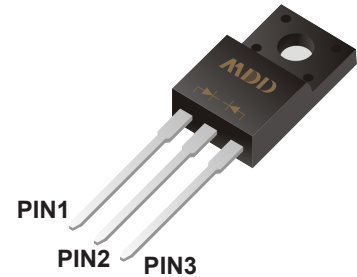


SCHOTTKY BARRIER RECTIFIER

Features

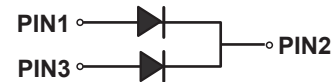
- ◆ High surge capacity.
For use in low voltage, high frequency inverters, free
- ◆ wheeling, and polarity protection applications.
Metal silicon junction, majority carrier conduction.
- ◆ High current capability, low forward voltage drop.
- ◆ Guard ring for over voltage protection.

ITO-220AB



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 unless otherwise specified.

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

Parameter	SYMBOLS	MDD MBRF 1045CT	MDD MBRF 1060CT	MDD MBRF 10100CT	MDD MBRF 10150CT	MDD MBRF 10200CT	UNITS
Marking Code							
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 T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	1.0			0.1		mA
		15.0	50.0		15.0		
Typical thermal resistance (NOTE 2)	R _{θJC}	2.0			1.5		°C/W
Operating junction temperature range	T _J	-55 to +150					°C
storage temperature range	T _{STG}	-55 to +150					°C

Note:2. Thermal resistance from junction to case.

Ratings And Characteristic Curves

Fig.1 Typical Forward Current Derating Curve

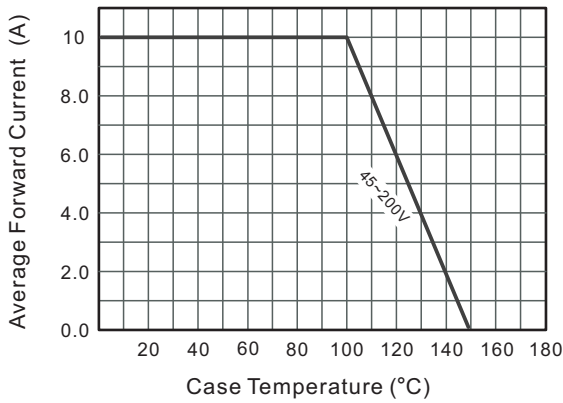


Fig.2 Typical Reverse Characteristics

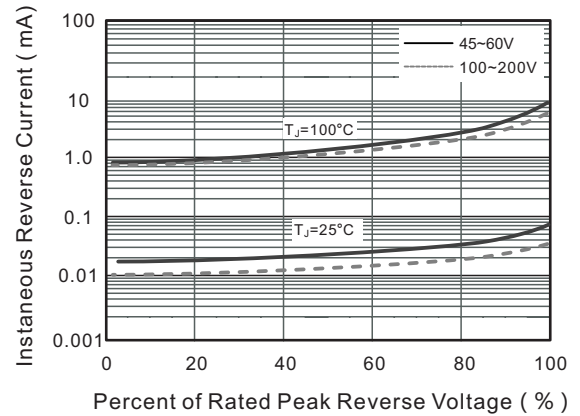


Fig.3 Typical Forward Characteristic(per leg)

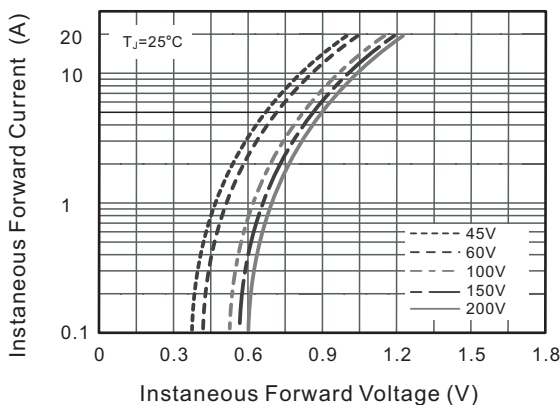
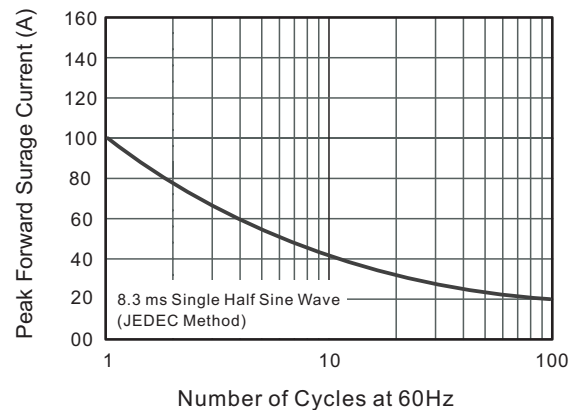


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current



The curve above is for reference only.

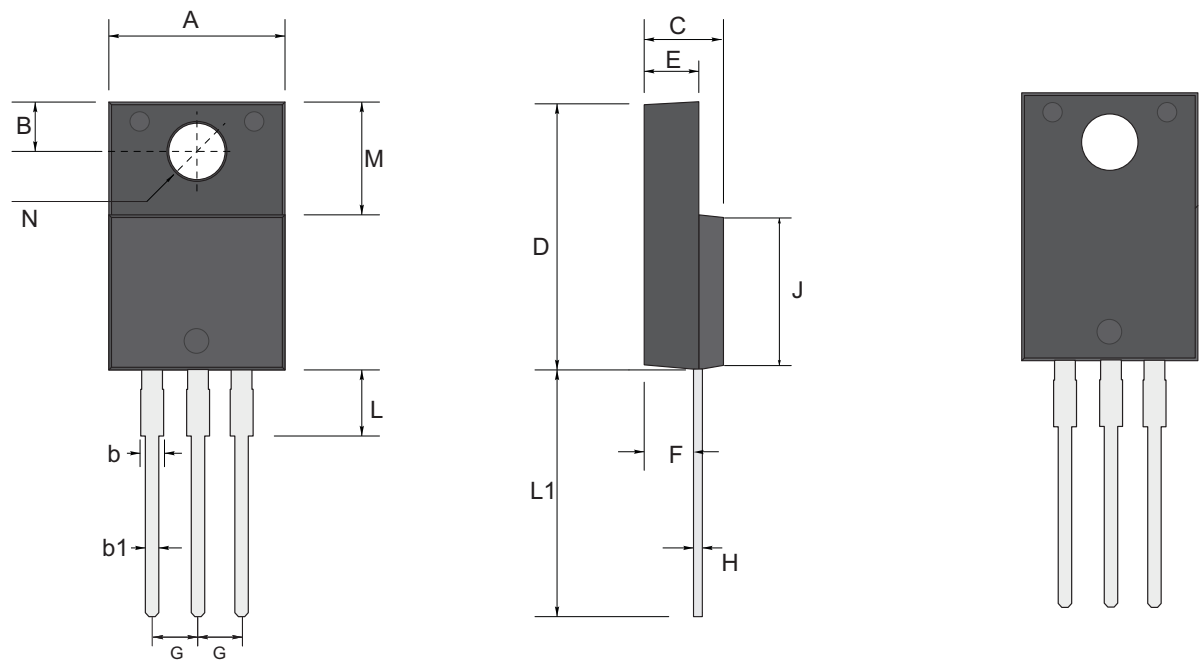


MBRF1045CT THRU MBRF10200CT

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

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	2.85	1.4	0.8	4.7	16.0	2.9	2.8	2.54 TYPICAL	0.70	2.9	14.3	7.0	3.4 TYPICAL
	typ	10.0	2.70	1.2	0.6	4.5	15.0	2.7	2.7		0.55	2.5	13.5	6.8	
	min	9.85	2.54	1.1	0.5	4.4	14.7	2.5	2.5		0.41	2.3	13.0	6.3	
mil	max	413	112	55	31	185	630	114	110	100 TYPICAL	27	114	563	276	133 TYPICAL
	typ	394	106	47	24	177	590	106	106		22	98	531	267	
	min	388	100	43	20	173	580	98	98		16	91	512	248	