



DATA SHEET

SEMICONDUCTOR

MBR1020FCT~MBR10200FCT

10A SCHOTTKY BARRIER RECTIFIER



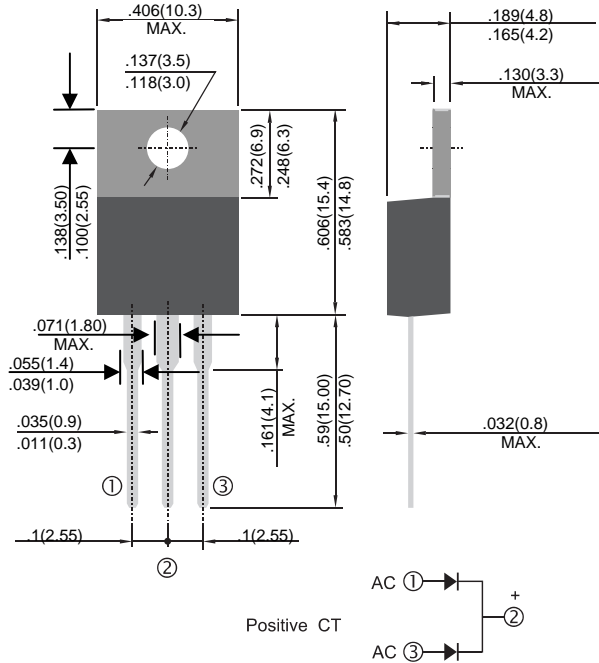
ITO-220AB Unit:inch(mm)

FEATURES

- Schottky Barrier Chip
- Guard Ring for Transient Protection
- High Current Capability, Low Forward
- Low Reverse Leakage Current
- High Surge Current Capability
- Plastic Material has UL Flammability
- Classification 94V-0
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

MECHANICAL DATA

- Case: ITO-220AB Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-750, Method 2026
- Polarity: As Marked on Body
- Mounting Position: Any
- Marking: Type Number



Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristic	Symbol	MBR	MBR	MBR	MBR	MBR	MBR	MBR	MBR	MBR	MBR	MBR	Units	
		1020FCT	1030FCT	1040FCT	1045FCT	1050FCT	1060FCT	1065FCT	1080FCT	10100FCT	10150FCT	10200FCT		
Peak Repetitive Reverse Voltage	VRRM												Volts	
Working Peak Reverse Voltage	VRWM	20	30	40	45	50	60	65	80	100	150	200	Volts	
DC Blocking Voltage	VR												Volts	
RMS Reverse Voltage	VR(RMS)	14	21	28	31.5	35	42	45.5	56	70	105	140	Volts	
Average Rectified Output Current @TC = 95°C	IF	10											Amps	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150											Amps	
Forward Voltage @IF = 5.0A	VF	0.55		0.7		0.75			0.80		0.90		Volts	
Peak Reverse Current @TA = 25°C	IRM	0.1				0.1				0.025				mA
At Rated DC Blocking Voltage @TA = 100°C		15				6.0				1.0				mA
Typical Junction Capacitance (Note 1)	Cj	350				280				200				pF
Typical Thermal Resistance	RθJC	4.5											/W	
Operating and Storage Temperature Range	Tj, TSTG	-55 to +150												

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

DEVICE CHARACTERISTICS

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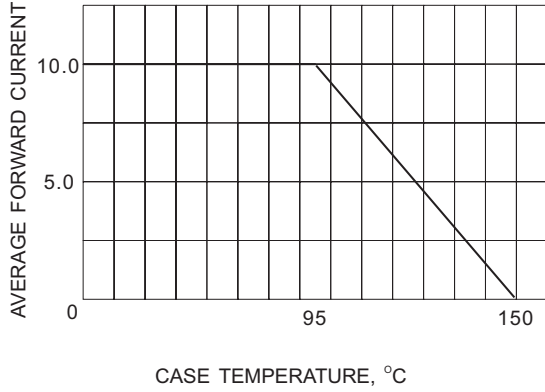


Fig.1- FORWARD CURRENT DERATING CURVE

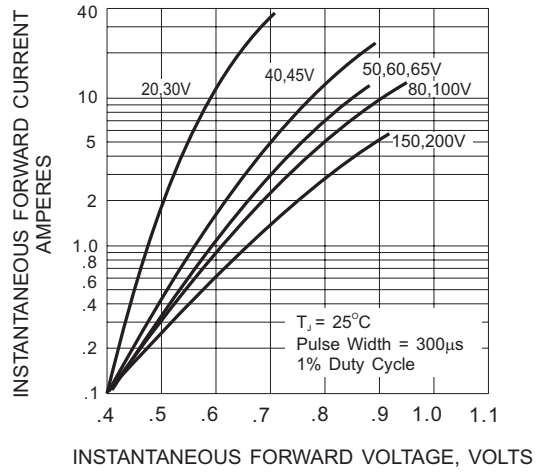


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

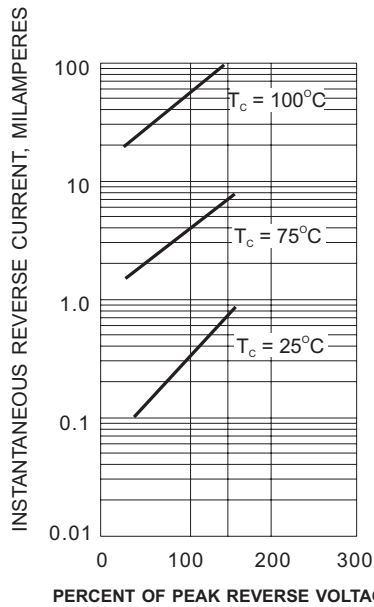


Fig.3- TYPICAL REVERSE CHARACTERISTIC

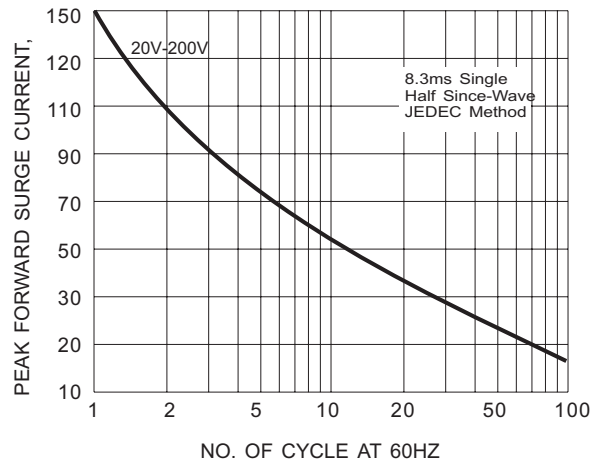
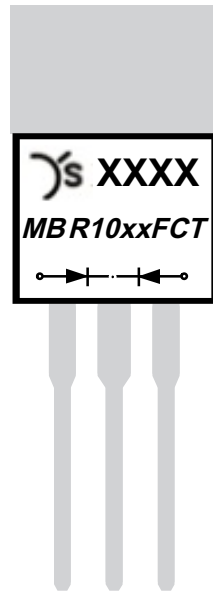


Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT



亞昕科技股份有限公司
YEASHIN TECHNOLOGY CO., LTD.

Marking Information



Line 1: YS Logo and Date code

The first half of Line 1: YS logo



The second half of Line 1:

YYWW: Year,

YYWW: Week.

Line 2 : Device name and Package type

MBR: Schottky Barrier Rectifier

10xx: 10 Ampere Series product.

10xx: The peak reverse Voltage of product.

Line 3 : Device Structure symbol



TO/ITO220 包装规范

Packing 包装	Dimension 尺寸	Qty 数量	Picture 图示
Bag/Tube 袋/管装	527mm*33mm*7mm	50 PCS	
Inner box 内盒	555mm*140mm*55mm	2000 PCS	 <p>标签贴盒盖正面中心处</p>
Carton 外箱	575mm*285mm *155mm	8000 PCS	 <p>外箱两侧贴标签位置</p>