



# DATA SHEET

SEMICONDUCTOR

MBRL2040CT~MBRL20200CT

## 20A SCHOTTKY BARRIER RECTIFIER

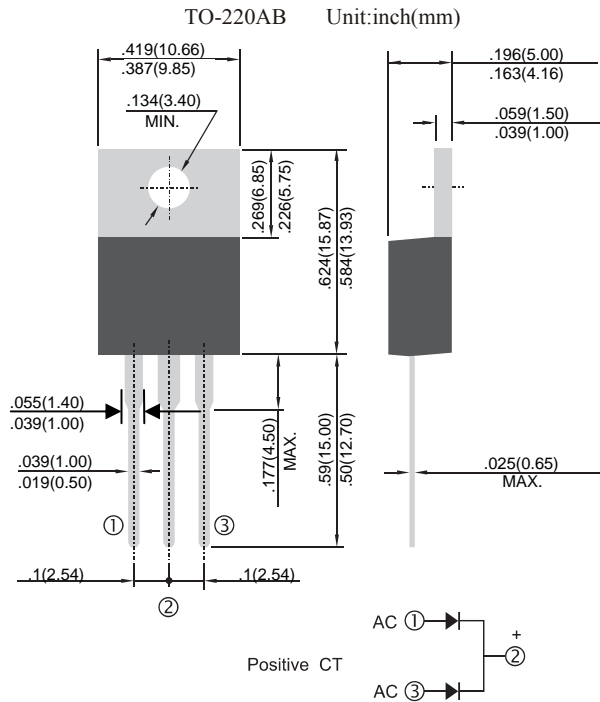


### FEATURES

- 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-O
- 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: TO-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	MBRL 2040CT	MBRL 2045CT	MBRL 2060CT	MBRL 20100CT	MBRL 20150CT	MBRL 20200CT	Units
Peak Repetitive Reverse Voltage	VRRM							Volts
Working Peak Reverse Voltage	VRWM	40	45	60	100	150	200	Volts
DC Blocking Voltage	VR							Volts
RMS Reverse Voltage	VR(RMS)	28	31.5	42	70	105	140	Volts
Average Rectified Output Current @TC = 90°C	IF	20						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 = 10.0 A	VF	0.52		0.58	0.72	0.95	1.05	Volts
Peak Reverse Current @TA = 25°C	IRM	0.5		0.3	0.2			mA
Operating and Storage Temperature Range	Tj, TSTG	-55 ~ +150						°C

# DEVICE CHARACTERISTICS

## MBRL2040CT~MBRL20200CT

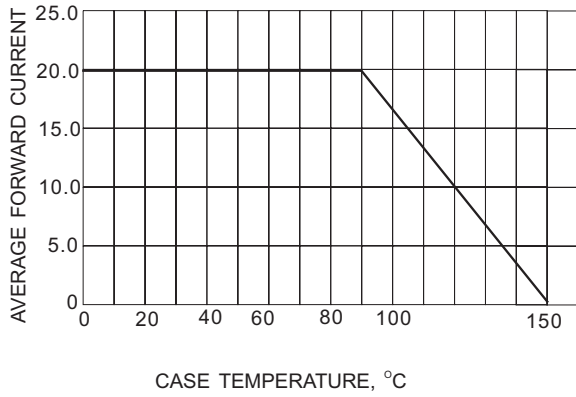


Fig.1- FORWARD CURRENT DERATING CURVE

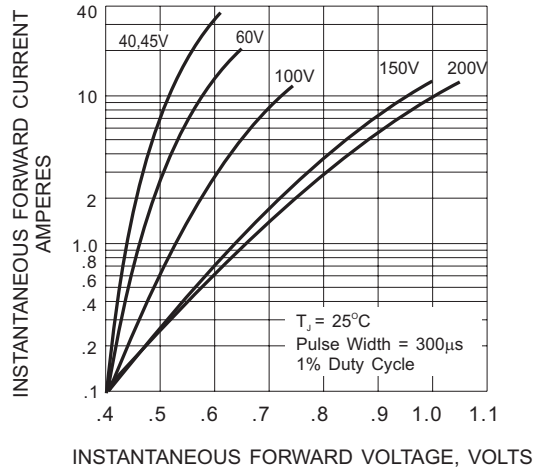


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

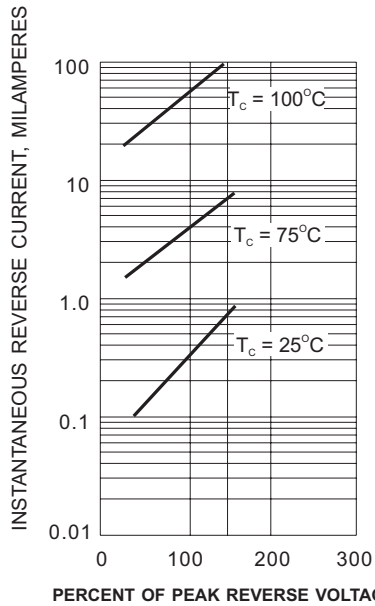


Fig.3- TYPICAL REVERSE CHARACTERISTIC

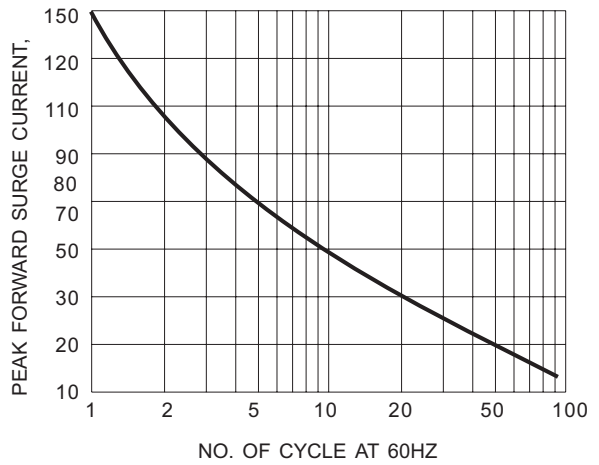


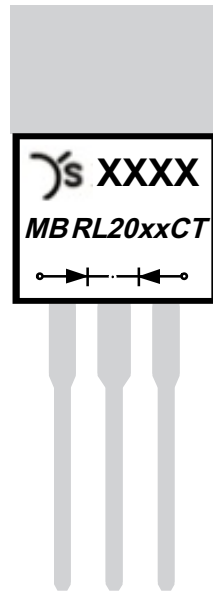
Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT



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## Marking Information

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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

L : Low VF

20xx: 20 Ampere Series product.

20xx: 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>