

### **Features**

- High Junction Temperature Capability
- Low Leakage Current
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Epoxy Meets UL 94 V-0 Flammability Rating

## **Maximum Ratings**

- Operating Junction Temperature Range: -65°C to +150°C
- Storage Temperature Range: -65°C to +150°C
- Typical Thermal Resistance: 2.5°C/W Junction to Case
- Mounting Torgue: 5 in-lbs Maximum

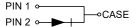
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR10150	MBR10150	150V	105V	150V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

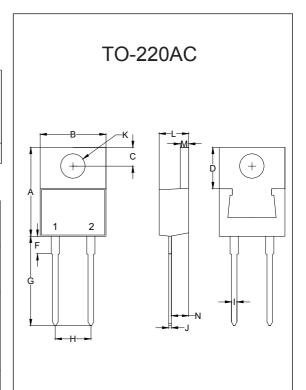
Average Forward Current	I <sub>F(AV)</sub>	10A	T <sub>C</sub> =125°C
Peak Forward Surge Current	I <sub>FSM</sub>	150A	8.3ms,Half Sine Wave
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.90V	I <sub>FM</sub> =10A T <sub>J</sub> =25°C
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.1mA 5mA	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**



# 10 Amp High Voltage Power Schottky Barrier Rectifier 150 Volts



	DIMENSIONS					
DIM	INCHES		MM		NOTE	
	MIN	MAX	MIN	MAX	NOTE	
Α	0.560	0.625	14.22	15.88		
В	0.380	0.420	9.65	10.67		
С	0.100	0.135	2.54	3.43		
D	0.230	0.270	5.84	6.86		
F		0.250		6.35		
G	0.500	0.580	12.70	14.73		
Н	0.190	0.210	4.83	5.33		
I	0.020	0.045	0.51	1.14		
J	0.012	0.025	0.30	0.64		
K	0.139	0.161	3.53	4.09	Ф	
L	0.140	0.190	3.56	4.83		
М	0.045	0.055	1.14	1.40		
N	0.080	0.115	2.03	2.92		



## **Curve Characteristics**

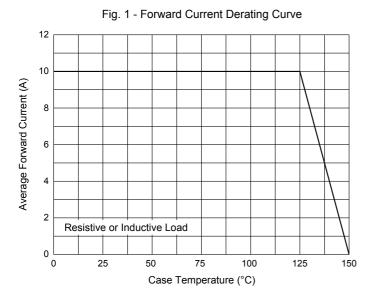


Fig. 3 - Typical Instantaneous Forward Characteristics

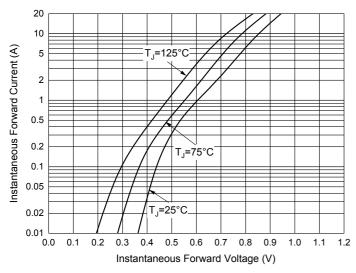


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge

Current

175

150

Peak Forward Surge

Current

175

150

25

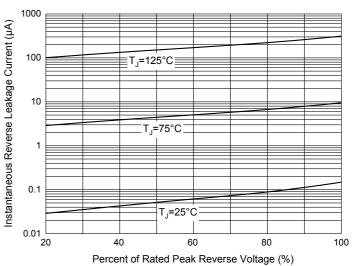
8.3 ms Single Half Sine-Wave

0

1 10 100

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





## **Ordering Information**

Device	Packing	
Part Number-BP	Bulk:50pcs/Tube,1Kpcs/Box,5Kpcs/Carton	

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

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