DATA SHEET

SEMICONDUCTOR

MBRL1040CT~MBRL10200CT

10A SCHOTTKY BARRIER RECTIFIER

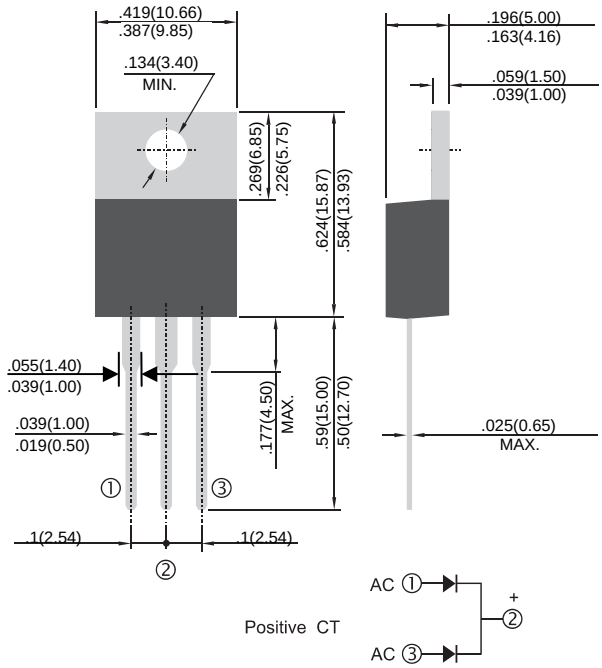
FEATURES

- 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

TO-220AB Unit:inch(mm)



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 1040CT	MBRL 1045CT	MBRL 1060CT	MBRL 10100CT	MBRL 10150CT	MBRL 10200CT	Units
Peak Repetitive Reverse Voltage **Working Peak Reverse Voltage** **DC Blocking Voltage**	V_{RRM} V_{RWM} V_R	40	45	60	100	150	200	Volts
RMS Reverse Voltage	$V_{R(RMS)}$	28	31.5	42	70	105	140	Volts
Average Rectified Output Current @TC = 90°C	I_F	10						Amps
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150						Amps
Forward Voltage @IF = 10.0 A	V_F	0.52		0.58	0.72	0.95	1.05	Volts
Peak Reverse Current @TA = 25°C	I_{RM}	0.5		0.3	0.2			mA
Operating and Storage Temperature Range	T_j, T_{STG}	-55 ~ +150						°C

DEVICE CHARACTERISTICS

MBRL1040CT~MBRL10200CT

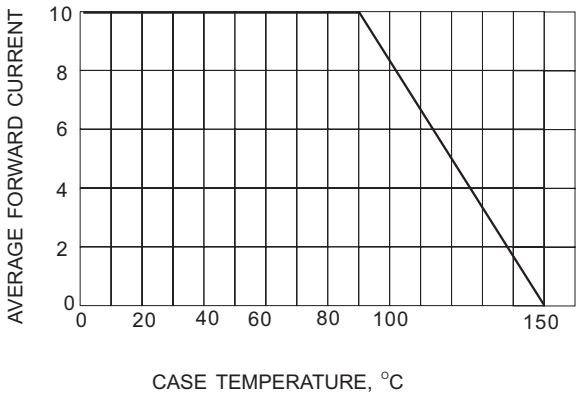


Fig.1- FORWARD CURRENT DERATING CURVE

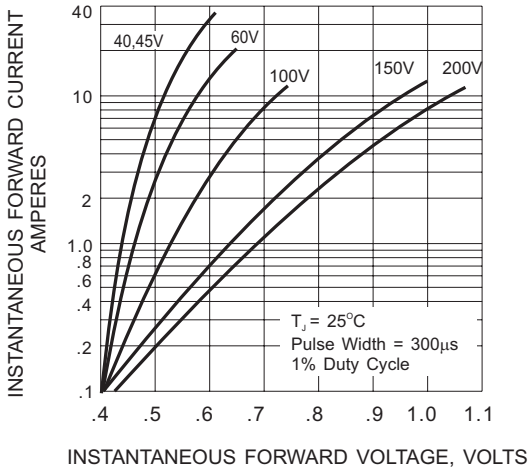


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

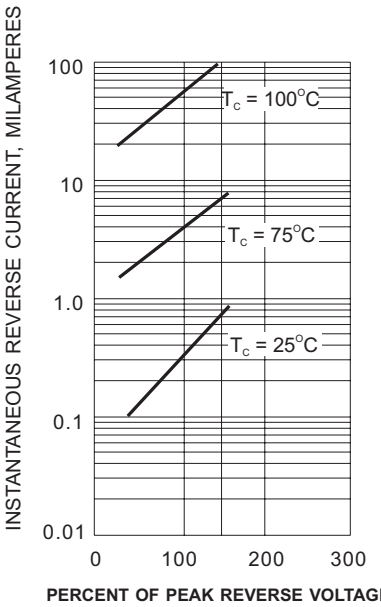


Fig.3- TYPICAL REVERSE CHARACTERISTIC

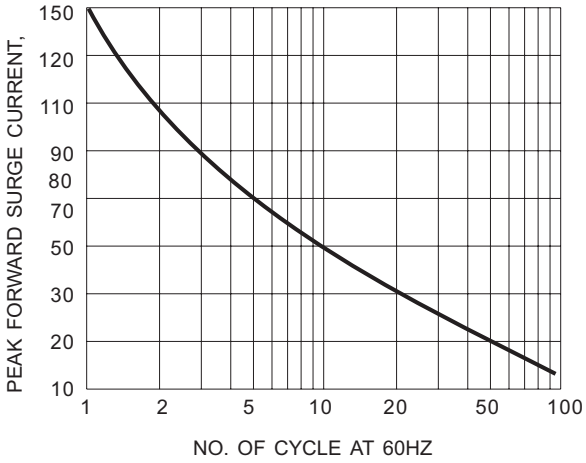
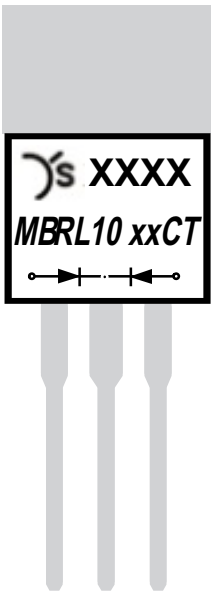


Fig.4- MAXIMUM NON-REPETITIVE SURGE CURRENT

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,

YY**WW**: Week.

Line 2 : Device name and Package type

MBR: Schottky Barrier Rectifier

L : Low VF

10xx: 10 Ampere Series product.

10**xx**: 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	 
Carton 外箱	575mm*285mm *155mm	8000 PCS	