



Micro Commercial Components

Micro Commercial Components  
20736 Marilla Street Chatsworth  
CA 91311  
Phone: (818) 701-4933  
Fax: (818) 701-4939

## Features

- Guard ring for transient protection
- Low power loss high efficiency
- High surge capacity, High current capability
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1
- Marking : type number

## Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C

MCC Part Number	Maximum Rcurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR3020FCT	20V	14V	20V
MBR3030FCT	30V	21V	30V
MBR3040FCT	40V	28V	40V
MBR3045FCT	45V	31.5V	45V
MBR3060FCT	60V	42V	60V
MBR3080FCT	80V	56V	80V
MBR30100FCT	100V	70V	100V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

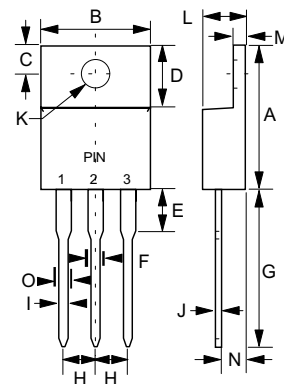
Average Forward Current	$I_{F(AV)}$	30 A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	250A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	0.60V 0.75V 0.85V	$I_{FM} = 15A; T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5 mA 30 mA 50 mA	$T_C = 25^\circ\text{C}$ $T_C = 125^\circ\text{C}$
Typical Thermal Resistance	$R_{thJC}$	5°C/W	(Note 2)

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.  
2. Thermal resistance from junction to case

# MBR3020FCT THRU MBR30100FCT

## 30 Amp Schottky Barrier Rectifier 20 to 100 Volts

## ITO-220AB



PIN 1  
PIN 3  
PIN 2

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.583	.642	14.80	16.30	
B	---	.406	---	10.30	
C	.100	.112	2.55	2.85	
D	.248	.272	6.30	6.90	
E	---	.161	---	4.10	
F	---	.071	---	1.80	
G	.512	.543	13.00	13.80	
H	---	.100	---	2.55	
I	---	.035	---	0.90	
J	---	.032	---	0.80	
K	.118	.134	3.00	3.40	Ø
L	---	.189	---	4.80	
M	---	.130	---	3.30	
N	.098	.114	2.50	2.90	
O	---	.055	---	1.40	

# RATING AND CHARACTERISTIC CURVES MBR3020FCT thru MBR30100FCT

FIG.1-FORWARD CURRENT DERATING CURVE

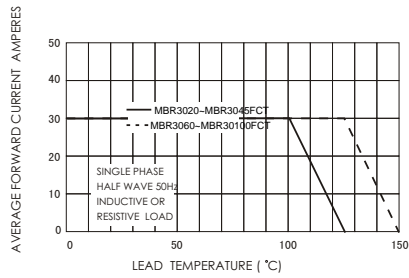


FIG.2-MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT PER DIODE

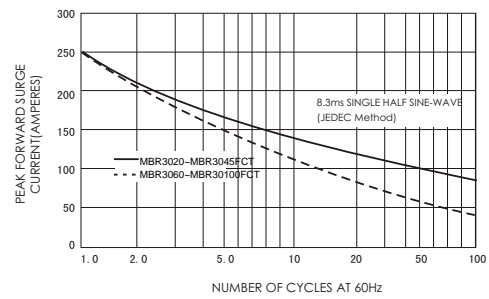


FIG.3-TYPICAL INSTANTANEOUS  
FORWARD CHARACTERISTICS

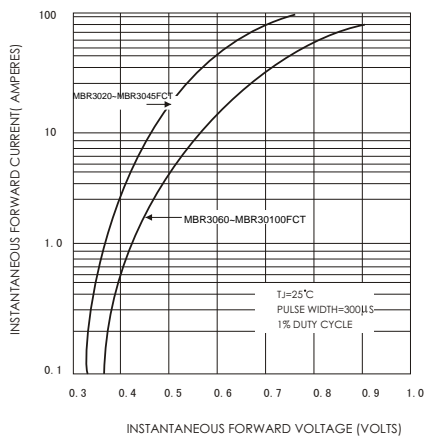
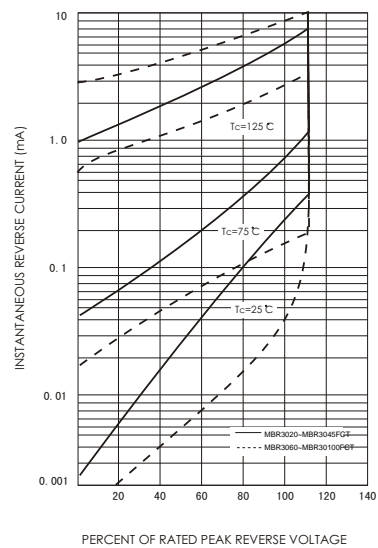


FIG.4-TYPICAL REVERSE CHARACTERISTICS





Micro Commercial Components

## Ordering Information

Device	Packing
(Part Number)-BP	Bulk; 1Kpcs/Box

### \*\*\*IMPORTANT NOTICE\*\*\*

*Micro Commercial Components Corp.* reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes.

*Micro Commercial Components Corp.* does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold *Micro Commercial Components Corp.* and all the companies whose products are represented on our website, harmless against all damages.

### \*\*\*APPLICATIONS DISCLAIMER\*\*\*

Products offer by *Micro Commercial Components Corp.* are not intended for use in Medical, Aerospace or Military Applications.

[www.mccsemi.com](http://www.mccsemi.com)