

#### **Features**

- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- 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: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 3°C/W Junction to Case

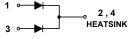
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRD1260CT	MBRD1260CT	60V	42V	60V
MBRD12100CT	MBRD12100CT	100V	70V	100V

# Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Currentt	I <sub>F(AV)</sub>	12A	T <sub>C</sub> =135°C
Peak Forward Surge Current	I <sub>FSM</sub>	150A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage MBRD1260CT MBRD12100CT	$V_{F}$	0.70V 0.85V	I <sub>FM</sub> =6A; T <sub>J</sub> =25°C
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	50μA 10mA	T <sub>J</sub> =25°C T <sub>J</sub> =125°C

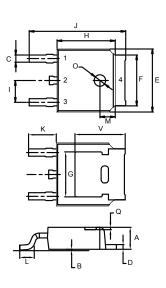
Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a.

#### **Internal Structure:**



# 12 Amp Schottky Rectifier 60V-100V

# (TO-252) DPAK



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	0.190		83	
Н	0.236	0.244	6.00	6.20	
-	0.086	0.094	2.18	2.39	
J	0.386	0.409	9.80	10.40	
K	0.114		2.90		
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	0.211		5.35		



#### **Curve Characteristics**

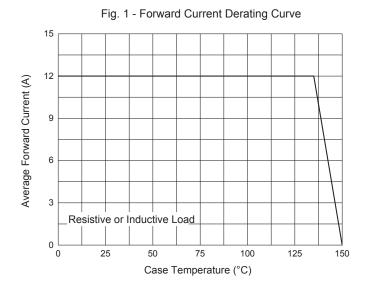


Fig. 3 - Typical Instantaneous Forward Characteristics 20 10 T<sub>J</sub>=125°C Instantaneous Forward Current (A) 5 2 0.5 T<sub>J</sub>=75°C 0.2 0.1 0.05 T<sub>1</sub>=25°C MBRD1260CT 0.02 0.01 - 0.0 0.1 0.2 0.3 0.4 0.5 0.6 0.7 0.8 0.9 1.0 Instantaneous Forward Voltage (V)

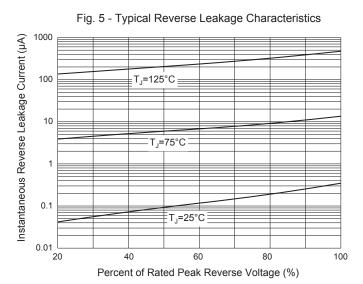
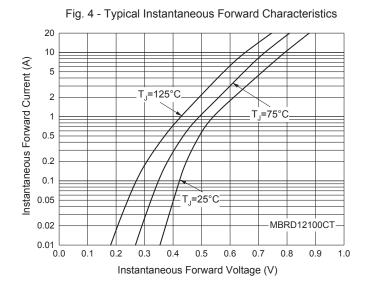


Fig. 2 - Peak Forward Surge Current

175
150
125
100
75
8.3 ms Single Half Sine-Wave
0
1 10 100
Number of Cycles at 60 Hz



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### **Ordering Information**

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

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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