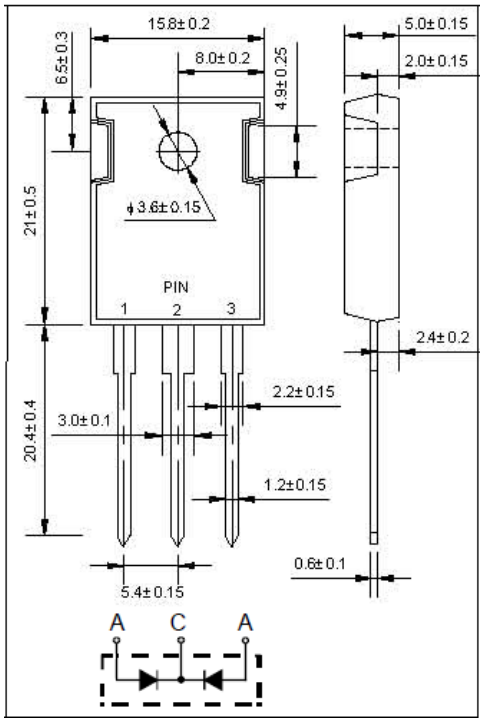
Schottky Barrier Rectifier MBR3045PT

FEATURES

- Dual Rectifier Conduction
- High Surge Capacity
- High Current Capability, Low Forward Voltage Drop
- 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℃)

SYMBOL	PARAMETER	VALUE	UNIT
V_{RRM}	Peak Repetitive Reverse Voltage	45	V
$I_{F(AV)}$	Average Rectified Forward Current T_C= 100℃	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	℃
T_{stg}	Storage Temperature Range	-55~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal Resistance,Junction to Case	6.8	℃/W

ELECTRICAL CHARACTERISTICS(Pulse Test: Pulse Width≤300μs,Duty Cycle≤2%)

SYMBOL	PARAMETER	CONDITIONS	MAX	UNIT
V_F	Maximum Instantaneous Forward Voltage	I_F= 15A ; T_C= 125℃ I_F= 30A ; T_C= 25℃ I_F= 30A ; T_C= 125℃	0.57 0.84 0.72	V
I_R	Maximum Instantaneous Reverse Current	Rated DC blocking Voltage,T_C= 25℃ Rated DC blocking Voltage, T_C= 125℃	1.0 60	mA

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