rated DC Voltage, $T_C = 25^{\circ}\text{C}$ Rated DC Voltage, $T_C = 125^{\circ}\text{C}$	0.2 6.0	mA