

## MBRD6100CT

Schottky Barrier Rectifier Reverse Voltage 100 V Forward Current 6 A

#### Features

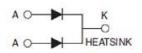
- Plastic package has underwriters Laboratory Flammability Classification 94V-0
- Dual rectifier construction, positive center tap
- Low forward voltage, high efficiency
- Guarding for over voltage protection

### **Mechanical Data**

- Case: epoxy, molded
- Weight: 0.4grams (approximately)
- Lead temperature for soldering purpose: 260°C max. for 10 sec



Package: TO-252 (DPAK)



Schematic Diagram

### **Maximum Ratings & Electrical Characteristics**

(TA=25°C unless otherwise noted)

Parameter		Test Conditions		Symbol	Value	Unit
Maximum Repetitive Peak Reverse Voltage				Vrrm	100	V
Working Peak Reverse Voltage				VRWM	100	V
Maximum DC Blocking Voltage				VDC	100	V
Maximum Average Forward Rectified CurrentTotal Device@ Tc=105°CPer Diode					6 3	A
Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load per Diode				Ігѕм	100	А
Peak repetitive Reverse Current Per Leg at tp=2.0µs ,1KHz				I <sub>RRM</sub>	1.0	А
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		l⊧=3A l⊧=3A	Tc=25°C Tc=125°C	VF	0.76 0.70	V
Maximum Reverse Current per Leg at Working			TJ=25°C		50	μA
Peak Reverse Voltage			TJ=100°C	lr	5	mA
Thermal C	haracteristics (T <sub>A</sub> =25°C unless otherwise noted	)		<u> </u>		1
Symbol	Parameter	Тур.(ТО-252)				Unit
$R_{\theta JC}$	Thermal Resistance, Junction to Case per Leg	3.5				°C/W
$R_{\theta J A}$	Thermal Resistance, Junction to Ambient per Leg 62.5				°C/W	

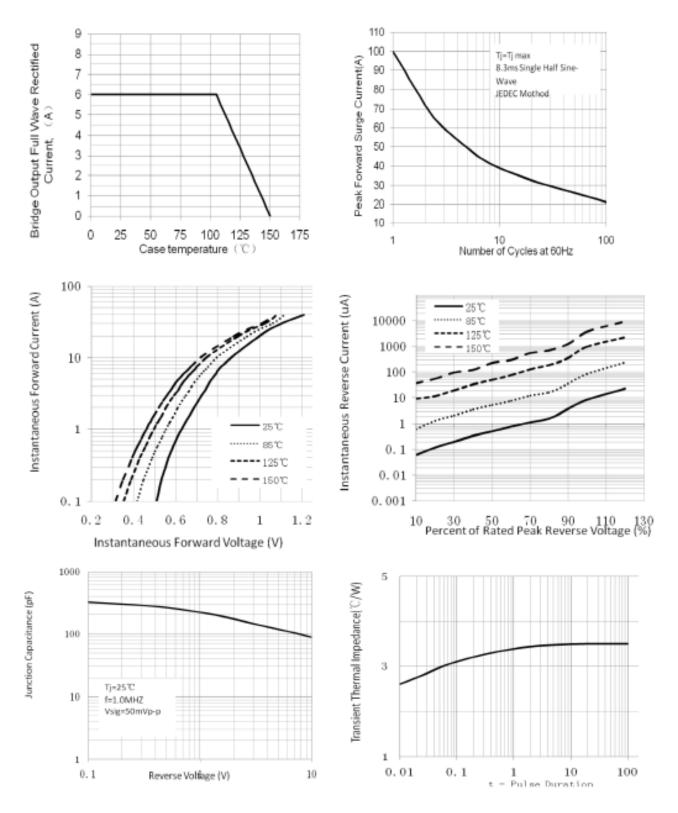
Note: Pulse test:300us pulse width, duty cycle=2%



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





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## Package Outline Dimensions

in millimeters

TO-252

