·M·C·C·
Micro Commercial Components

10 Amp Schottky Barrier Rectifier 100 Volts

Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating
- Moisture Sensitivity Level 1
- Pb-Free Package
- Extremely Fast Switching
- Extremely Low Forward Drop
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: -55ºC to +150ºC
- Storage Temperature Range: -55ºC to +150ºC
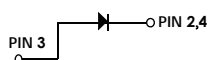- Typical Thermal Resistance (Per Leg): 3°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRD10100	MBRD10100	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	10A	T_C=115°C
Peak Forward Surge Current	I_{FSM}	180A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V_F	0.66V(Typ) 0.73V 0.63V	I_F=10A;T_J=25ºC I_F=10A;T_J=25ºC I_F=10A;T_J=125ºC
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	50µA 15mA	T_J=25ºC T_J=125ºC

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

Internal Structure:

PIN 3 ▸ PIN 2,4

(TO-252) DPAK

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.087	0.094	2.20	2.40	
B	0.000	0.005	0.00	0.13	
C	0.026	0.034	0.66	0.86	
D	0.018	0.023	0.46	0.58	
E	0.256	0.264	6.50	6.70	
F	0.201	0.215	5.10	5.46	
G	0.190		4.83		
H	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	0.114		2.90		
L	0.055	0.067	1.40	1.70	
M	0.063		1.60		
O	0.043	0.051	1.10	1.30	
Q	0.000	0.012	0.00	0.30	
V	0.211		5.35		

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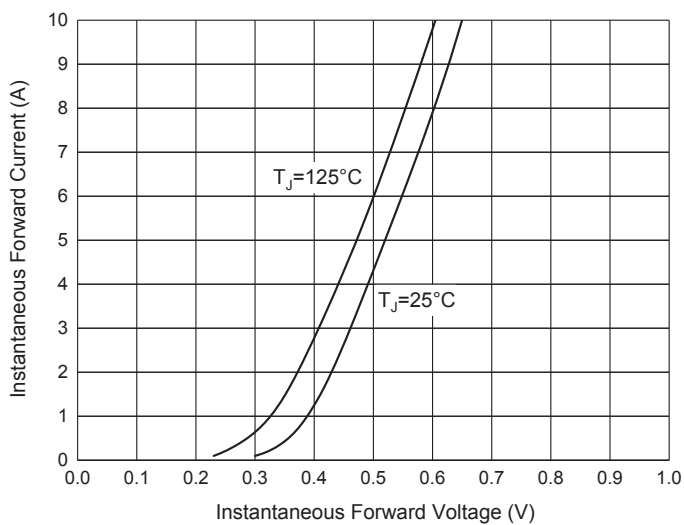# Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

Fig. 2 - Typical Reverse Leakage Characteristics

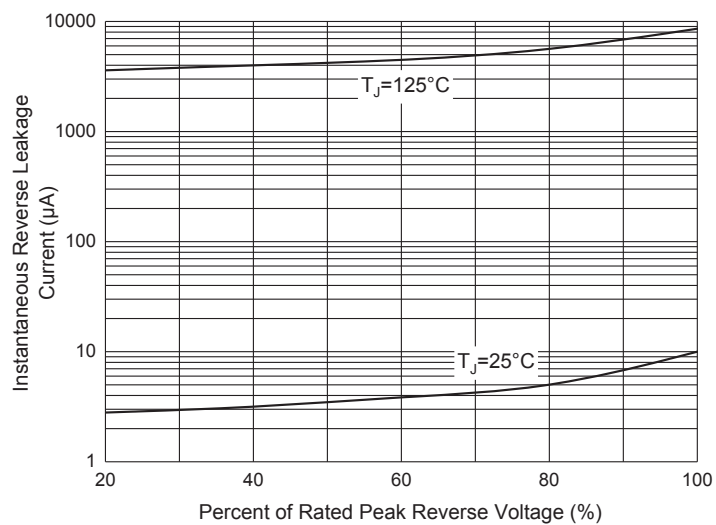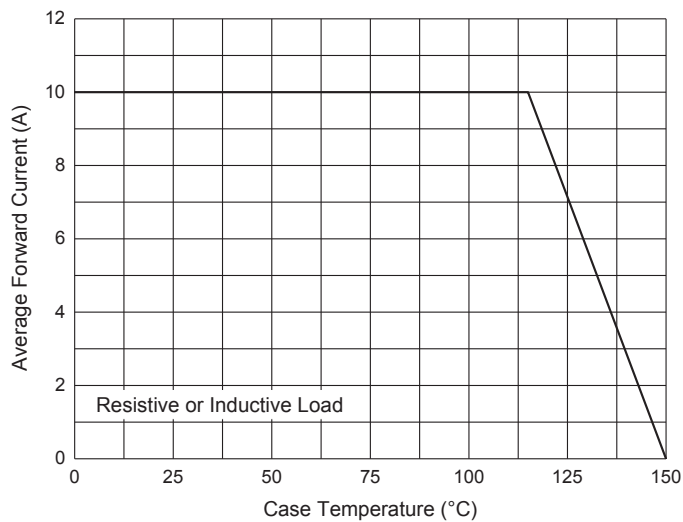Fig. 3 - Forward Current Derating Curve

Ordering Information

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

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