

#### **Features**

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

## **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance 4.0°C/W Junction to Case

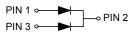
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRL30100FCT	MBRL30100FCT	100V	70V	100V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

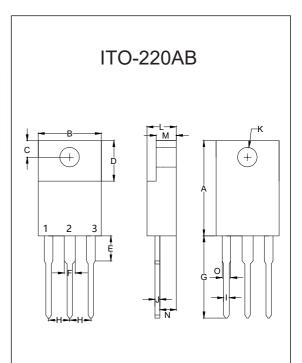
Average Forward Current	I <sub>F(AV)</sub>	30A	T <sub>C</sub> =65°C
Peak Forward Surge Current	I <sub>FSM</sub>	200A	8.3ms,Half Sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	0.72V	I <sub>FM</sub> =15A ;T <sub>J</sub> =25°C
Maximum DC Reverse Current at Rated DC Blocking Voltage	I <sub>R</sub>	0.1mA 10mA	T <sub>J</sub> =25°C T <sub>J</sub> =100°C
Current Squared Time	l²t	167A <sup>2</sup> S	1ms≤t<8 .3ms T <sub>A</sub> =25°C, Rating of per diode

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

#### **Internal Structure**



# 30 Amp Low VF Schottky Barrier Rectifier 100 Volts



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
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	
E		0.177		4.50	
F		0.071		1.80	
G	0.500	0.539	12.70	14.20	
Н	0.1	00	2.5	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**

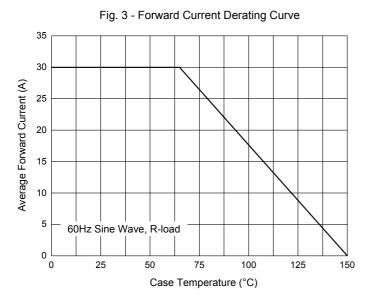


Fig. 3 - Typical Instantaneous Forward Characteristics

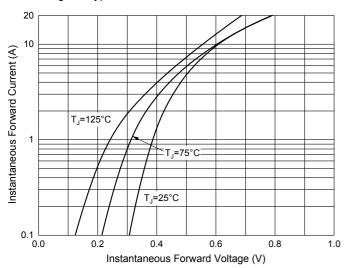


Fig. 2 - Surge Forward Current Capability

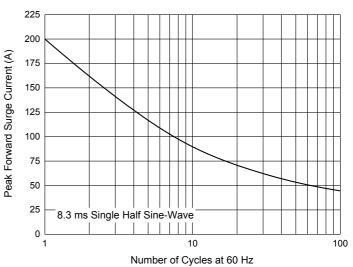
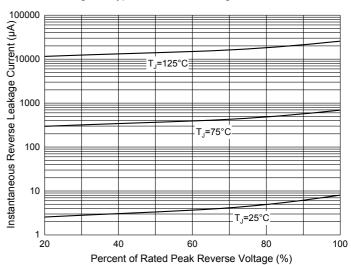


Fig. 4 - Typical Reverse Leakage Characteristics





## **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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