

**M·C·C·**

Micro Commercial Components



Micro Commercial Components  
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**Features**

- High Surge Capacity
- High Current Capability, High Efficiency
- Marking : type number
- Halogen free available upon request by adding suffix "-HF"
- Low Forward Voltage Drop
- Lead Free Finish/RoHS Compliant (Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

**Maximum Ratings**

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR2020FCT	20V	14V	20V
MBR2030FCT	30V	21V	30V
MBR2035FCT	35V	24.5V	35V
MBR2040FCT	40V	28V	40V
MBR2045FCT	45V	31.5V	45V
MBR2060FCT	60V	42V	60V
MBR2080FCT	80V	56V	80V
MBR2100FCT	100V	70V	100V

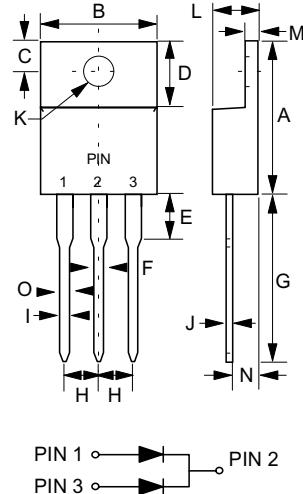
**Electrical Characteristics @ 25°C Unless Otherwise Specified**

Average Forward Current	$I_{F(AV)}$	20 A	$T_A = 120^\circ C$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$		
2020FCT-2045FCT		.70V	$I_{FM} = 10A$ ; $T_A = 25^\circ C$
2060FCT		.80V	
2080FCT-20100FCT		.85V	
2020FCT-2045FCT		.84V	$I_{FM} = 20A$ ; $T_A = 25^\circ C$
2060FCT		.95V	
2080FCT-20100FCT		.95V	
2020FCT-2045FCT		.72V	$I_{FM} = 20A$ ; $T_A = 125^\circ C$
2060FCT		.85V	
2080FCT-20100FCT		.85V	
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$		
2020FCT~2045FCT		0.1mA	$T_A = 25^\circ C$
2060FCT~20100FCT		0.15mA	
2020FCT~2045FCT		50mA	
2060FCT~20100FCT		150mA	$T_A = 125^\circ C$

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

**MBR2020FCT****THRU**  
**MBR2100FCT**

**20 Amp**  
**Schottky**  
**Barrier Rectifier**  
**20 to 100 Volts**

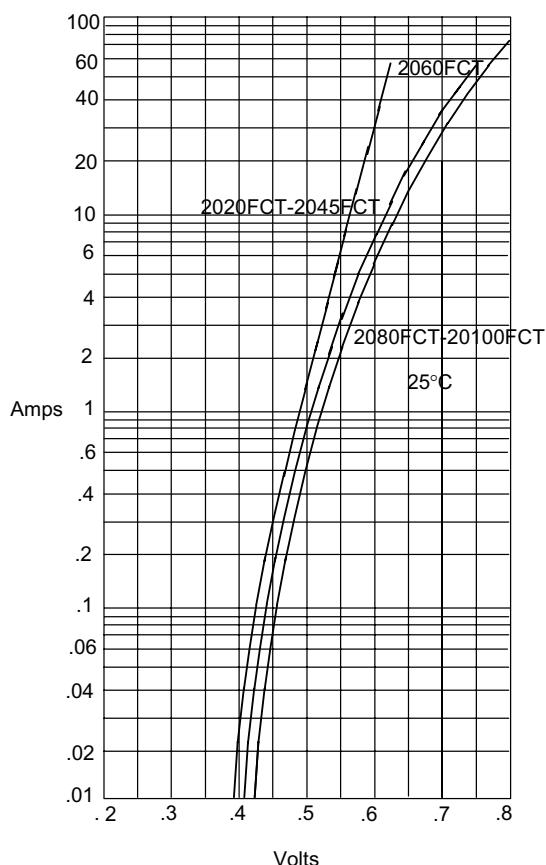
**ITO-220AB**

DIM	INCHES		MM		NOTE
	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	---	.071	---	1.80	
G	.512	.543	13.00	13.80	
H	---	.100	---	2.55	
I	---	.035	---	.90	
J	---	.032	---	.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	

**www.mccsemi.com**

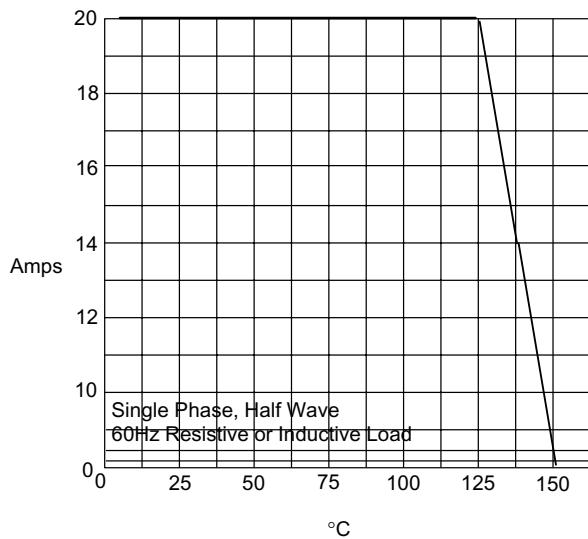
## MBR2020FCT thru MBR20100FCT

Figure 1  
Typical Forward Characteristics



Instantaneous Forward Current - Amperesversus  
Instantaneous Forward Voltage - Volts

Figure 3  
Forward Derating Curve

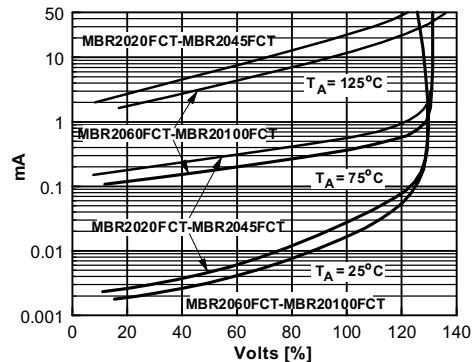


Average Forward Rectified Current - Amperesversus  
Ambient Temperature - °C

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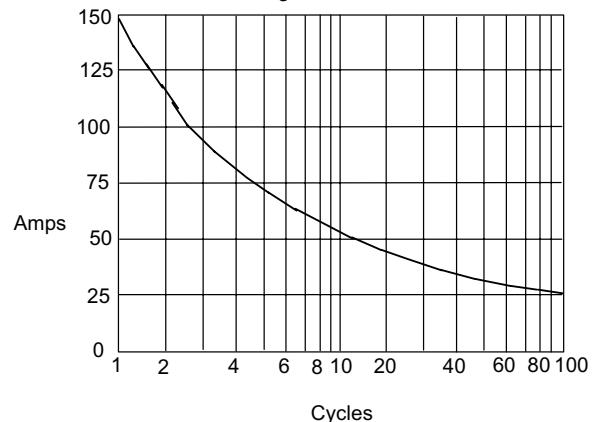
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Figure 2  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - mA  
Percent of Rated Peak Reverse Voltage - Volts%

Figure 4  
Peak Forward Surge Current



Peak Forward Surge Current - Amperesversus  
Number of Cycles at 60Hz - Cycles

<sup>TM</sup>

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## Ordering Information

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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