

MBRD6100CT

6A/100V Schottky Barrier Rectifier

Features

- Plastic package has underwriters laboratory flammability classification 94V-0
- Dual rectifier construction, positive center tap
- Low forward voltage, high efficiency
- Guardring for over voltage protection

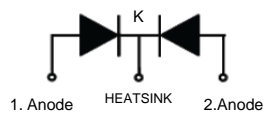
Mechanical Data

- Case: epoxy, molded
- Weight: 0.4grams (approximately)
- Finish: all external surfaces corrosion resistant and terminal leads readily solderable
- Lead temperature for soldering purpose: 260°C max. for 10 sec
- 2500 units per reel

TO-252 (D-PAK)



Schematic Diagram



Maximum Ratings and Electrical Characteristics (T_A=25°C unless otherwise specified)

Symbol	Parameter	Value	Unit
V _{RRM}	Maximum Repetitive Peak Reverse Voltage	100	V
V _{RWM}	Working Peak Reverse Voltage	100	V
V _{DC}	Maximum DC Blocking Voltage	100	V
I _{F(AV)}	Maximum Average Forward Rectified Current @ T _C =105°C	Total Device: 6 Per Diode: 3	A
I _{FSM}	Peak Forward Surge Current 8.3ms Single Half Sine-wave Superimposed on Rated Load Per Diode	100	A
I _{RRM}	Peak Repetitive Reverse Current Per Leg at tp=2.0µs, 1KHz	1.0	A
DV/dt	Voltage Rate of Change (rated V _R)	10000	V/µs
V _F	Maximum Instantaneous Forward Voltage Per Leg	I _F =3A, T _C =25°C	0.76
		I _F =3A, T _C =125°C	0.60
I _R	Maximum Reverse Current Per Leg at Working Peak Reverse Voltage	T _J =25°C	50
		T _J =100°C	5
T _J	Operating Junction Temperature Range	-55 to +150	°C
T _{STG}	Storage Temperature Range	-55 to +150	°C

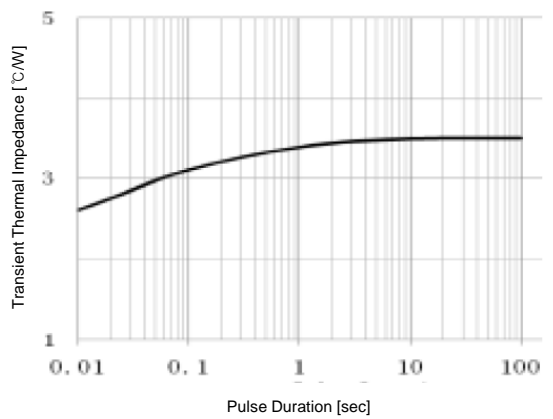
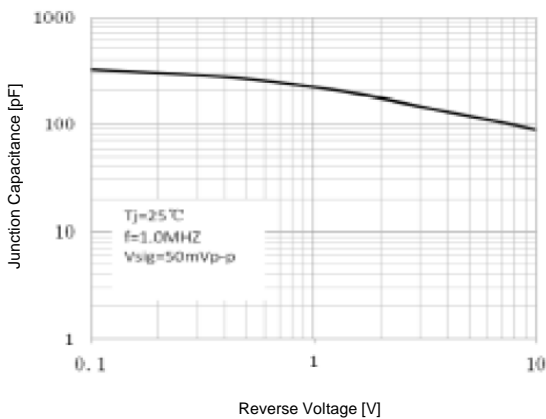
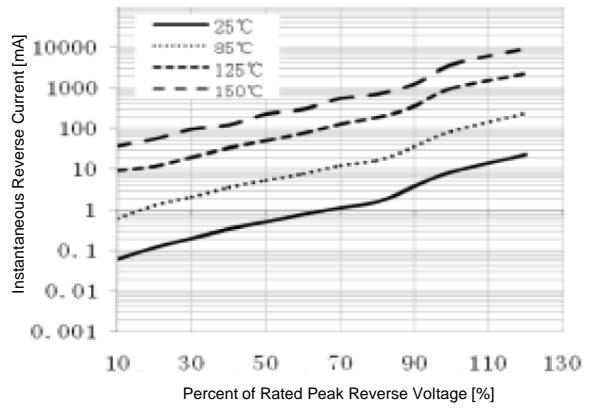
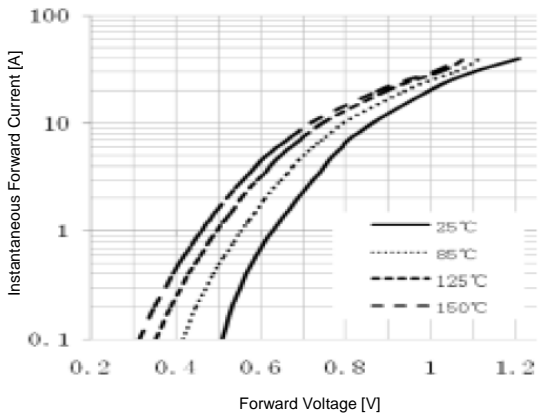
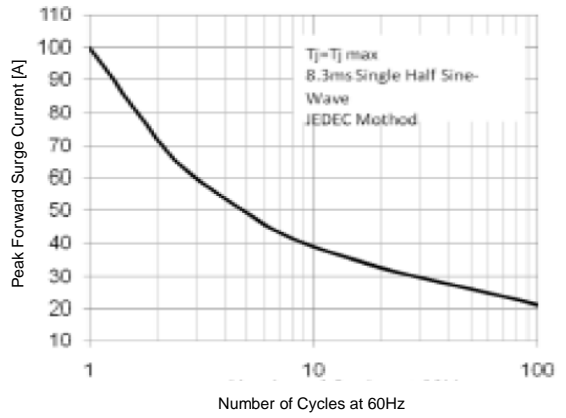
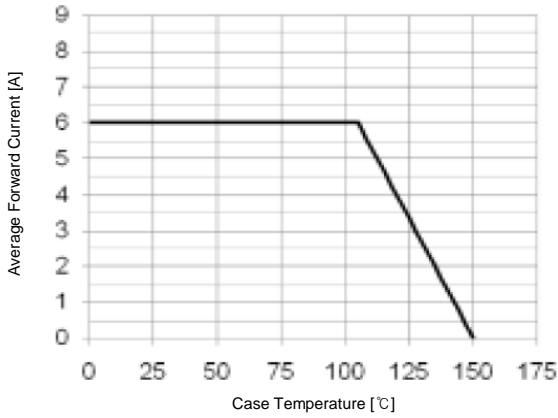
Thermal Resistance Characteristics

Symbol	Parameter	Value	Unit
R _{BJC}	Thermal Resistance, Junction-to-Case per Leg, Typ.	3.5	°C/W
R _{BJA}	Thermal Resistance, Junction-to-Ambient per Leg, Typ.	62.5	°C/W

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

Rating and Characteristic Curves

($T_A=25^\circ\text{C}$ Unless otherwise noted)



Package Outline Dimension

In millimeters

TO-252 (D-PAK)

