

MBRF3045CT THRU MBRF30100CT

AXIAL SCHOTTKY BARRIER RECTIFIER

ITO-220AB Axial Schottky Barrier Rectifier

Features

- High frequency operation
- High purity,high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long tem reliability

Applications

For use in low voltage high frequency inverters, free wheeling,DC/DC converters, and polarity protection applications.

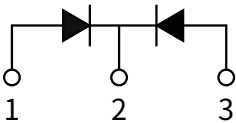
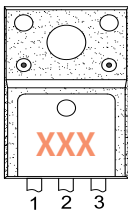
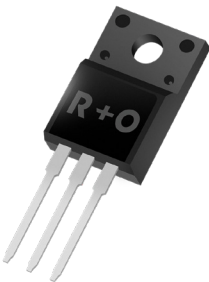
Mechanical Data

- Case: ITO-220AB
- Molding compound meets UL 94V-0 flammability rating
- Terminals: Tin plated leads, solderable per J-STD-002,and JESD22-B102

Function Diagram

Reverse Voltage
45-100 V
Forward Current
30 Ampere

ITO-220AB



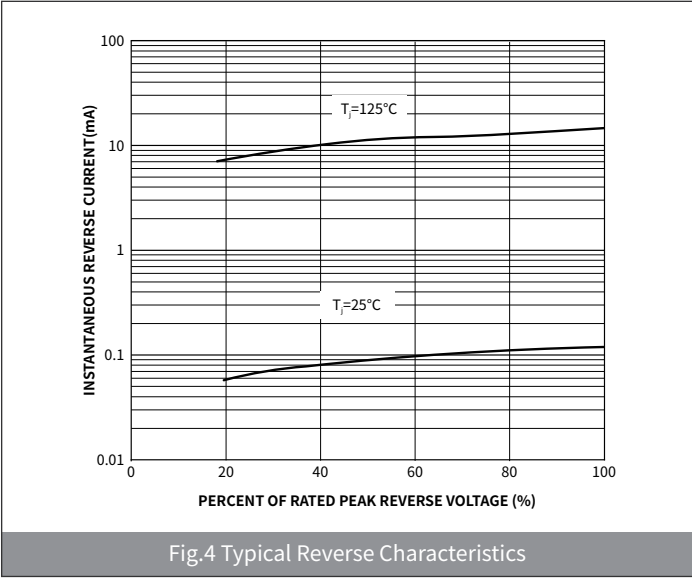
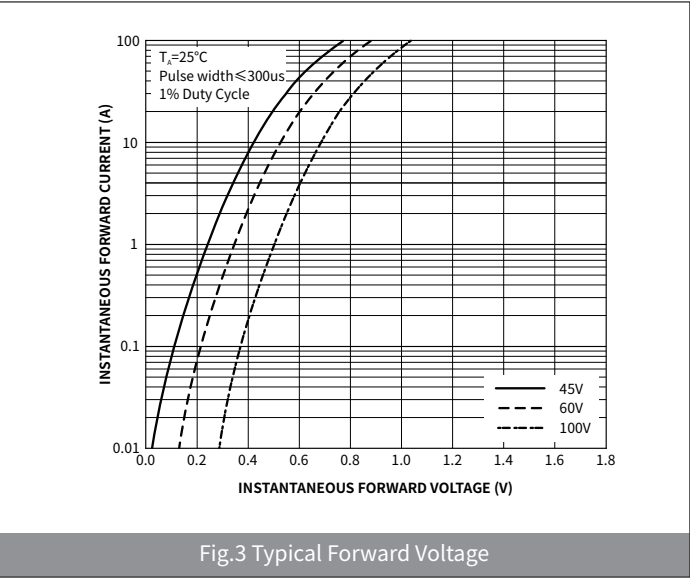
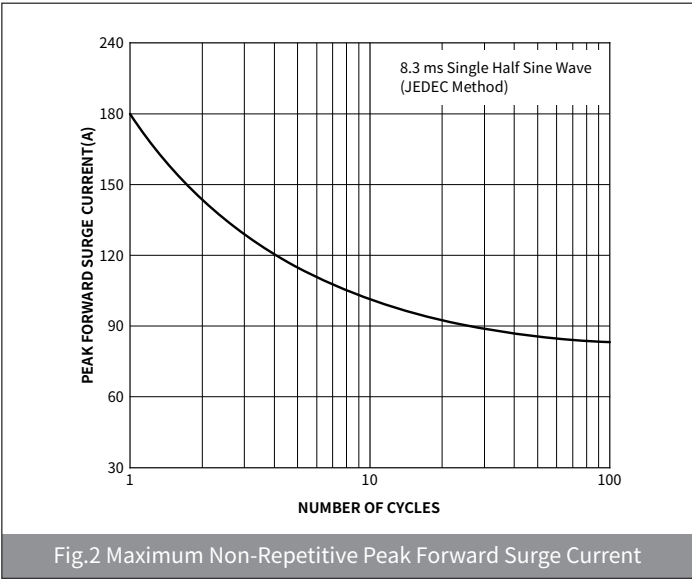
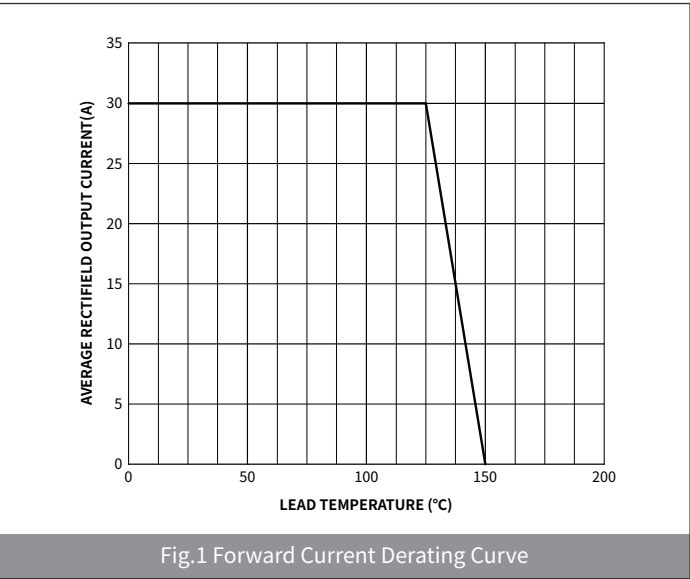
Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MBRF3045CT	MBRF3060CT	MBRF30100CT
Device marking code			MBRF3045CT	MBRF3060CT	MBRF30100CT
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	45	60	100
Maximum RMS Voltage	V_{RMS}	V	31.5	42	70
Maximum DC blocking Voltage	V_{DC}	V	45	60	100
Maximum Average Forward Rectified Current @60Hz sine wave, Resistance load,TL (Fig.1)	$I_{F(AV)}$	A	30		
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I_{FSM}	A	180		
Current Squared Time @1ms ≤ t<8.3ms Tj=25°C	I^2t	A ² S	134		
Storage temperature	T_{stg}	°C	-55~+150		
Junction temperature	T_j	°C	-55~+150		
Typical Thermal Resistance	$R_{\theta JC}$	°C /W	2		

● Electrical Characteristics (Ta=25°C Unless otherwise noted)

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	MBRF3045CT	MBRF3060CT	MBRF30100CT
Maximum instantaneous forward voltage	$I_F=15A$	V_F	V	0.65	0.78	0.87
Maximum DC reverse currentat rated DC blocking voltage	$V_R=V_{DC}, T_A=25^{\circ}C$	I_{R1}	mA	0.3	0.2	0.15
	$V_R=V_{DC}, T_A=125^{\circ}C$	I_{R2}		20		

● Ratings And Characteristics Curves (Ta=25°C Unless otherwise specified)



MBRF3045CT THRU MBRF30100CT

AXIAL SCHOTTKY BARRIER RECTIFIER

● Ordering Information

PACKAGE	UNIT WEIGHT(g)	TUBE(pcs)	BOX(pcs)	CARTON(pcs)
ITO-220AB	2.26	50	1000	5000

● Package Outline Dimensions (ITO-220AB)

Symbol	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	14.50	15.50	0.571	0.610
B	9.50	10.50	0.374	0.413
C	6.45	7.15	0.254	0.281
D	8.20	8.80	0.323	0.346
E	2.90	3.30	0.114	0.130
F	12.8	-	0.504	-
G	1.10	1.4	0.043	0.055
H	2.44	2.64	0.096	0.104
I	0.70	0.90	0.028	0.035
J	0.45	0.65	0.018	0.026
K	4.35	4.75	0.171	0.187
L	2.50	2.90	0.098	0.114
M	2.50	2.90	0.098	0.114
O	Φ3.3	Φ3.7	Φ3.3	Φ3.7