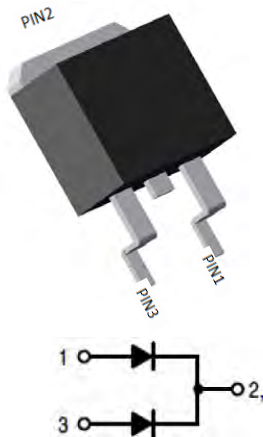


Schottky Barrier Rectifier

MBR4045CTB

TO-263



Features

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

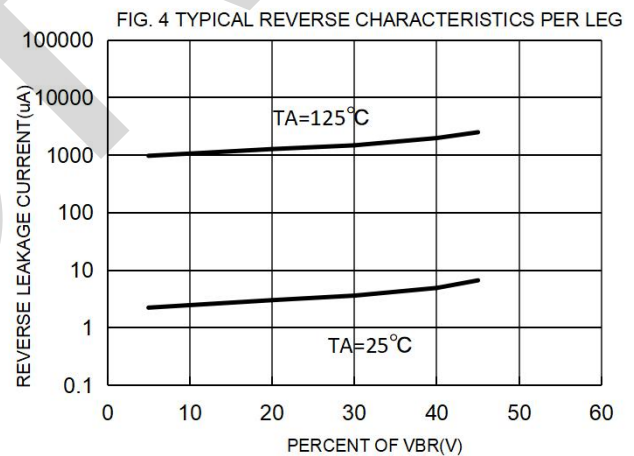
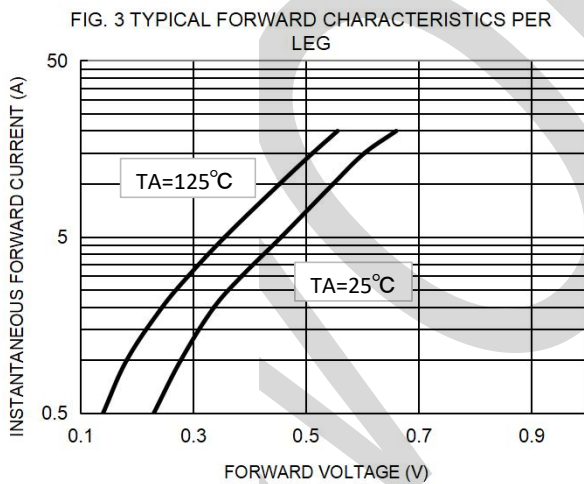
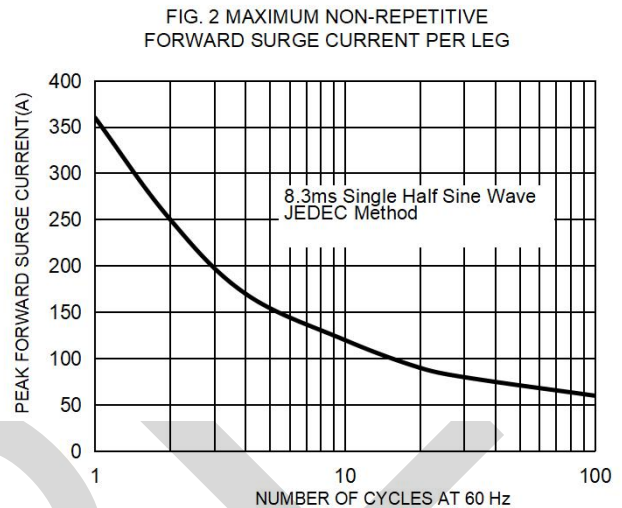
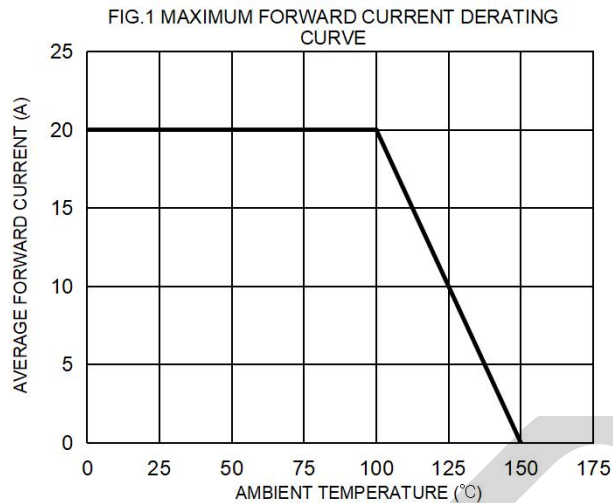
Applications

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

Parameter			Symbols	MBR4045CTB		Units
Maximum Repetitive Peak Reverse Voltage			VRRM	45		V
Working Peak Reverse Voltage			VRWM	45		V
Maximum DC Blocking Voltage			VDC	45		V
Maximum Average Forward Rectified Current	per diode	I(AV)	20		A	
	total		40			
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)			IFSM	360		A
Instantaneous forward voltage per diode			VF	Typ.	Max.	V
	IF=5A	TJ=25°C		0.46	-	
	IF=5A	TJ=125°C		0.36	-	
	IF=20A	TJ=25°C		0.66	0.75	
	IF=20A	TJ=125°C		0.56	-	
Maximum Reverse Current at VR=45V	TJ=25°C		IR	7	50	μA
	TJ=125°C			3	-	mA
Operating and Storage Temperature Range			Tj, Tstg	-50~ +150		°C
Typical thermal resistance (Note 1)			RthJC	2		°C/W

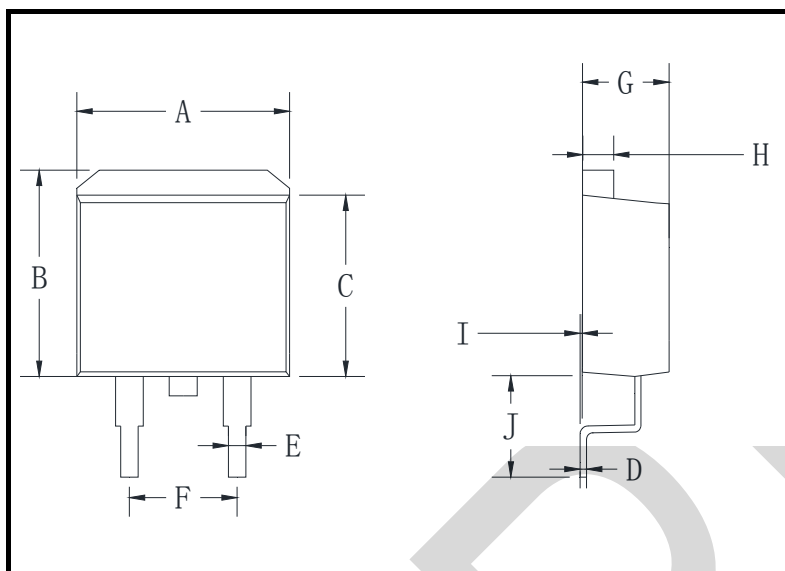
Note1: Thermal resistance from Junction to case per leg mounted on heatsink.

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



PACKAGE OUTLINE DIMENSIONS

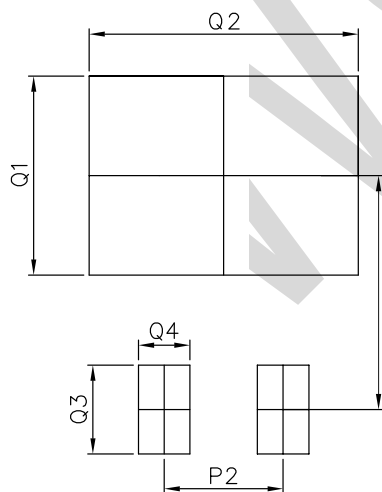
TO-263



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