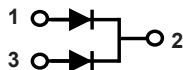
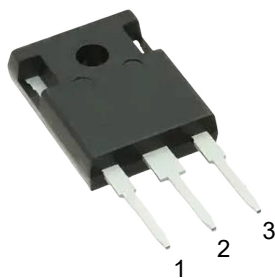


Schottky Barrier Rectifier

TO-247S
MBR6045PTS



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	45		V
Maximum average forward rectified current	per device		IF(AV)	60		A
	per diode			30		
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode			IFSM	450		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=30A	TJ=25°C		0.60	0.65	
	IF=30A	TJ=125°C		0.55	-	
	IF=60A	TJ=25°C		0.78	0.82	
	IF=60A	TJ=125°C		0.72	-	
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)

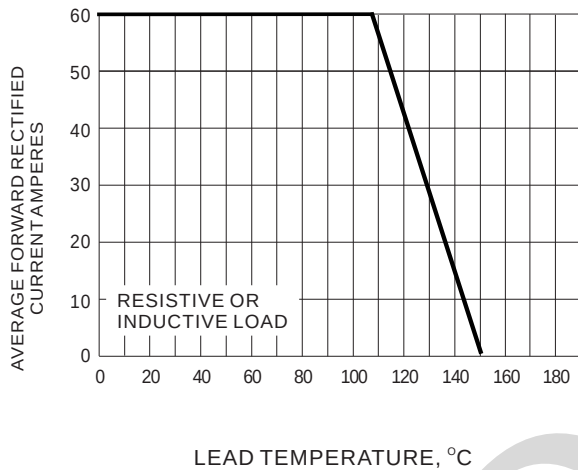


Fig.1- FORWARD CURRENT DERATING CURVE

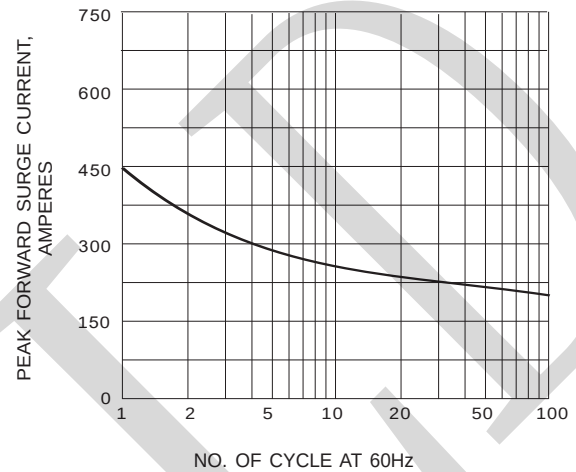


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

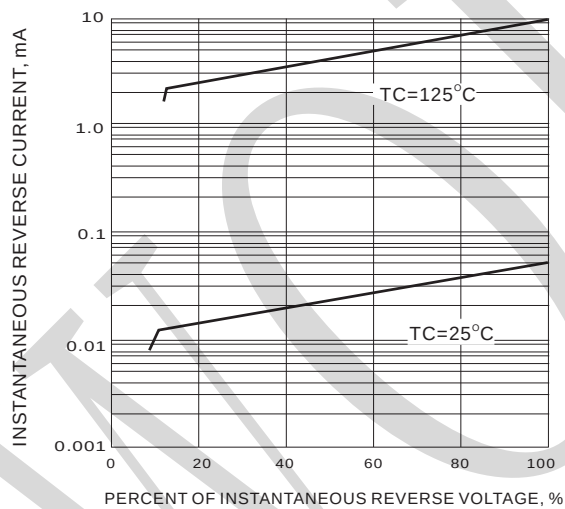


Fig.3- TYPICAL REVERSE CHARACTERISTIC

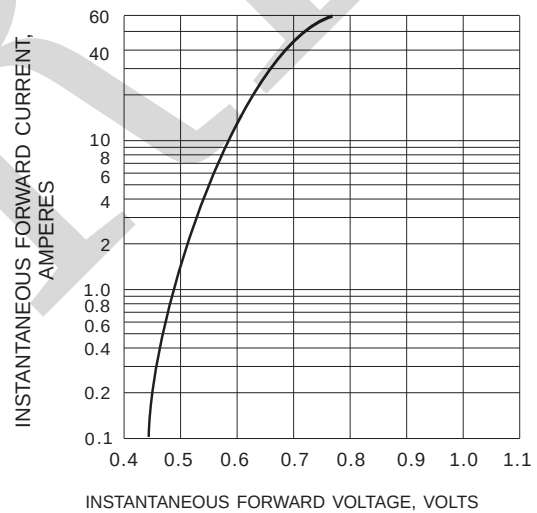
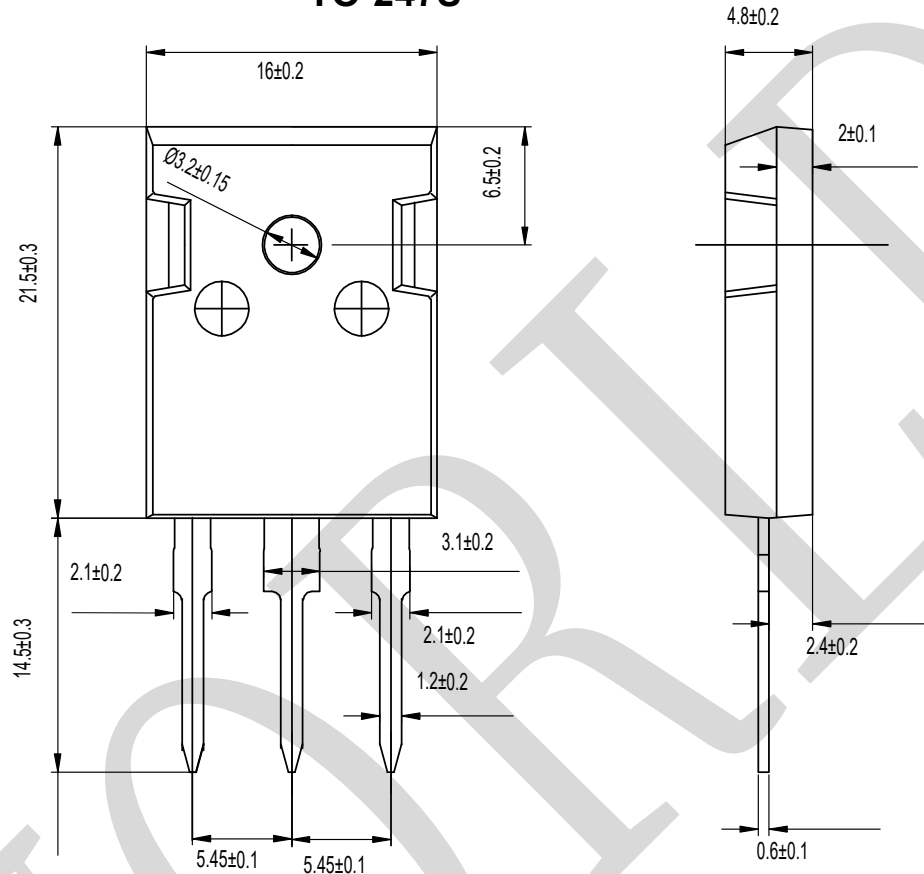


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

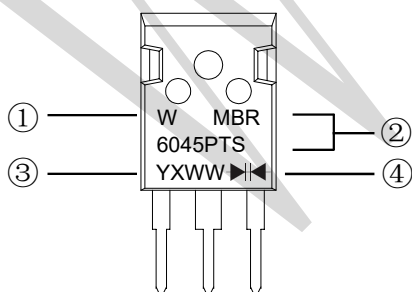
PACKAGE OUTLINE DIMENSIONS

TO-247S



Dimensions in millimeters

Marking Information



- ① W : Company's trademark
- ② Product model : MBR6045PTS
- 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