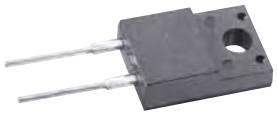
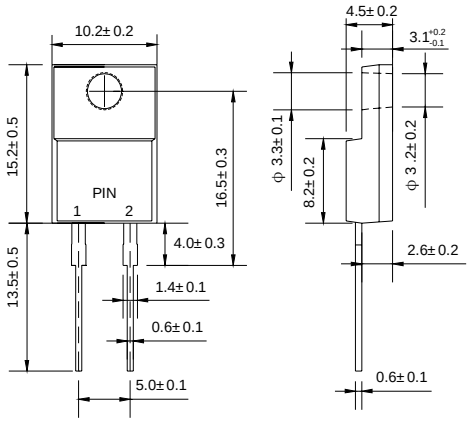
MBRF830-MBRF8100

Schottky Barrier Rectifiers

VOLTAGE RANGE: 30 - 100 V
CURRENT: 8.0 A



ITO-220AC



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 ITO-220AC,molded plastic body
- ◇ Polarity: As marked
- ◇ Position: Any
- ◇ Weight:0.056 ounces,1.587 gram

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%.

		MBRF 830	MBRF 835	MBRF 840	MBRF 845	MBRF 850	MBRF 860	MBRF 880	MBRF 8100	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	30	35	40	45	50	60	80	100	V
Maximum RMS Voltage	V_{RMS}	21	25	28	32	35	42	56	70	V
Maximum DC blocking voltage	V_{DC}	30	35	40	45	50	60	80	100	V
Maximum average forw ard total device rectified current @T_C = 125°C	$I_{F(AV)}$	8.0								A
Peak forw ard surge current 8.3ms single half sine-w ave superimposed on rated load	I_{FSM}	150								A
Maximum forw ard voltage (Note 1)	V_F	(I_F=8.0A,T_C=125℃) 0.57 (I_F=8.0A,T_C=25 ℃) 0.70 (I_F=16A,T_C=25℃) 0.84				0.70 0.80 0.95		- 0.85 -		V
Maximum reverse current at rated DC blocking voltage	I_R	@T_C=25℃ 0.1 @T_C=125℃ 15						0.5 50		m A
Maximum thermal resistance (Note 2)	$R_{\theta JC}$	3.0								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.

MBRF830-MBRF8100

Schottky Barrier Rectifiers

Ratings AND Charactieristic Curves

FIG.1 -- PEAK FORWARD SURGE CURRENT

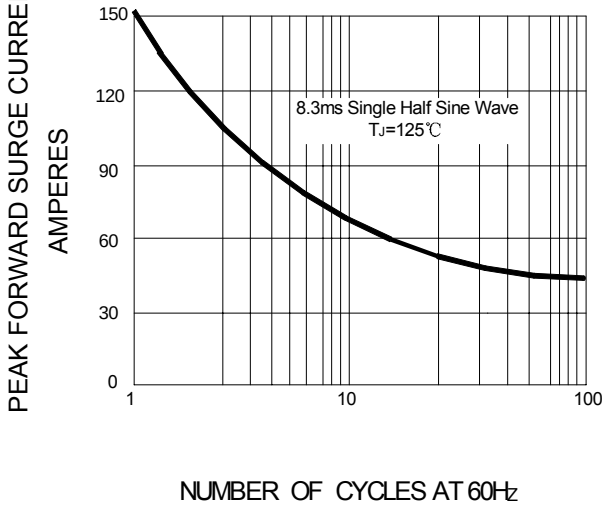


FIG.2 -- FORWARD DERATING CURVE

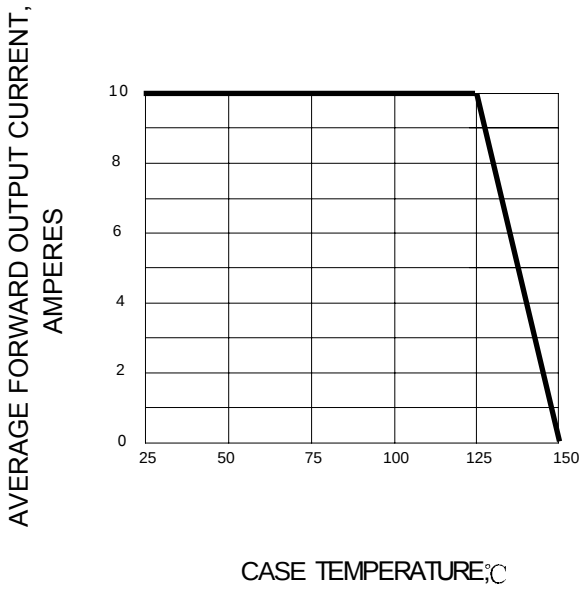


FIG.3 -- TYPICAL FORWARD CHARACTERISTIC

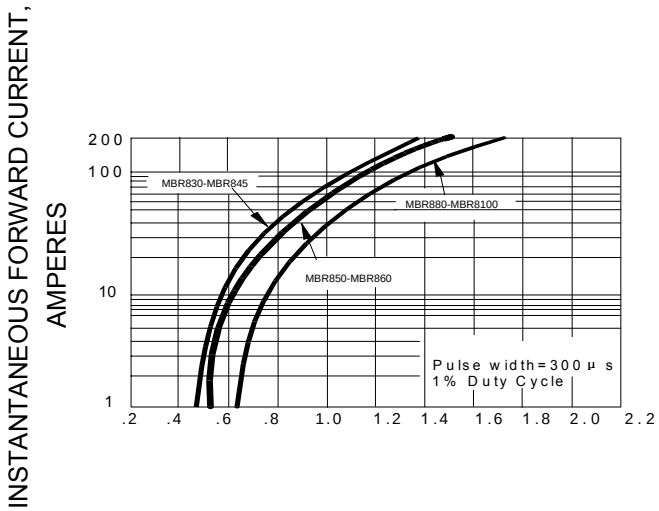


FIG.4 -- TYPICAL REVERSE CHARACTERISTIC