



Micro Commercial Components

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# MBR2020FCT THRU MBR20100FCT

## 20 Amp Schottky Barrier Rectifier 20 to 100 Volts

### Features

- High Surge Capacity
- Low Forward Voltage Drop
- High Current Capability, High Efficiency
- Marking : type number
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0

### Maximum Ratings

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

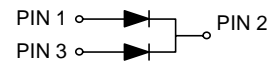
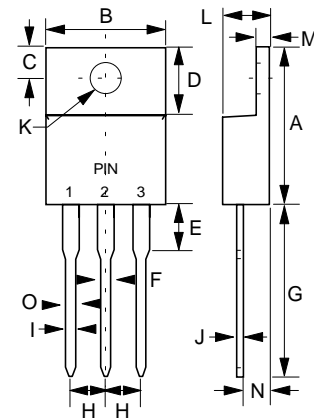
MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR2020FCT	20V	14V	20V
MBR2030FCT	30V	21V	30V
MBR2035FCT	35V	24.5V	35V
MBR2040FCT	40V	28V	40V
MBR2045FCT	45V	31.5V	45V
MBR2060FCT	60V	42V	60V
MBR2080FCT	80V	56V	80V
MBR20100FCT	100V	70V	100V

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

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

\*Pulse Test: Pulse Width 300µsec, Duty Cycle 2%

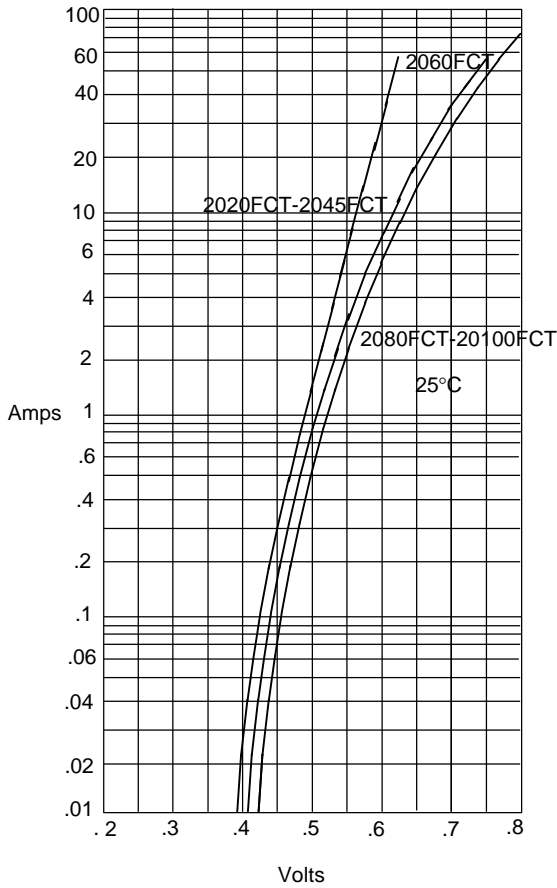
### ITO-220AB



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	---	0.90	
J	---	.032	---	0.80	
K	.118	.134	3.00	3.40	∅
L	---	.189	---	4.80	
M	---	.130	---	3.30	
N	.098	.114	2.50	2.90	
O	---	.055	---	1.40	

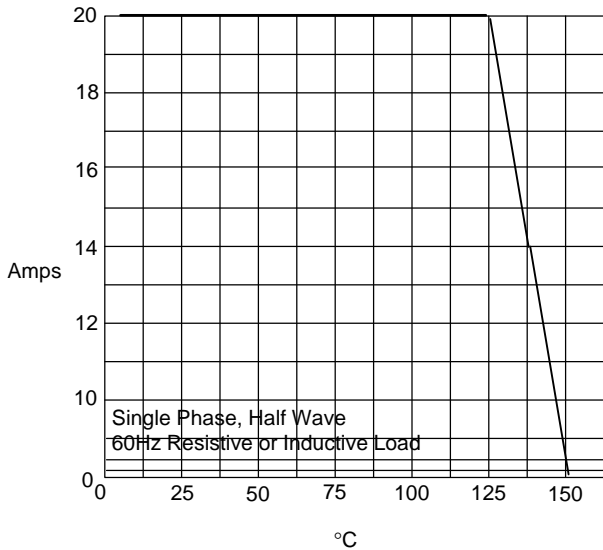
# MBR2020FCT thru MBR20100FCT

Figure 1  
Typical Forward Characteristics



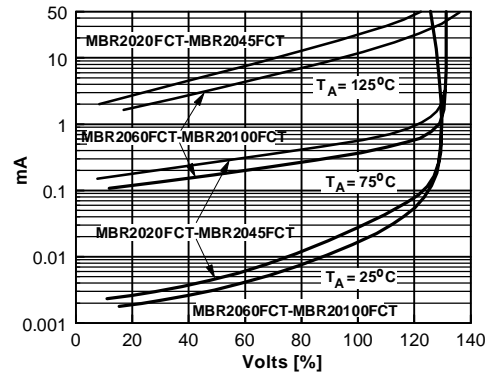
Instantaneous Forward Current - Amperes *versus*  
Instantaneous Forward Voltage - Volts

Figure 3  
Forward Derating Curve



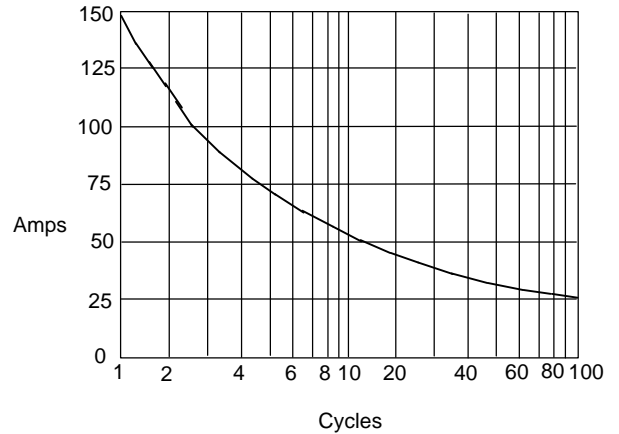
Average Forward Rectified Current - Amperes *versus*  
Ambient Temperature - °C

Figure 2  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - mAmpere  
Percent Of Rated Peak Reverse Voltage - Volts%

Figure 4  
Peak Forward Surge Current



Peak Forward Surge Current - Amperes *versus*  
Number Of Cycles At 60Hz - Cycles



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