

#### **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Low Leakage Current
- High Current Capability and High Efficiency
- Epoxy Meets UL 94 V-0 Flammability Rating

# 30 Amp Schottky Barrier Rectifiers 150 Volts

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 2°C/W Junction to Case

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum	Maximum DC Blocking Voltage
MBR30150	MBR30150	150V	105V	150V

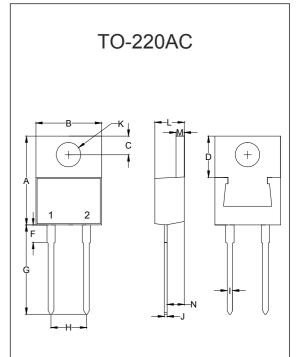
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	30A	T <sub>C</sub> =100°C		
Peak Forward Surge Current	I <sub>FSM</sub>	300A	8.3ms,Half Sine Wave		
Instantaneous Forward Voltage	V <sub>F</sub>	0.82V(Typ) 0.88V(Max) 0.80V(Max)	I <sub>F</sub> =30A;T <sub>J</sub> =25°C I <sub>F</sub> =30A;T <sub>J</sub> =25°C I <sub>F</sub> =30A;T <sub>J</sub> =125°C		
Maximum Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10uA 15mA	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**





DIMENSIONS						
DIM	INCHES		MM		NOTE	
DIIVI	MIN	MAX	MIN	MAX	NOTE	
Α	0.578	0.603	14.68	15.32		
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	0.147	0.167	3.74	4.24		
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**

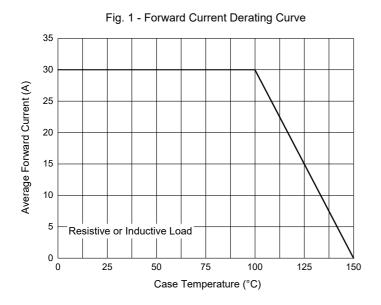


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

350

(V)

150

8.3 ms Single Half Sine-Wave

Number of Cycles at 60 Hz

Fig. 3 - Typical Instantaneous Forward Characteristics

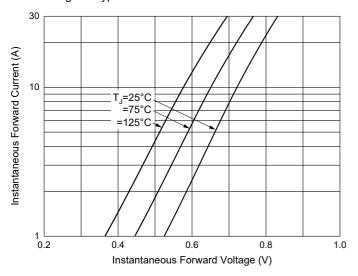
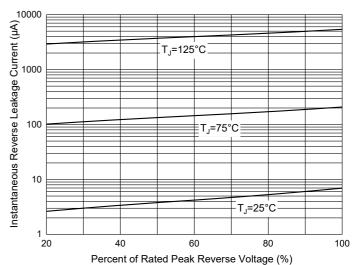


Fig. 4 - Typical Reverse Leakage Characteristics





## **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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