

## Schottky Barrier Rectifier

## MBR30200FCT

### 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

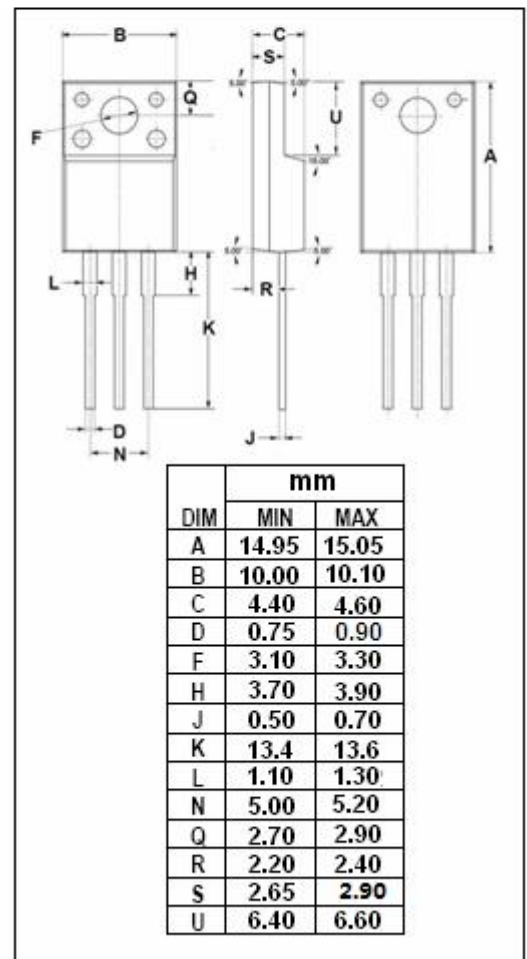
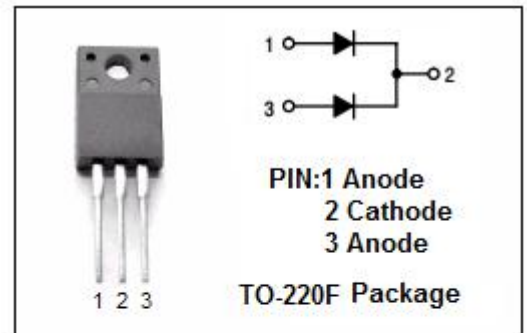


### APPLICATIONS

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

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	200	V
V <sub>R(RMS)</sub>	RMS Reverse Voltag	140	V
I <sub>F(AV)</sub>	Average Rectified Forward Current	30	A
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	150	A
T <sub>J</sub>	Junction Temperature	-55~150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C
dv/dt	Voltage Rate of Change (Rated V <sub>R</sub> )	10,000	V/ μ s



**Schottky Barrier Rectifier****MBR30200FCT****THERMAL CHARACTERISTICS**

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	1.4	°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	$I_F = 15A ; T_c = 25^\circ C$	0.9	V
		$I_F = 15A ; T_c = 125^\circ C$	0.7	
$I_R$	Maximum Instantaneous Reverse Current	$V_R = V_{RWM} ; T_c = 25^\circ C$	1	mA
		$V_R = V_{RWM} ; T_c = 125^\circ C$	6	

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