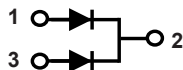
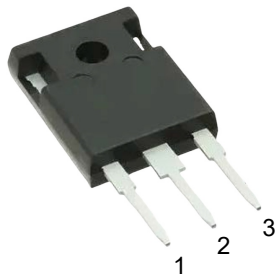


Schottky Barrier Rectifier

TO-247S

MBR40100PTS



Features

- Low forward voltage drop
- Low power losses
- High efficiency operation
- Lead Free Finish, RoHS Compliant

Applications

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

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

Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			VRRM	100		V
Maximum average forward rectified current	device	IF(AV)	40		A	
	per diode		20			
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode			IFSM	220		A
Operating junction and storage temperature range			T _J , T _{STG}	-55 to +150		°C
Typical thermal resistance per leg			R _{θJA}	2		°C/W
Instantaneous forward voltage per diode			VF(1)	TYP.	MAX.	V
	IF=3A	TJ=25°C		0.56	0.67	
	IF=3A	TJ=125°C		0.50	-	
	IF=20A	TJ=25°C		0.80	0.88	
	IF=20A	TJ=125°C		0.75	-	
Instantaneous reverse current per diode at rated reverse voltage		TJ=25°C	IR(2)	1	100	uA
		TJ=125°C		10	-	mA

Notes:

(1) Pulse test: 300 μs pulse width, 1 % duty cycle

(2) Pulse test: Pulse width ≤ 40 ms

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

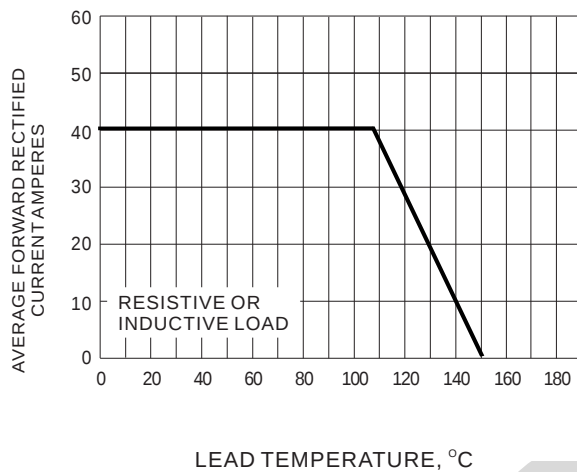


Fig.1- FORWARD CURRENT DERATING CURVE

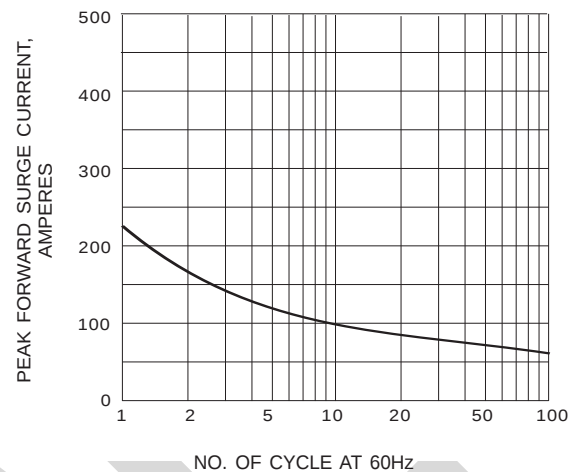


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

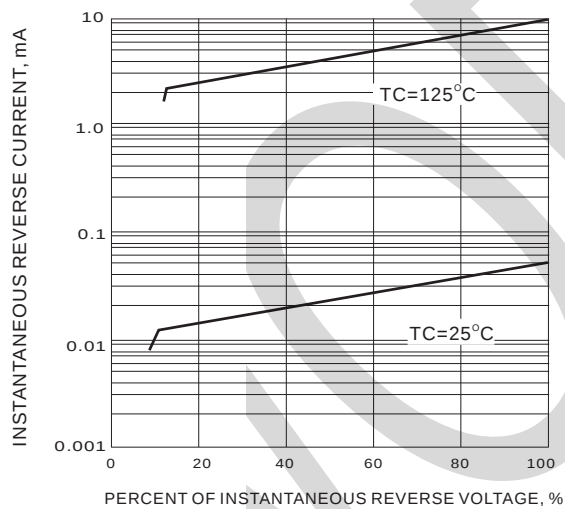


Fig.3- TYPICAL REVERSE CHARACTERISTIC

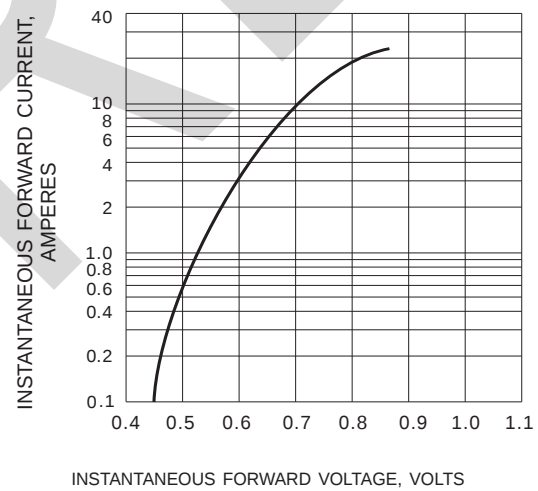
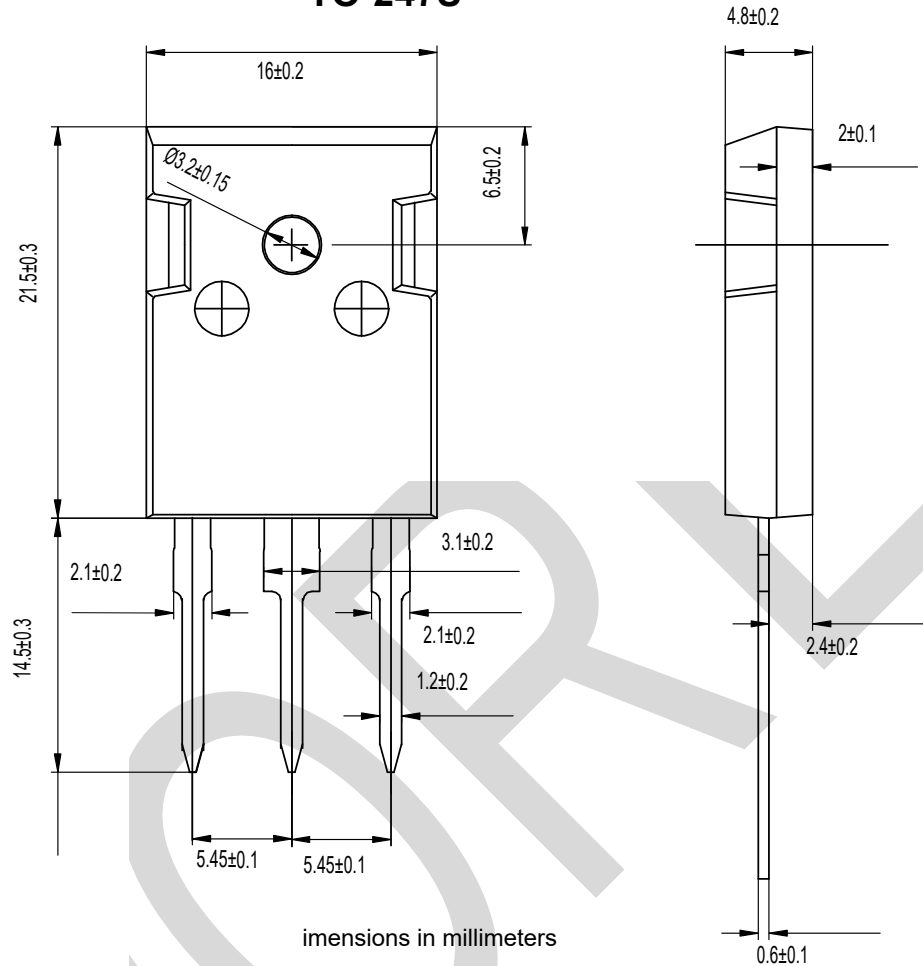


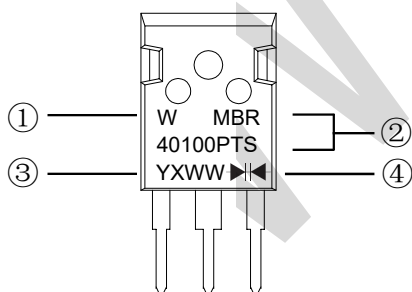
Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

PACKAGE OUTLINE DIMENSIONS

TO-247S



Marking Information



- ① W : Company's trademark
- ② Product model : MBR40100PTS
- ③ PDC information:

Y X WW

WW: Week code (01 to 53)

X: Internal identification code

Y: Year code (ex: 0=2020)

④ Double wafer