# MBR1080FCT THRU MBR10200FCT

Schottky Diodes

Features
- High frequency operation
- Low forward voltage drop
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical Applications
Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

Mechanical Data
- **Package**: ITO-220AB
  Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **Terminals**: Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity**: As marked

■Maximum Ratings (T$_a$=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	MBR1080FCT	MBR10100FCT	MBR10120FCT	MBR10150FCT	MBR10200FCT
Device marking code			MBR1080FCT	MBR10100FCT	MBR10120FCT	MBR10150FCT	MBR10200FCT
Repetitive Peak Reverse Voltage	V$_{RRM}$	V	80	100	120	150	200
Average Rectified Output Current @60Hz sine wave, R-load, T$_a$=25℃	I$_O$	A	10				
Surge(Non-repetitive)Forward Current @60Hz half sine-wave, 1 cycle, T$_a$=25℃	I$_{FSM}$	A	100				
Current Squared Time @1ms≤t≤8.3ms Tj=25℃	I^{2}t	A^{2}s	41				
Storage Temperature	T$_{stg}$	℃	-55 ~ +150				
Junction Temperature	T$_j$	℃	-55 ~ +150				

■Electrical Characteristics (T$_a$=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	MBR1080FCT	MBR10100FCT	MBR10120FCT	MBR10150FCT	MBR10200FCT
Maximum instantaneous forward voltage drop per diode	V$_{FM}$	V	I$_{FM}$=5.0A	0.85		0.9		0.95
Maximum DC reverse current at rated DC blocking voltage per diode	I$_{RRM1}$	mA	V$_{RM}$=V$_{RRM}$ T$_a$=25℃	0.1				
	I$_{RRM2}$		V$_{RM}$=V$_{RRM}$ T$_a$=100℃	20				

Note1:Pulse test:300uS pulse widh,1% duty cycle

Note2:Pulse test:pulse widh 40mS

# MBR1080FCT THRU MBR10200FCT

■Thermal Characteristics (T$_a$=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	MBR1080FCT	MBR10100FCT	MBR10120FCT	MBR10150FCT	MBR10200FCT
Thermal Resistance	Between junction and case	Rθ_{J-C}	℃/W			4.0		

■Ordering Information (Example)

PREFERED P/N	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MBR1080FCT THRU MBR10200FCT	Approximate 1.6	50	1000	5000	Tube

■Characteristics (Typical)

FIG1:Io -Tc Curve
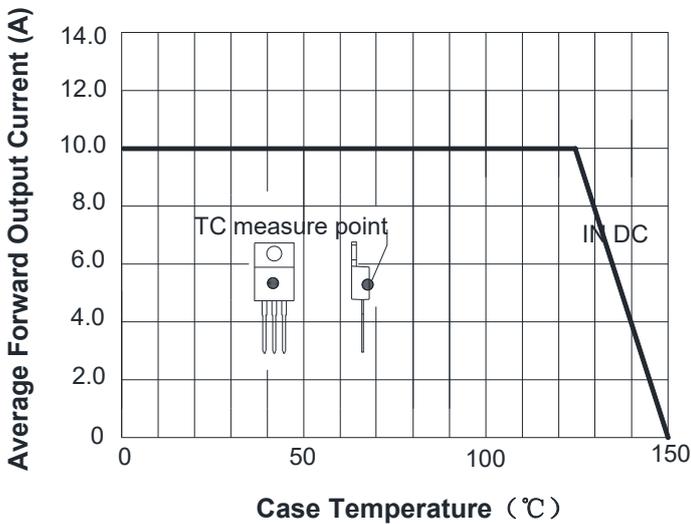
FIG2:Surge Forward Current Capability
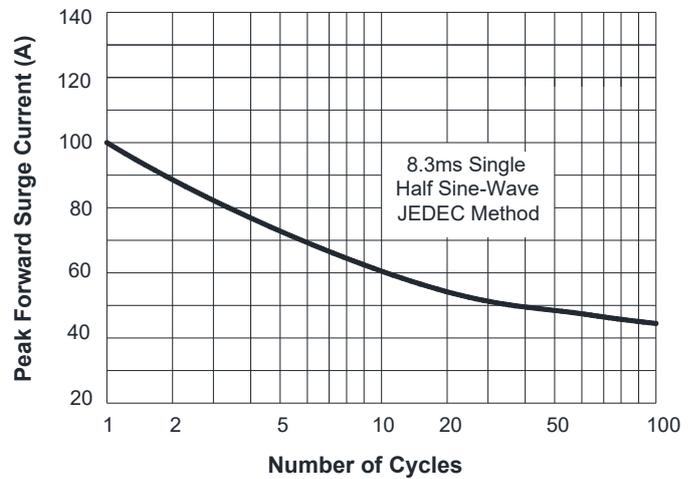
FIG3: Forward Voltage
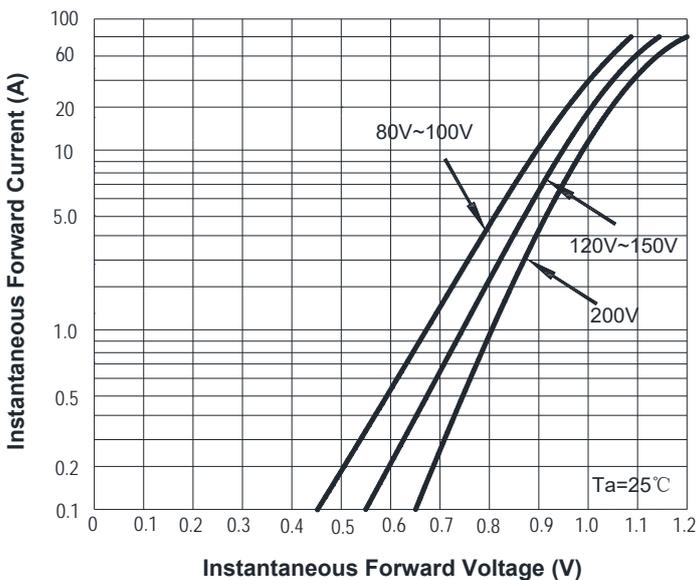
FIG.4: Typical Reverse Characteristics
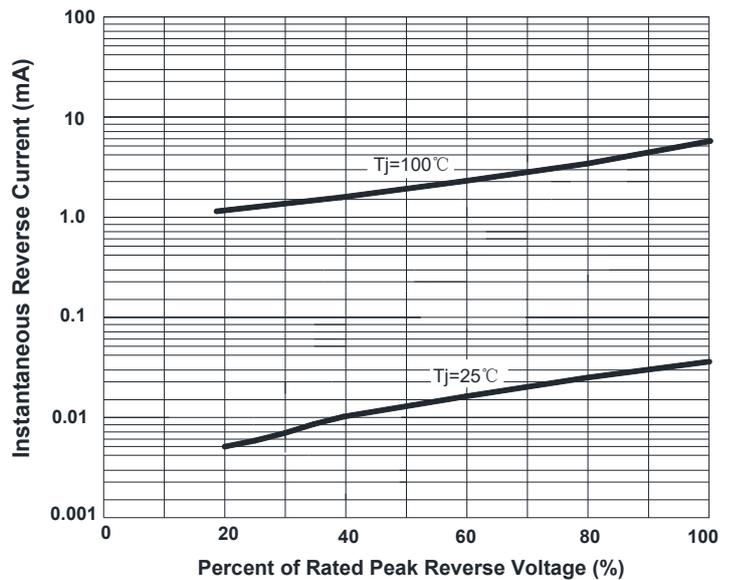
■Outline Dimensions

ITO-220AB

Dimensions in millimeters
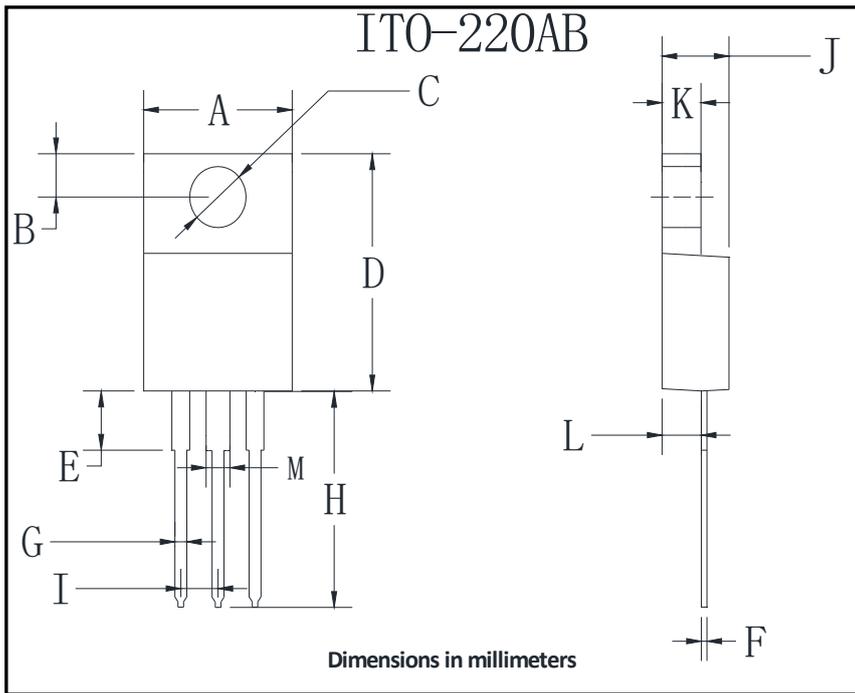
ITO-220AB		
Dim	Min	Max
A	9.8	10.2
B	2.25	2.75
C	2.95	3.45
D	14.75	15.25
E	3.05	3.95
F	0.45	0.75
G	0.45	0.75
H	13.4	14.2
I	2.35	2.75
J	4.3	4.8
K	2.58	2.82
L	2.58	2.82
M	1.47	1.77

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website http:// www.21yangjie.com , or consult your nearest Yangjie's sales office for further assistance.