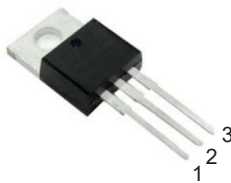
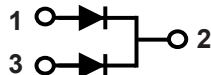
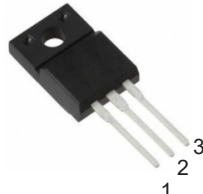


Schottky Barrier Rectifier

TO-220AB
MBR1045CT



ITO-220AB
MBR1045CTF



Features

- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses
- High efficiency

Applications

- DC/DC Converters
- AC/DC Adaptors
- Switching Power Supplies

Maximum ratings and electrical characteristics (T_J = 25°C unless otherwise noted)

Parameter			Symbols	MBR1045CT	MBR1045CTF	Units
Maximum Repetitive Peak Reverse Voltage			VRRM	45		V
Working Peak Reverse Voltage			VRWM	45		V
Maximum DC Blocking Voltage			VDC	45		V
Maximum Average Forward Rectified Current	per diode	I(AV)	5		A	
	total		10			
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)			IFSM	200		A
Instantaneous forward voltage per diode			VF	Typ.	Max.	V
	IF=3A	TJ=25°C		0.46	-	
	IF=3A	TJ=125°C		0.39	-	
	IF=5A	TJ=25°C		0.52	0.60	
	IF=5A	TJ=125°C		0.48	-	
Maximum Reverse Current at VR=45V		TJ=25°C	IR	5	30	μA
		TJ=125°C		3	-	mA
Operating and Storage Temperature Range			Tj, Tstg	-40 ~ +150		°C
Typical thermal resistance (Note 1)			RthJC	2		°C/W

Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

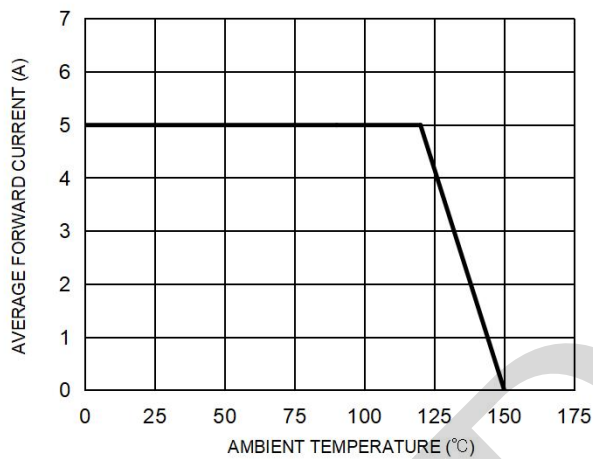


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

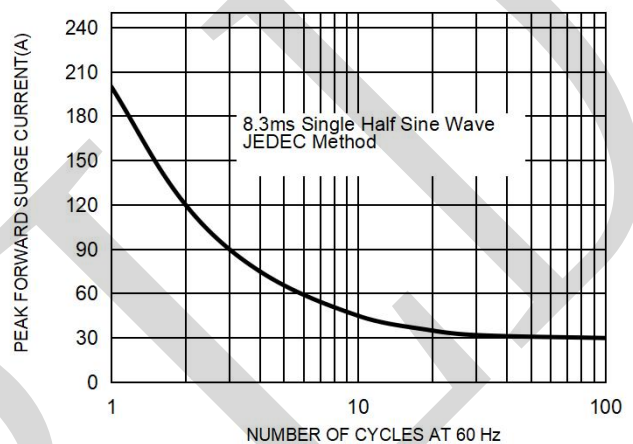


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

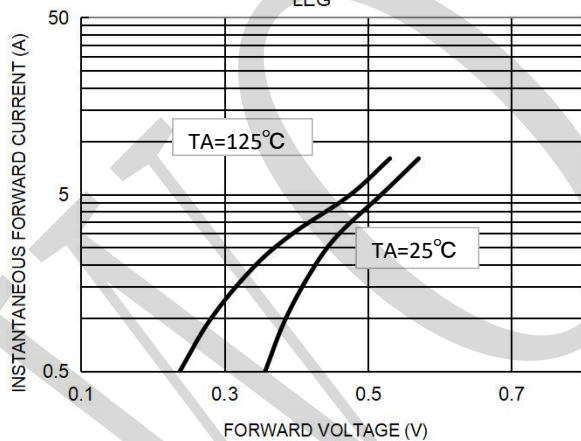
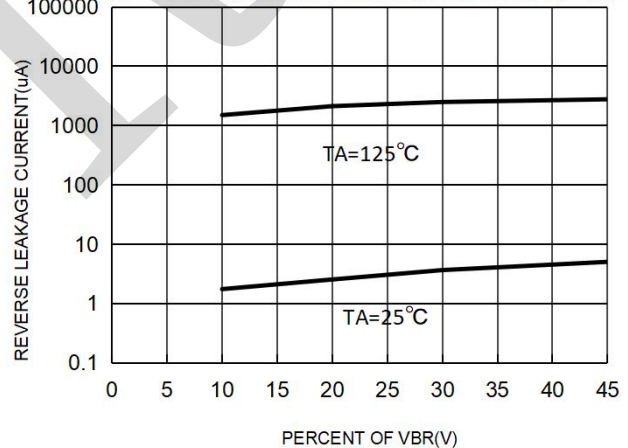


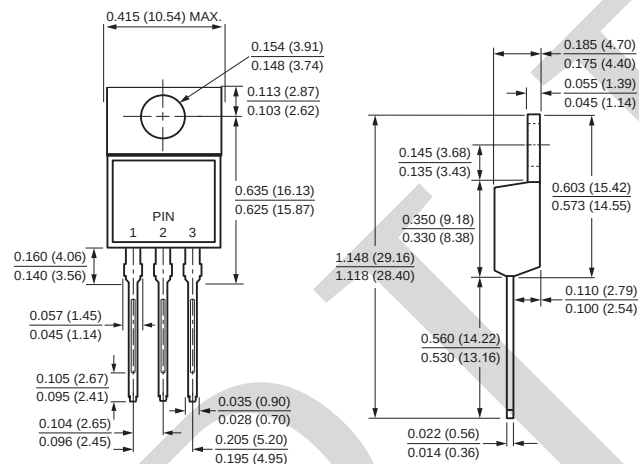
FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



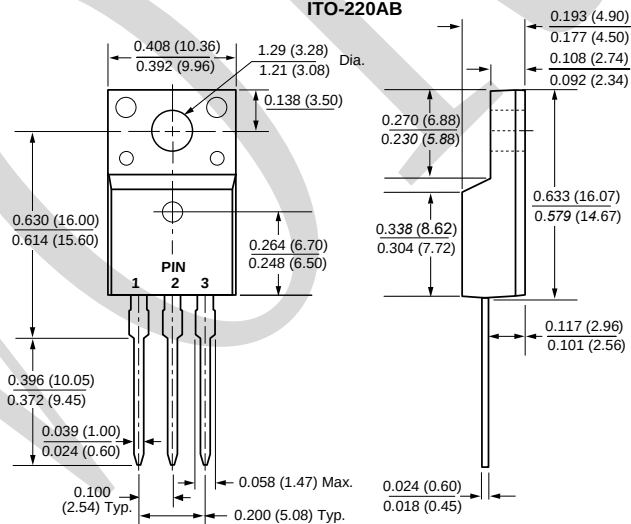
PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)

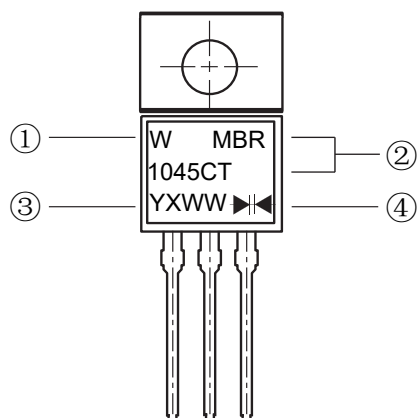
TO-220AB



ITO-220AB



Marking Information



①W : Company's trademark

②Product model : MBR1045CT or MBR1045CTF

③PDC information:

Y X WW

WW:Week code(01 to 53)

X:Internal identification code

Y:Year code(ex:0=2020)

④ Double wafer