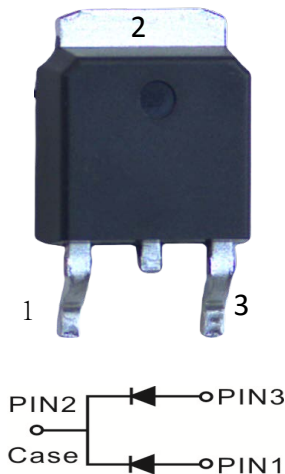


SCHOTTKY BARRIER RECTIFIER

MBR20150D

TO-252



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 (TJ = 25°C unless otherwise noted)

Parameter			Symbol	Limit		Unit
Maximum repetitive peak reverse voltage			VRRM	150		V
Maximum average forward rectified current	per device	IF(AV)	20		A	
	per diode		10			
Peak forward surge current 8.3 ms single half sine- wave superimposed on rated load per diode			IFSM	150		A
Operating junction and storage temperature range			TJ, TSTG	-50 to +150		°C
Typical thermal resistance per leg			RθJC	4		°C/W
Instantaneous forward voltage per diode			VF(1)	TYP.	MAX.	V
	IF=5A	TJ=25°C		0.75	0.80	
	IF=5A	TJ=125°C		0.63	-	
	IF=10A	TJ=25°C		0.83	0.93	
	IF=10A	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		1	-	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-TYPICAL FORWARD CURRENT DERATING CURVE

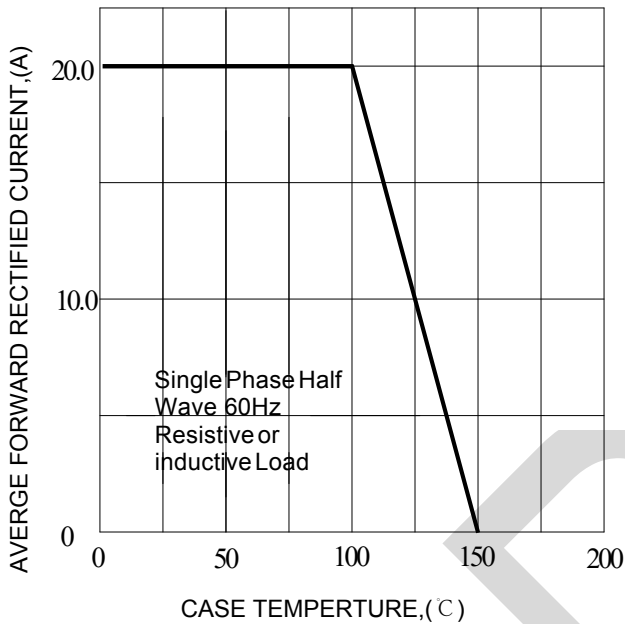


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

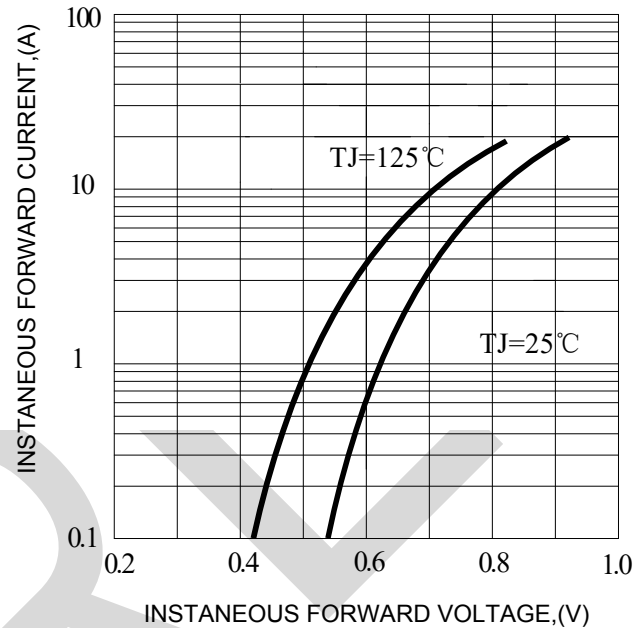


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

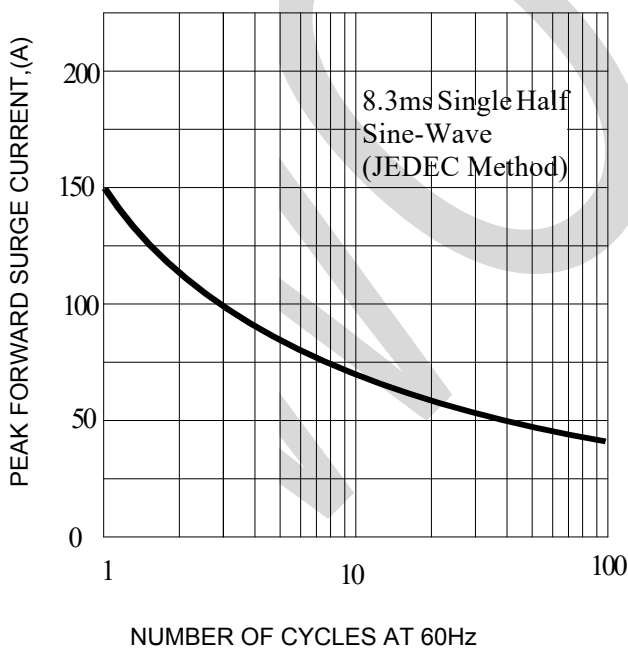
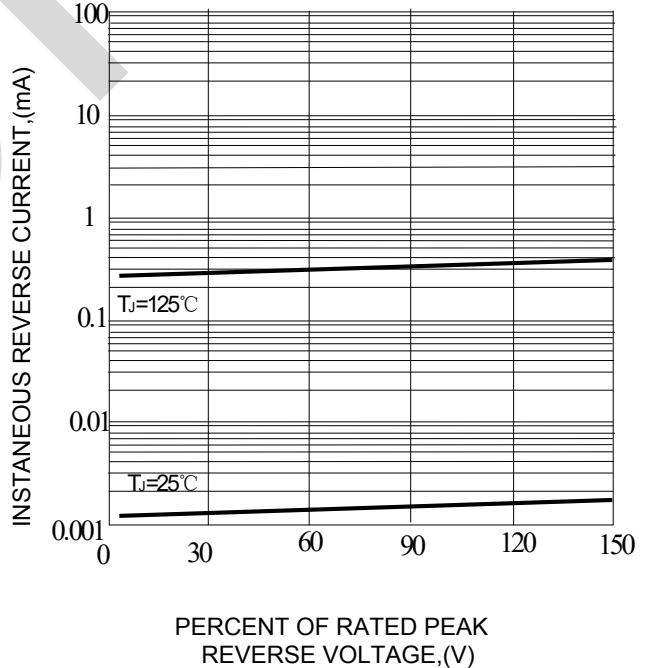


FIG.4-TYPICAL REVERSE CHARACTERISTICS



PACKAGE OUTLINE DIMENSIONS

Note: unit In(mm)

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