



Micro Commercial Components

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

# MBR1020F THRU MBR10100F

## 10 Amp Schottky Barrier Rectifier 20 to 100 Volts

### Features

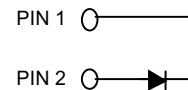
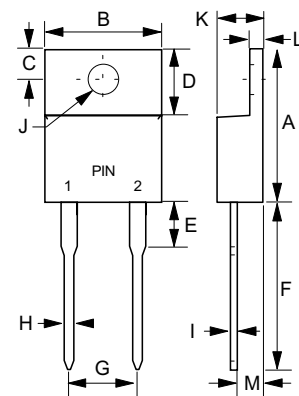
- Low Power Loss And High Efficiency
- Low Forward Voltage , High Current Capability
- Marking : type number
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

### Maximum Ratings

- Operating Junction Temperature: -50°C to +150°C
- Storage Temperature: -50°C to +150°C

MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR1020F	20V	14V	20V
MBR1030F	30V	21V	30V
MBR1040F	40V	26V	40V
MBR1050F	50V	35V	50V
MBR1060F	60V	42V	60V
MBR1080F	80V	56V	80V
MBR1090F	90V	63V	90V
MBR10100F	100V	80V	100V

### ITO-220AC



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

Average Forward Current	$I_{F(AV)}$	10 A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage 1020F-1040F 1050F-1060F 1080F-10100F	$V_F$	.55V .75V .85V	$T_J = 25^\circ\text{C}$ $I_{FM} = 10\text{A};$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.5mA 50mA	$T_C = 25^\circ\text{C}$ $T_C = 100^\circ\text{C}$

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

DIM	DIMENSIONS			
	INCHES		MM	
	MIN	MAX	MIN	MAX
A	.583	.606	14.80	15.40
B	---	.406	---	10.30
C	.100	.112	2.55	2.85
D	.248	.272	6.30	6.90
E	---	.161	---	4.10
F	.512	.543	13.00	13.80
G	.200		5.10	
H	---	.035	---	0.90
I	---	.032	---	0.80
J	.118	.134	3.00	3.40
K	---	.189	---	4.80
L	---	.123	---	3.10
M	.098	.114	2.50	2.90

MBR1020F thru MBR10100F

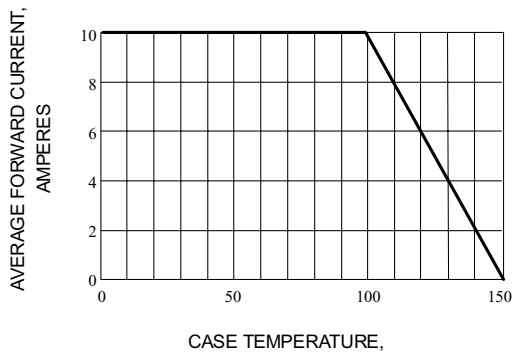


Fig. 1-FORWARD CURRENT DERATING CURVE

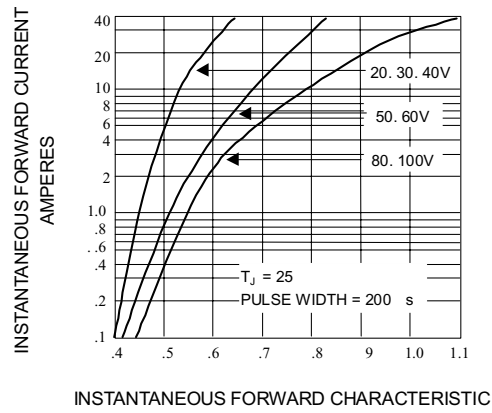


Fig. 2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

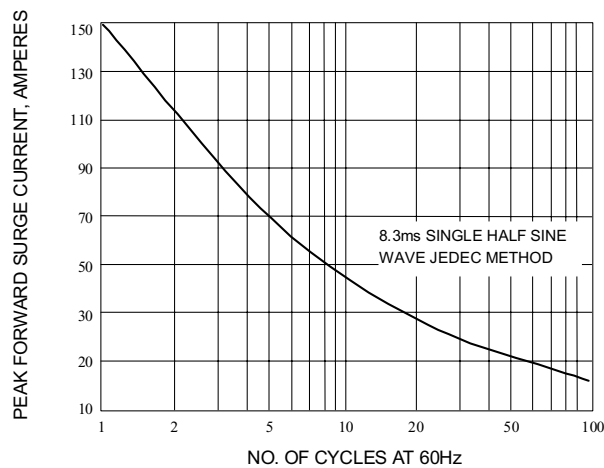


Fig. 3-MAXIMUM NON-REPETITIVE SURGE CURRENT



Micro Commercial Components

## Ordering Information

Device (Part Number)-BP	Packing 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)