

## **MBRB1045CT**

Schottky Barrier Rectifier Reverse Voltage 45 V Forward Current 10 A

### **Features**

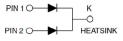
- Plastic package has underwriters Laboratory
   Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Low forward voltage, high efficiency
- Guarding for over voltage protection

# 1 2 k

Package: TO-263

## **Mechanical Data**

- Case: epoxy, molded
- Weight: 1.4grams (approximately)
- Finish: all external surfaces corrosion resistant and terminal leads readily solderable
- Lead temperature for soldering purpose: 260°C max. for 10 sec
- 50 units per plastic tube or tape reel packing 800 pcs/reel



**Schematic Diagram** 

## **Maximum Ratings & Electrical Characteristics**

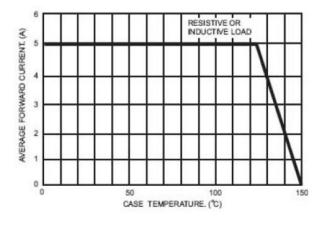
(T<sub>A</sub>=25°C unless otherwise noted)

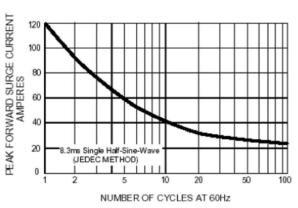
Parameter	Test Conditions		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage			V <sub>RRM</sub>	45	V
Working Peak Reverse Voltage			VRWM	45	V
Maximum DC Blocking Voltage			VDC	45	V
Maximum Average Forward Rectified Current  © Tc=105°C  Total Device Per Diode			<b>I</b> F(AV)	10 5	Α
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load per Diode			Ігѕм	120	А
Peak repetitive Reverse Current Per Leg at tp=2.0µs ,1KHz			I <sub>RRM</sub>	1.0	Α
Voltage Rate of Change (rated V <sub>R</sub> )			Dv/dt	10000	V/µs
Operating Junction Temperature Range			TJ	- 55 to+150	°C
Storage Temperature Range			Тѕтс	- 55 to+150	°C
Maximum Instantaneous Forward Voltage per Leg	I=5A I=5A	Tc=25°C Tc=125°C	VF	0.55 0.50	V
Maximum Reverse Current per Leg at Working Peak Reverse Voltage		TJ=25°C TJ=100°C	lr	200 15	μA mA
Thermal Characteristics (T <sub>A</sub> =25°C unless otherwise note	d)	•	•		
Symbol Parameter	Тур.(ТО-263)				Unit
R <sub>BJC</sub> Thermal Resistance, Junction to Case per Leg	2.0				°C/W
R <sub>0JA</sub> Thermal Resistance, Junction to Ambient per Leg	62.5				°C/W

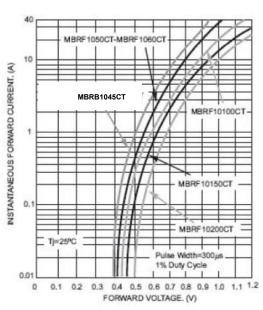
Note: Pulse test:300us pulse width, duty cycle=2%

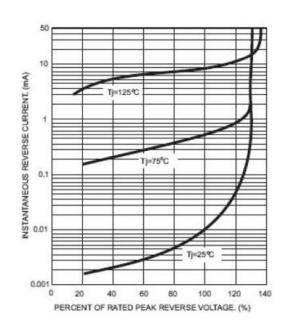
Schottky Barrier Rectifier Reverse Voltage 45 V Forward Current 10 A

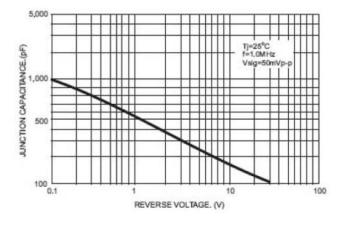
## Ratings and Characteristics Curves (T<sub>A</sub> = 25°C unless otherwise noted)

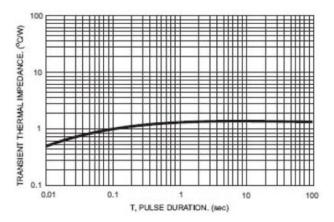














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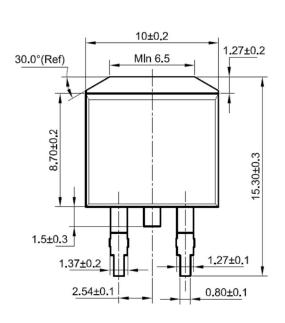
Schottky Barrier Rectifier

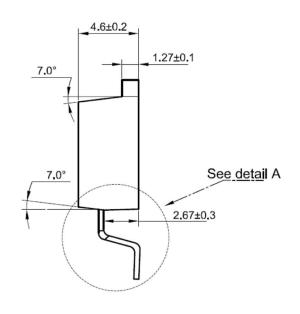
Reverse Voltage 45 V Forward Current 10 A

## **Package Outline Dimensions**

in millimeters

TO-263





## 3.0° 3.0° Epoxy Width10.0±0.2

