MBRF1045CT THRU MBRF10200CT

Reverse Voltage - 45 to 200 Volts Forward Current - 10.0 Amper

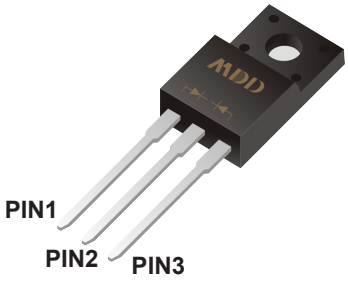
SCHOTTKY BARRIER RECTIFIER

Features

ITO-220AB

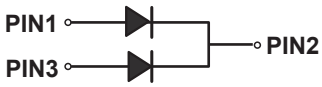
RoHS COMPLIANT

- 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 capability,low forward voltage drop.
- Guard ring for over voltage protection.



Mechanical Data

Case : JEDEC ITO-220AB Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.060 ounce, 1.67 grams



Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unlss otherwise specified.

Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

Parameter / Marking Code	SYMBOLS	MDD MBRF 1045CT	MDD MBRF 1060CT	MDD MBRF 10100CT	MDD MBRF 10150CT	MDD MBRF 10200CT	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	45	60	100	150	200	V
Maximum RMS voltage	V_{RMS}	32	42	70	135	140	V
Maximum DC blocking voltage	V_{DC}	45	60	100	150	200	V
Maximum average forward rectified current (see fig.1)	$I_{(AV)}$	10.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150			125		A
Maximum instantaneous forward voltage at 5.0A	V_F	0.60	0.75	0.85	0.95		V
Maximum DC reverse current at rated DC blocking voltage T_A=25℃	I_R	1.0			0.1		mA
T_A=100℃		15.0	50.0		15.0		
Typical thermal resistance (NOTE 2)	$R_{\theta JC}$	2.0			1.5		℃/W
Operating junction temperature range	T_J	-55 to +150					℃
storage temperature range	T_{STG}	-55 to +150					℃

Note:2.Thermal resistance from junction to case.

Ratings And Characteristic Curves

Fig.1 Typical Forward Current Derating Curve

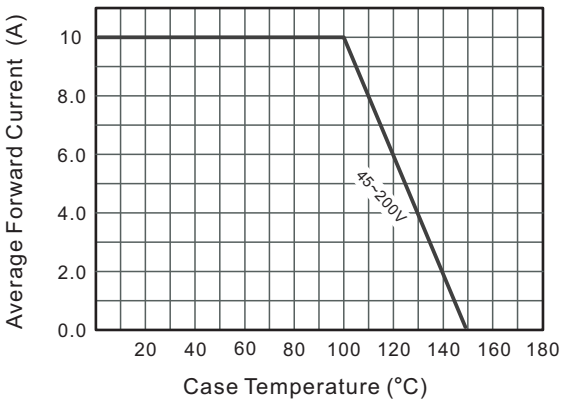


Fig.2 Typical Reverse Characteristics

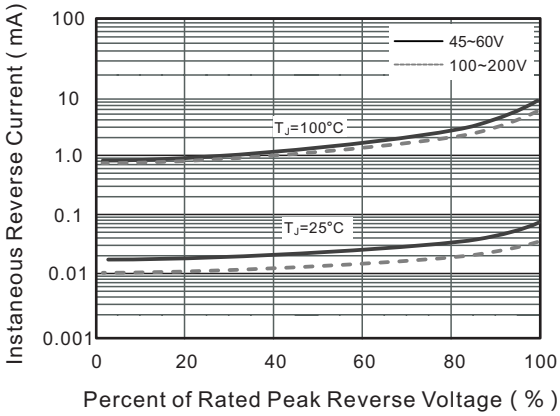


Fig.3 Typical Forward Characteristic(per leg)

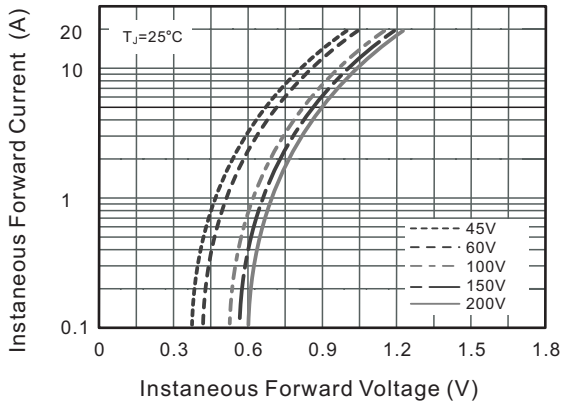
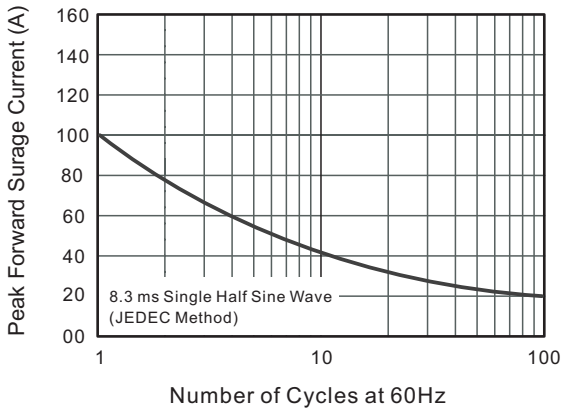


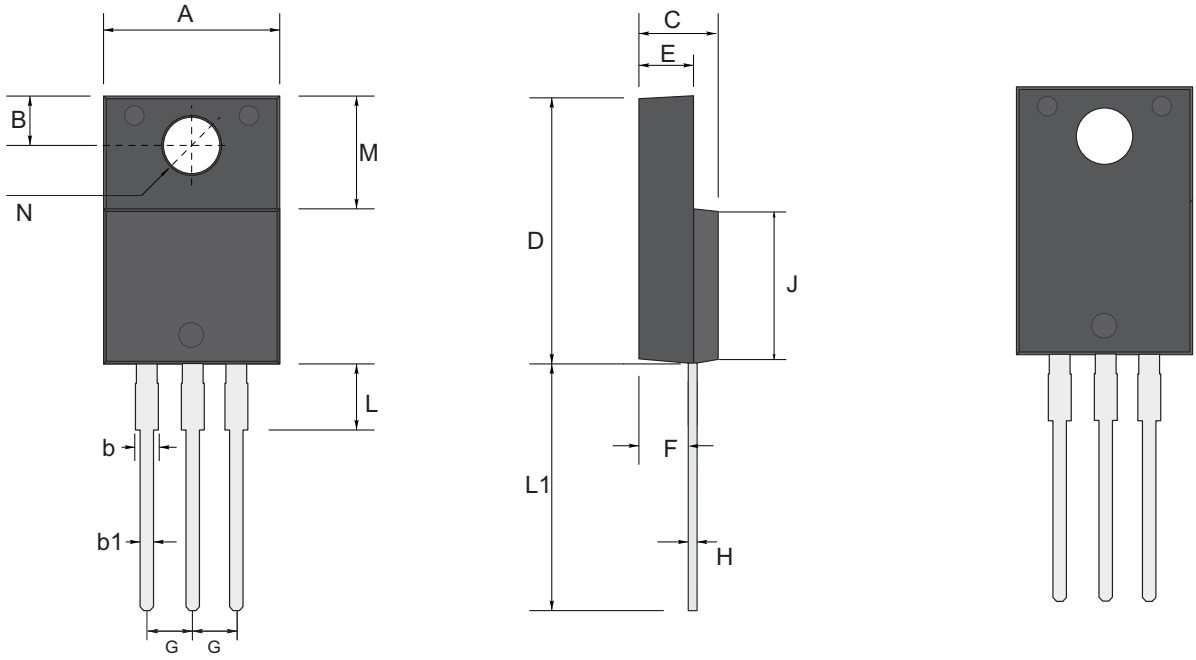
Fig.4 Maximum Non-Repetitive Peak Forward Surage Current



The curve above is for reference only.

Outlitne

ITO-220AB Package Outline Dimensions



UNIT		A	B	b	b1	C	D	E	F	G	H	L	L1	M	N
mm	max	10.5	3.3	1.5	1.0	4.9	16.2	2.9	3.55	2.74	0.70	3.8	14.3	7.0	3.4
	min	9.6	2.54	1.1	0.5	4.3	14.7	2.4	2.56	2.34	0.30	2.3	12.0	6.3	3.0

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