

#### **Features**

- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Halogen Free. "Green" Device (Note 2)
- Have Over Voltage Protect Loop and High Reliability
- Low Voltage Continued Circuit and Protection Circuit
- Epoxy Meets UL 94 V-0 Flammability Rating
- · Moisture Sensitivity Level 1

# **Maximum Ratings**

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Typical Thermal Resistance (Per Leg): 3°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRD6100CT	6100	100V	71V	100V

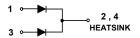
# Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	6.0A	T <sub>C</sub> =115°C
Peak Forward Surge Current	I <sub>FSM</sub>	78A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.74V	I <sub>F</sub> =3.0A;T <sub>J</sub> =25°C
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.01mA 1mA	T <sub>J</sub> =25°C T <sub>J</sub> =100°C

#### Note:

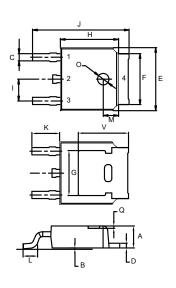
FÈPā @kr{ ] ^¦æč¦^Á[ |å^¦Ár¢^{ ] @i} }檢j ] |ā^åÉ^^^ÁÖWsāa^&æç^Áæj } ^¢Ä æÈ ∰GÈHalogen free "Green" products are defined as those which contain <900ppm bromine, Á <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

#### Internal Structure:



# 6 Amp Schottky Barrier Rectifier 100 Volts

# (TO-252) DPAK



PIN 1.3 Anode PIN 2.4 Cathode

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	0.087	0.094	2.20	2.40	
В	0.000	0.005	0.00	0.13	
С	0.026	0.034	0.66	0.86	
D	0.018	0.023	0.46	0.58	
Е	0.256	0.264	6.50	6.70	
F	0.201	0.215	5.10	5.46	
G	0.1	90	4.8	83	
Н	0.236	0.244	6.00	6.20	
I	0.086	0.094	2.18	2.39	
J	0.386	0.409	9.80	10.40	
K	0.1	14	2.9	90	
L	0.055	0.067	1.40	1.70	
М	0.063		1.60		
0	0.043	0.051	1.10	1.30	
Q	0.000	0.012	0.00	0.30	
V	0.2	11	5.3	35	

0.9

1.0



# **Curve Characteristics**

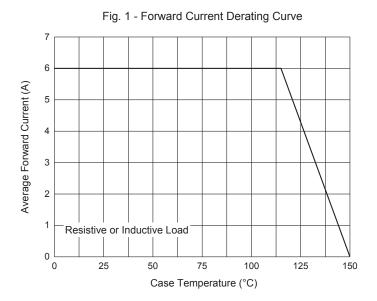
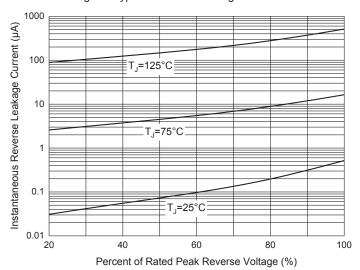


Fig. 3 - Typical Reverse Leakage Characteristics



20
10
10
10
T = 125°C
T = 75°C

0.5

Instantaneous Forward Voltage (V)

0.6

0.01 - 0.1

0.2

0.3

0.4

Fig. 2 - Typical Instantaneous Forward Characteristics

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# **Ordering Information**

Device	Packing	
Part Number-TP	Tape&Reel: 2.5Kpcs/Reel	

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