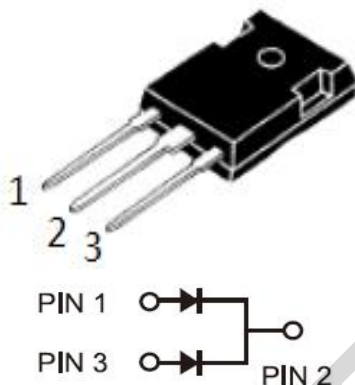


SCHOTTKY BARRIER RECTIFIER

TO-247
MBR60150PT



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	150		V
Maximum average forward rectified current	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			TJ, TSTG	-50 to +150		°C
Typical thermal resistance per leg TO-247			RθJA	2		°C/W
Instantaneous forward voltage per diode			VF(1)	TYP.	MAX.	V
	IF=5A	TJ=25°C		0.66	0.71	
	IF=5A	TJ=125°C		0.53	-	
	IF=30A	TJ=25°C		0.83	0.90	
	IF=30A	TJ=125°C		0.73	-	
Instantaneous reverse current per diode at rated reverse voltage		TJ=25°C	IR(2)	5	20	uA
		TJ=125°C		4	-	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 MAXIMUM FORWARD CURRENT DERATING CURVE

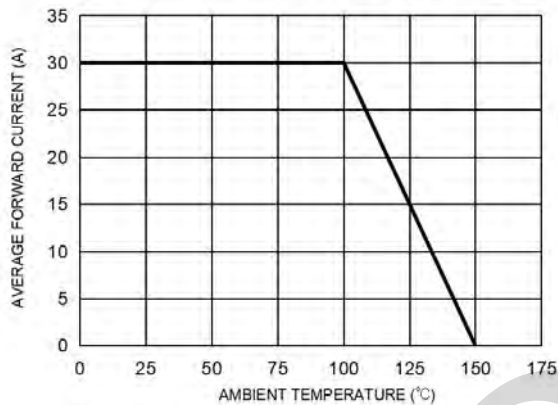


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

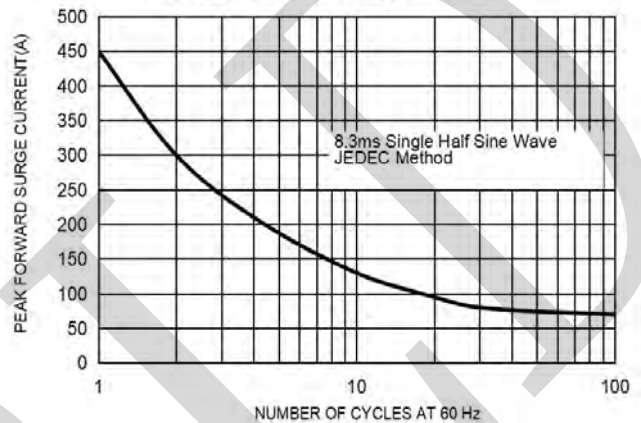


FIG. 3 TYPICAL FORWARD CHARACTERISTICS PER LEG

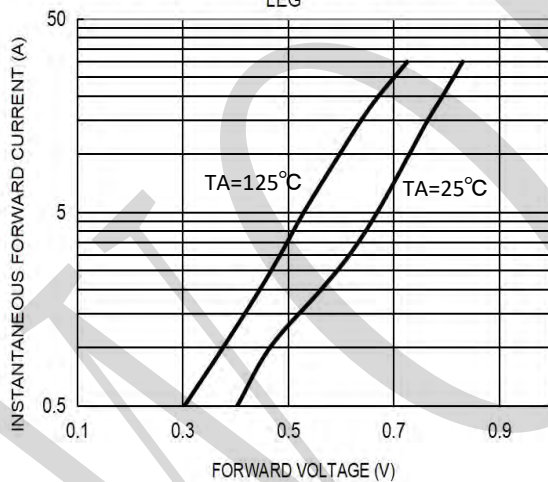
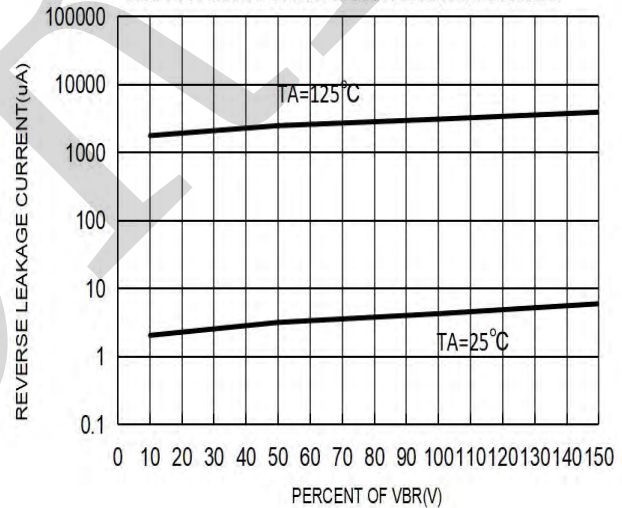
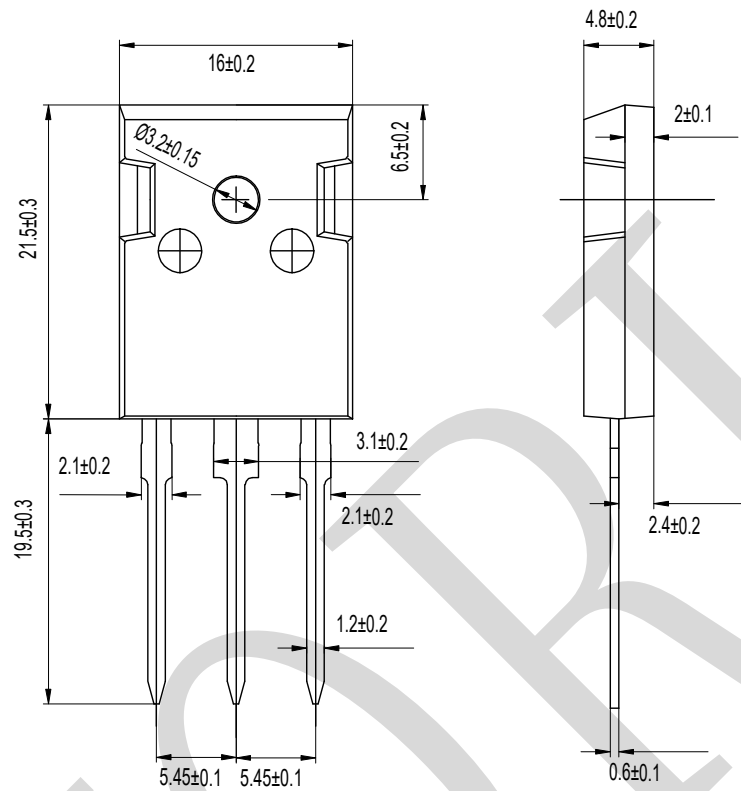


FIG. 4 TYPICAL REVERSE CHARACTERISTICS PER LEG



PACKAGE OUTLINE DIMENSIONS

TO-247



Dimensions in millimeters