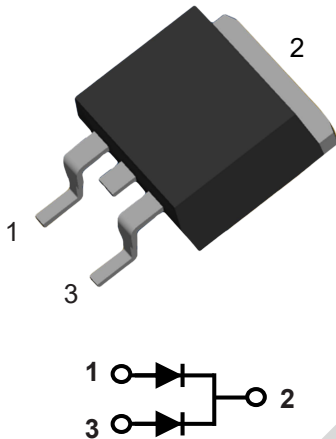


Schottky Barrier Rectifier

**MBR20150CTB
TO-263**



Features

- Low forward voltage
- High current capability
- High forward surge capability
- Low power losses, High efficiency
- Guarding for over voltage protection

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	total	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	290		A
Operating junction and storage temperature range			T _J , T _{STG}	-55 to +150		°C
Typical thermal resistance per leg			R _{ΘJC}	2		°C/W
Instantaneous forward voltage per diode			VF(1)	TYP.	MAX.	V
	IF=3A	TJ=25°C		0.73	-	
	IF=3A	TJ=125°C		0.60	-	
	IF=10A	TJ=25°C		0.84	0.90	
	IF=10A	TJ=125°C		0.72	-	
Instantaneous reverse current per diode at rated reverse voltage		TJ=25°C	IR(2)	1	10	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 Current Derating, Case

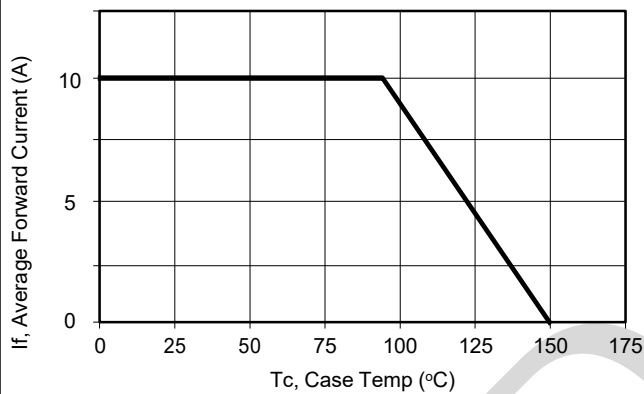


Fig. 2 Maximum Repetitive Surge Current

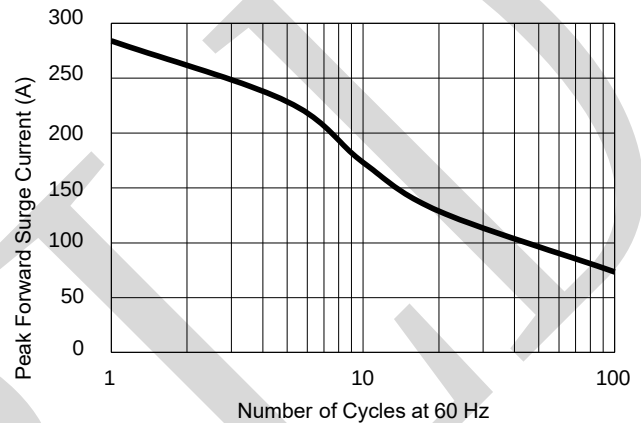


Fig. 3 Typical Forward Voltage

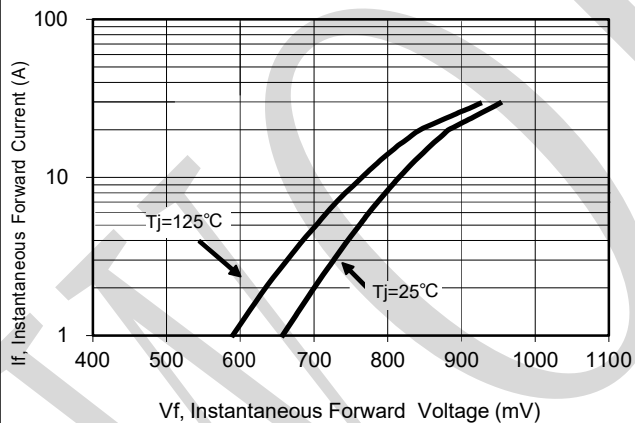
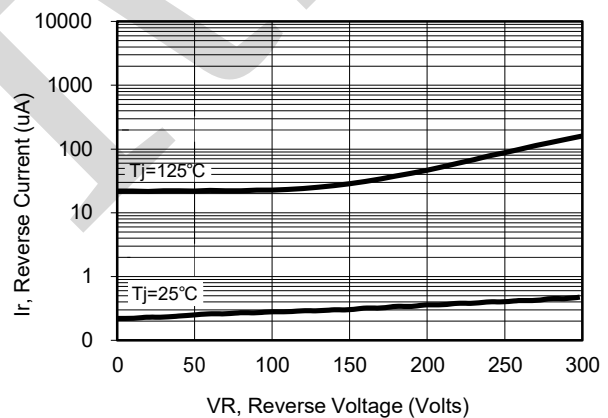


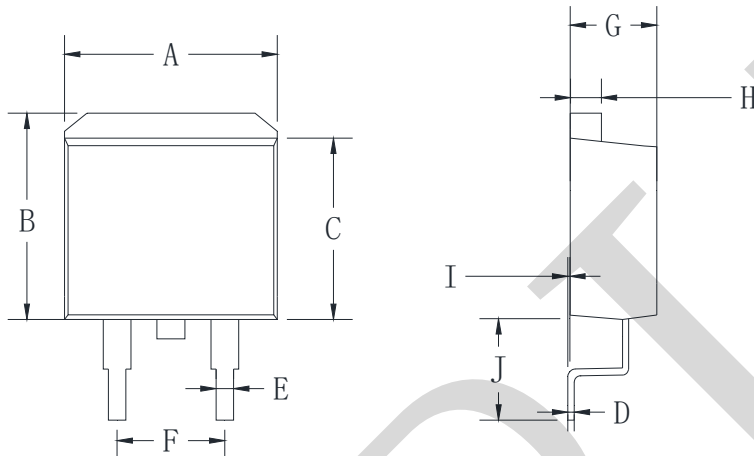
Fig. 4 Typical Reverse Current



PACKAGE OUTLINE DIMENSIONS

Note:unit In(mm)

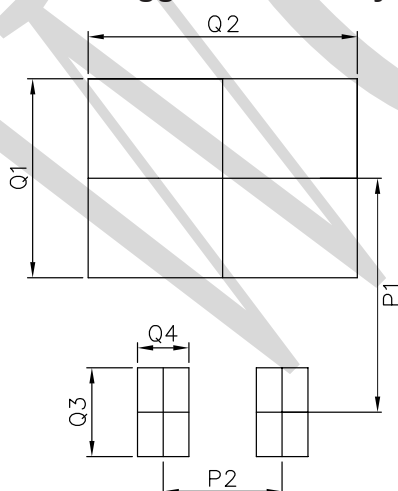
TO-263



TO-263 mechanical data

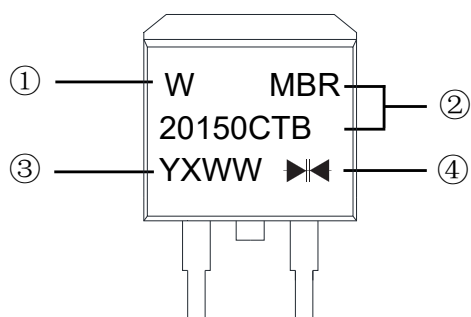
UNIT		A	B	C	D	E	F	G	H	I	J
mm	max	11.5	10.5	9.0	0.64	0.94	5.6	5.1	1.4	0.6	6.1
	min	9.5	9.7	8.4	0.28	0.68	4.5	4.0	1.1	0.02	4.9
mil	max	452.7	413.3	354.3	25.2	37.0	220.5	200.8	55.1	23.6	240.1
	min	374.0	381.8	330.7	11.0	26.7	177.2	157.5	43.3	0.78	192.9

TO-263 Suggested Pad Layout



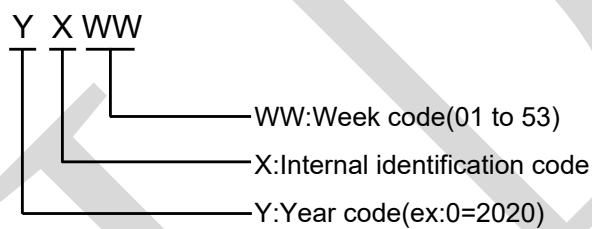
UNIT		P1	P2	Q1	Q2	Q3	Q4
mm	min	10.0	4.00	8.5	11.5	3.8	2.1
mil	min	393.3	157.5	39.37	334.6	149.6	82.7

Marking Information



- ① W : Company's trademark
- ② Product model : MBR20150CTB

③ PDC information:



- ④  Double wafer