

Schottky Barrier Rectifier

MBR30200PT

FEATURES

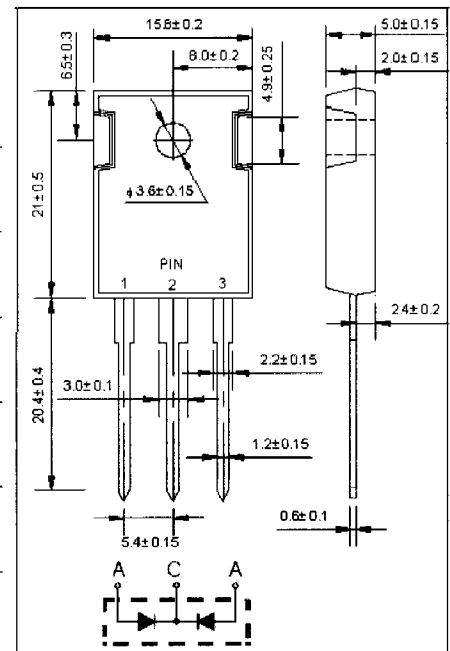
- Dual Rectifier Conduction
- Low Power Loss
- High Efficiency
- High Current Capability
- Guarding for Overvoltage protection

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}	Peak Repetitive Reverse Voltage	200	V
$I_{F(AV)}$	Average Rectified Forward Current $T_C=100^\circ\text{C}$	30	A
I_{FSM}	Nonrepetitive Peak Surge Current 8.3ms single half sine-wave superimposed on rated load conditions	200	A
T_J	Junction Temperature	-55~150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-55~150	$^\circ\text{C}$



THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j-c}$	Thermal Resistance, Junction to Case	4.4	$^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS(Pulse Test: Pulse Width $\leq 300\ \mu\text{s}$, Duty Cycle $\leq 2\%$)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	$I_F=15\text{A}; T_C=25^\circ\text{C}$ $I_F=15\text{A}; T_C=125^\circ\text{C}$ $I_F=30\text{A}; T_C=25^\circ\text{C}$ $I_F=30\text{A}; T_C=125^\circ\text{C}$ Note	0.85 0.65 0.95 0.75	V
I_R	Maximum Instantaneous Reverse Current	Rated DC blocking Voltage, $T_C=25^\circ\text{C}$ Rated DC blocking Voltage, $T_C=125^\circ\text{C}$	0.2 40	mA

Note: Pulse test: 300 μs pulse width, 1% duty cycle

