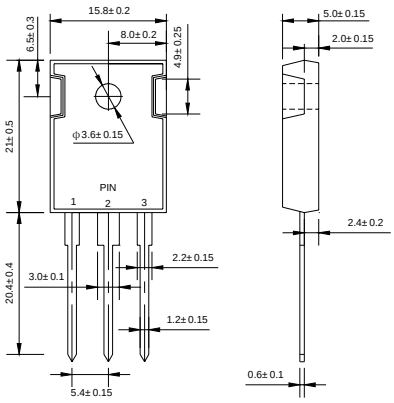
MBR3030PT-MBR30200PT
Schottky Barrier Rectifiers

RoHS COMPLIANT

VOLTAGE RANGE: 30 - 200 V

CURRENT: 30 A

TO-3P(TO-247AD)



Dimensions in millimeters

Features

- ◇ High surge capacity.
- ◇ For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.
- ◇ Metal silicon junction, majority carrier conduction.
- ◇ High current capacity, low forward voltage drop.
- ◇ Guard ring for over voltage protection.

Mechanical Data

- ◇ Case:JEDEC TO-3P,molded plastic body
- ◇ Terminals:Solderable per MIL-STD-750, Method 2026
- ◇ Polarity: As marked
- ◇ Position: Any
- ◇ Weight: 0.223 ounce, 6.3 grams

℃

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 ambient temperature unless otherwise specified.

Single phase,half wave,60Hz,resistive or inductive load.For capactive load,derate current by 20%.

Parameter	Symbol	MBR 3030 PT	MBR 3035 PT	MBR 3040 PT	MBR 3045 PT	MBR 3050 PT	MBR 3060 PT	MBR 3080 PT	MBR 30100 PT	MBR 30150 PT	MBR 30200 PT	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	30	35	40	45	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	21	25	28	32	35	42	56	70	105	140	V
Maximum DC blocking voltage	V_{DC}	30	35	40	45	50	60	80	100	150	200	V
Maximum average forw ard total device rectified current @T_C = 125°C	$I_{F(AV)}$	30.0										A
Peak forw ard surge current 8.3ms single half sine-w ave superimposed on rated load	I_{FSM}	200										A
Maximum forward voltage (Note1) (15.0A,T_C=25℃	V_F	0.7				0.8		0.85		0.92		V
Maximum reverse current @T_C=25℃ at rated DC blocking voltage @T_C=125℃	I_R	0.1 15										m A
Maximum thermal resistance (Note 2)	$R_{\theta JC}$	2.0										K/W
Operating junction temperature range	T_J	- 55 ---- + 150										℃
Storage temperature range	T_{STG}	- 55 ---- + 150										℃

NOTE: 1. Pulse test:300μs pulse width,1% duty cycle.
2. Thermal resistance from junction to case.

Ratings AND Charactieristic Curves

FIG.1 -- PEAK FORWARD SURGE CURRENT

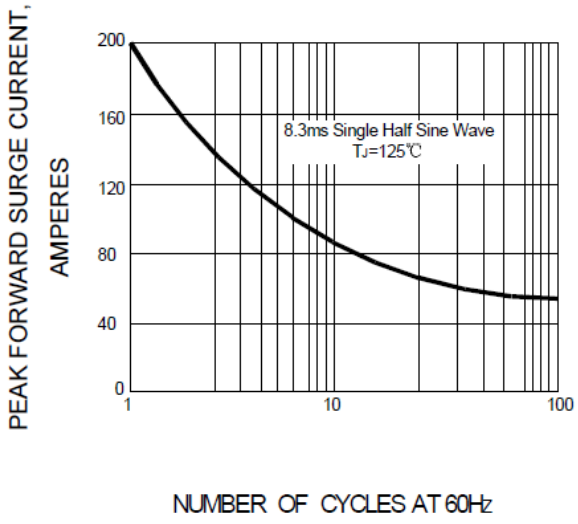


FIG.2 -- FORWARD DERATING CURVE

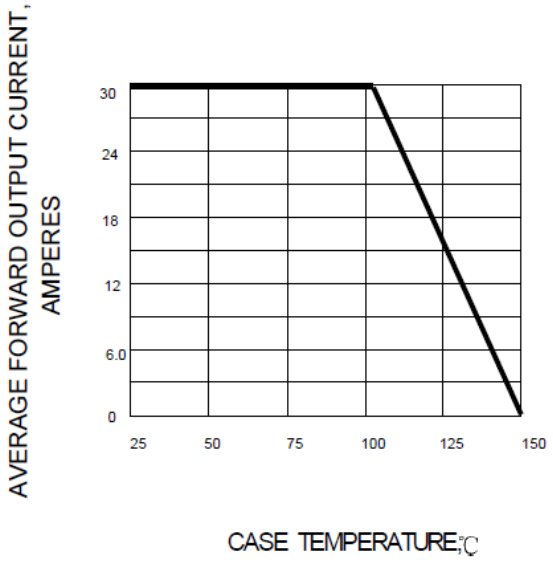


FIG.3 -- TYPICAL FORWARD CHARACTERISTIC

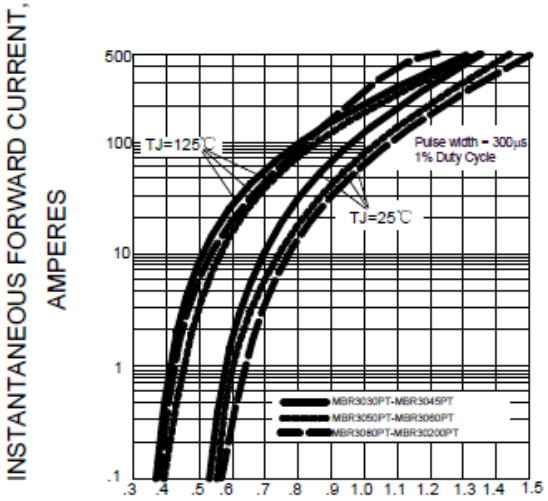


FIG.4 -- TYPICAL REVERSE CHARACTERISTIC