

# **Schottky Barrier Rectifier**

# **MBR30200CT**

#### **FEATURES**

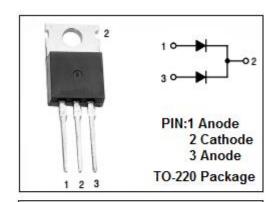
- · Plastic material used carriers Unerwriter Laboratory
- Metal silicon rectifier, majorty carrier conduction
- · Low Power Loss, High Efficiency
- · Guard ring for transient protection
- High Surge Capability, High Current Capability
- 100% tested
- Minimum Lot-to-Lot variations for robust device performance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

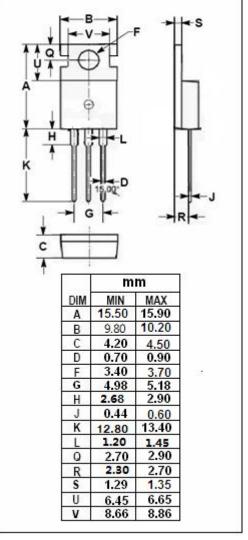


• For use in low voltage ,high frequency inverters,free wheeling and polarity protection applications.

# ABSOLUTE MAXIMUM RATINGS(Ta=25℃)

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		V
I <sub>F(AV)</sub>	Average Rectified Forward Current	30	Α
I <sub>FSM</sub>	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	150	Α
$T_J$	Junction Temperature	-55~150	$^{\circ}\!\mathbb{C}$
T <sub>stg</sub>	Storage Temperature Range	-55~150	$^{\circ}\!\mathbb{C}$
dv/dt	Voltage Rate of Change (Rated V <sub>R</sub> )	10,000	V/μs







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### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance,Junction to Case	2.0	°C/W

## **ELECTRICAL CHARACTERISTICS** (Pulse Test: Pulse Width=300 µ s,Duty Cycle≤1%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
	Maximum Instantaneous Forward Voltage	I <sub>F</sub> = 15A ; Tc= 25℃	0.9	V
V <sub>F</sub>		I <sub>F</sub> = 15A ; Tc= 125℃	0.7	
	Maximum Instantaneous Reverse Current	V <sub>R</sub> = V <sub>RWM;</sub> Tc= 25°C	1	- mA
lR		V <sub>R</sub> = V <sub>RWM;</sub> Tc= 125℃	6	

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