

### **Features**

- · Low Power Loss and High Efficiency
- High Surge Capacity and High Current Capability
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- Halogen Free Available Upon Request By Adding Suffix "-HF"

# 30 Amp Schottky Barrier Rectifier 45 Volts

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 4°C/W Junction to Case

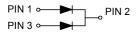
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR3045FCTS	MBR3045FCTS	45V	31.5V	45V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	30A	T <sub>C</sub> =80°C
Peak Forward Surge Current	I <sub>FSM</sub>	200A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.65V	I <sub>FM</sub> =15A;T <sub>J</sub> =25°C
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.2mA 100mA	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**



# ITO-220AB

B.W.E.V.O.O.V.O							
DIMENSIONS							
DIM	INCHES		MM		NOTE		
DIIVI	MIN	MAX	MIN	MAX	INOTE		
Α	0.567	0.642	14.40	16.30			
В		0.421		10.70			
С	0.085	0.128	2.15	3.25			
D	0.248	0.272	6.30	6.90			
Е		0.177		4.50			
F		0.071		1.80			
G	0.500	0.539	12.70	14.20			
Н	H 0.100		2.55				
ı		0.035		0.90			
J		0.032		0.80			
K	0.102	0.150	2.60	3.80	Ф		
L		0.201		5.10			
М		0.140		3.56			
N	0.083	0.126	2.10	3.20			
0		0.071		1.80			



### **Curve Characteristics**

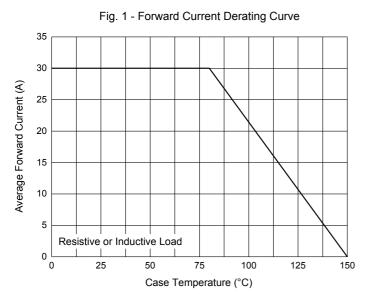


Fig. 3 - Typical Instantaneous Forward Characteristics

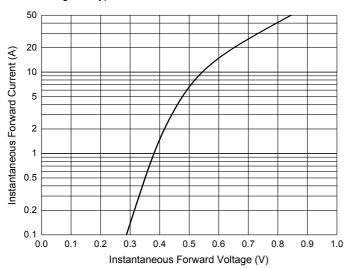


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

200

160

80

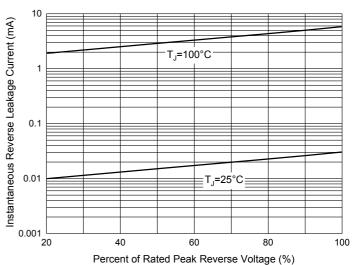
80

80

-8.3 ms Single Half Sine-Wave
0
1 100

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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