

MBR1040FCT THRU MBR10200FCT

AXIAL SCHOTTKY BARRIER RECTIFIER

ITO-220AB Axial Schottky Barrier Rectifier

● Features

- Low power loss,high efficiency
- High forward surge current capability
- High reliability
- High current capability

Reverse Voltage
40-200 V
Forward Current
10 Ampere

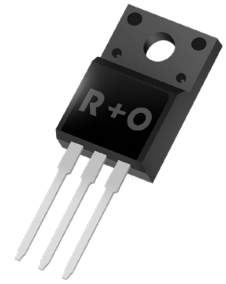
● Applications

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

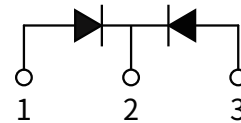
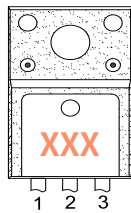
● Mechanical Data

- Case: ITO-220AB
Molding compound meets UL 94V-0 flammability rating, RoHS-compliant, halogen-free
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026

ITO-220AB



● Function Diagram



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

PARAMETER	SYMBOL	UNIT	MBR 1040FCT	MBR 1045FCT	MBR 1050FCT	MBR 1060FCT	MBR 1080FCT	MBR 10100FCT	MBR 10150FCT	MBR 10200FCT	
Device marking code			MBR 1040FCT	MBR 1045FCT	MBR 1050FCT	MBR 1060FCT	MBR 1080FCT	MBR 10100FCT	MBR 10150FCT	MBR 10200FCT	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	V	40	45	50	60	80	100	150	200	
Maximum RMS Voltage	V _{RMS}	V	28	31.5	35	42	56	70	105	140	
Maximum DC blocking Voltage	V _{DC}	V	40	45	50	60	80	100	150	200	
Maximum Average Forward Rectified Current @60Hz sinewave, Resistance load,TL (Fig.1)	I _{F(AV)}	A	10								
Non-repetitive Peak Forward Surge Current @ t=8.3ms Half-sine wave	I _{FSM}	A	100				110				
Storage temperature	T _{stg}	°C	-55 ~ +150						-55 ~ +175		
Junction temperature	T _j	°C	-55 ~ +150						-55 ~ +175		
Typical Thermal Resistance	R _{θJC}	°C /W	3.0								

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

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	MBR	MBR	MBR	MBR	MBR	MBR	MBR	MBR
				1040FCT	1045FCT	1050FCT	1060FCT	1080FCT	10100FCT	10150FCT	10200FCT
Maximum instantaneous forward voltage	$I_F=5A$	V_F	V	0.6		0.75		0.85		0.92	
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}, T_J=25^\circ C$	I_{R1}	mA	0.05				0.02			
	$V_R=V_{DC}, T_J=125^\circ C$	I_{R2}		20				20			

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

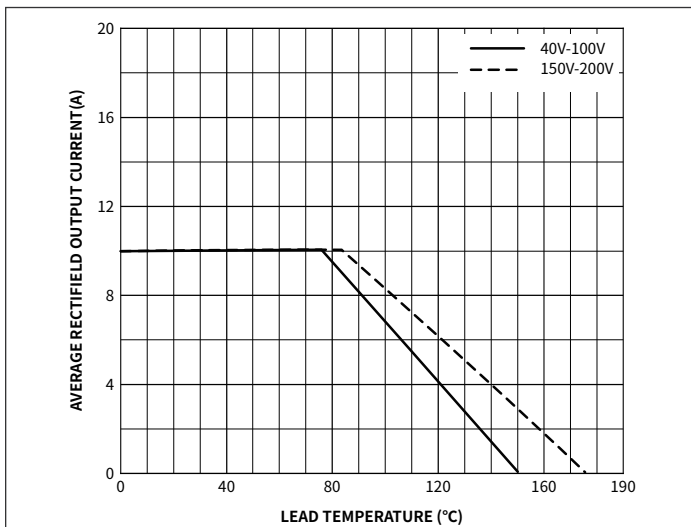


Fig.1 Forward Current Derating Curve

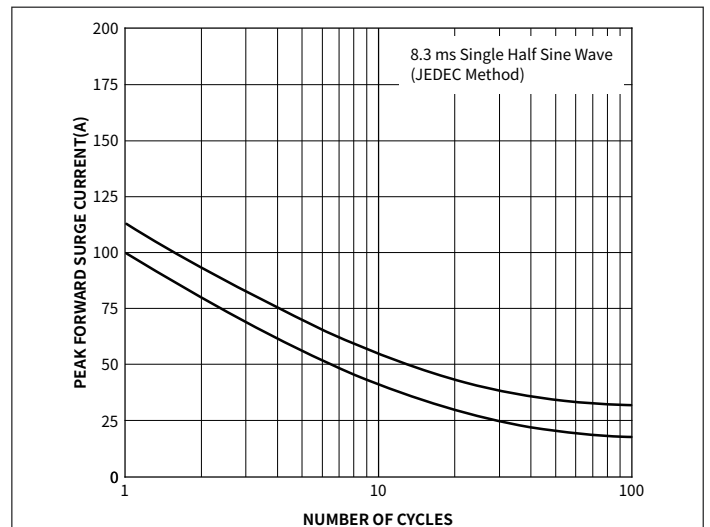


Fig.2 Maximum Non-Repetitive Peak Forward Surge Current

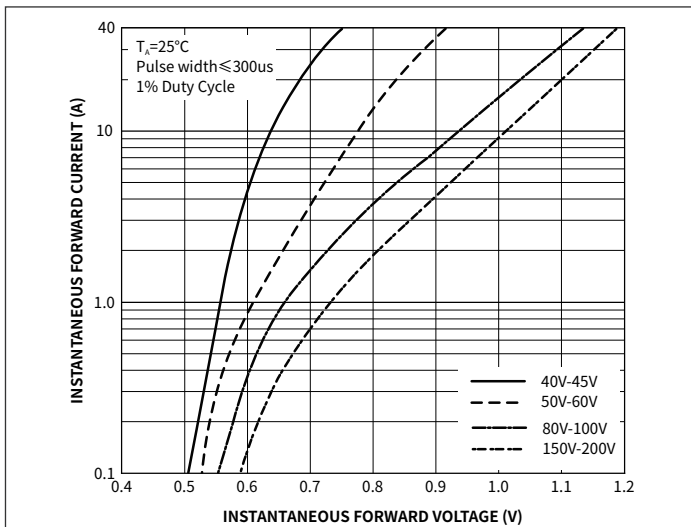


Fig.3 Typical Forward Voltage

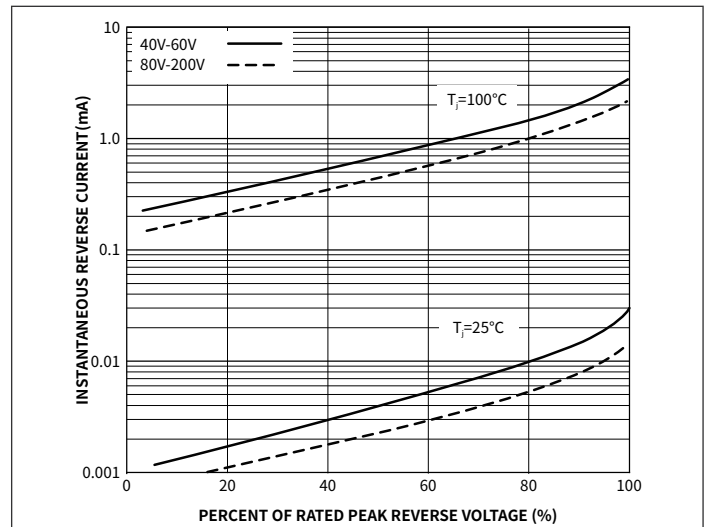


Fig.4 Typical Reverse Characteristics

MBR1040FCT THRU MBR10200FCT

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	14.9	16.0	0.587	0.630
B	9.90	10.40	0.390	0.409
C	6.45	7.15	0.254	0.281
D	7.85	8.75	0.309	0.344
E	2.80	3.50	0.110	0.138
F	12.8	-	0.504	
G	1.10	1.4	0.043	0.055
H	2.35	2.65	0.093	0.104
I	0.45	0.95	0.018	0.037
J	0.40	0.65	0.016	0.026
K	4.35	4.75	0.171	0.187
L	2.55	3.15	0.100	0.124
M	2.45	2.7	0.096	0.106
O	Φ3	Φ3.5	Φ3	Φ3.5