

Schottky Barrier Rectifier

MBRF30100CT

FEATURES

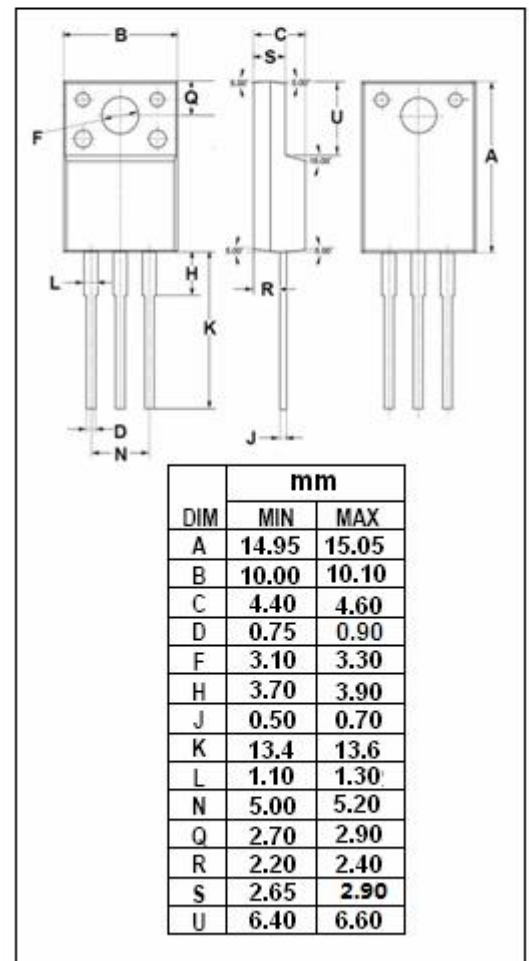
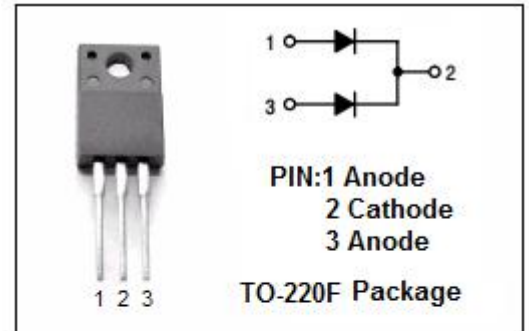
- Plastic package used carriers Unerwriter Laboratory
- Metal silicon rectifier, majonty carrier conduction
- Low Power Loss,High Efficiency
- Guard ring for transient protection
- High Surge Capability,High Current Capability
- 100% tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- For use in low voltage ,high frequency inverters,free wheeling and polarity protection applications.

ABSOLUTE MAXIMUM RATINGS($T_a=25^{\circ}\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM} V_{RWM} V_R	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	100	V
$V_{R(RMS)}$	RMS Reverse Voltag	100	V
$I_{F(AV)}$	Average Rectified Forward Current	30	A
I_{FSM}	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	350	A
T_J	Junction Temperature	-55~150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^{\circ}\text{C}$



Schottky Barrier Rectifier**MBRF30100CT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	2.5	°C/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	$I_F = 15A ; T_c = 25^\circ C$	0.9	V
		$I_F = 15A ; T_c = 125^\circ C$	0.7	
I_R	Maximum Instantaneous Reverse Current	$V_R = V_{RWM}; T_c = 25^\circ C$	0.15	mA
		$V_R = V_{RWM}; T_c = 125^\circ C$	5	

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