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# MBR2020CT THRU MBR20100CT

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

## Features

- Meatl of Silicon Rectifier, Majority Conductor
- Guard ring for transient protection
- Low Forward Voltage Drop
- High Current Capability, High Efficiency
- Low Power Loss

## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +175°C
- Typical Thermal Resistance 2°C/W Junction to Case

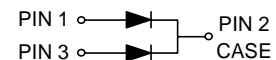
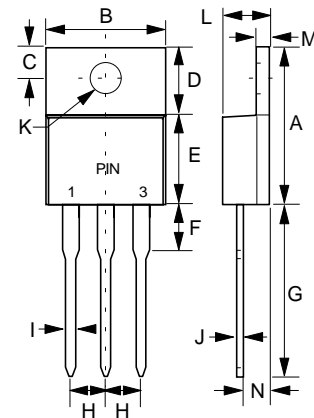
MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR2020CT	20V	14V	20V
MBR2030CT	30V	21V	30V
MBR2035CT	35V	24.5V	35V
MBR2040CT	40V	28V	40V
MBR2045CT	45V	31.5V	45V
MBR2060CT	60V	42V	60V
MBR2080CT	80V	56V	80V
MBR20100CT	100V	70V	100V

## 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	$I_{FM} = 10A;$ $T_A = 25^\circ\text{C}$
2020CT-2045CT		.80V	
2060CT		.85V	
2080CT-20100CT		.84V	$I_{FM} = 20A;$ $T_A = 25^\circ\text{C}$
2020CT-2045CT		.95V	
2060CT		.95V	
2080CT-20100CT	.72V	$I_{FM} = 20A;$ $T_A = 125^\circ\text{C}$	
2020CT-2045CT	.85V		
2060CT	.85V		
2080CT-20100CT			
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.1mA	$T_A = 25^\circ\text{C}$
2020CT~2045CT		0.15mA	$T_A = 125^\circ\text{C}$
2060CT~20100CT		50mA	
2020CT~2045CT		150mA	

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

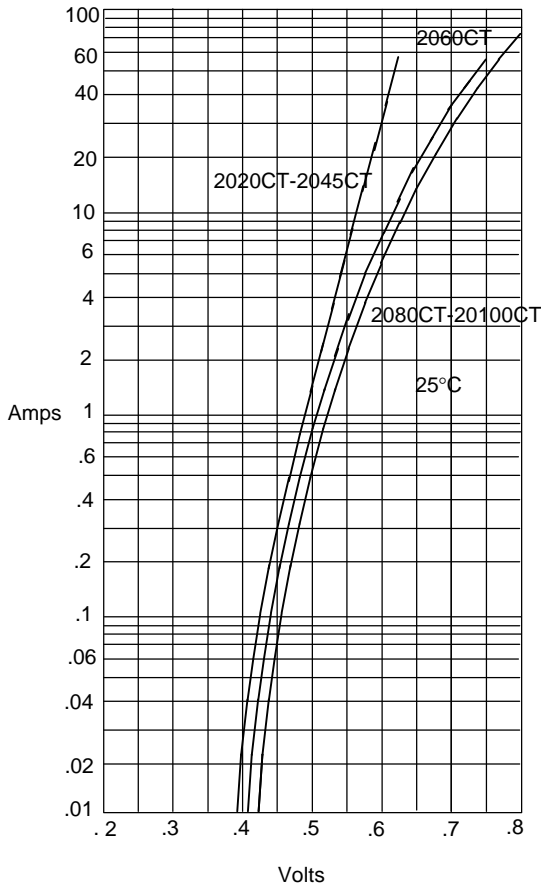
## TO-220AB



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.100	.135	2.54	3.43	
D	.230	.270	5.84	6.86	
E	.380	.420	9.65	10.67	
F	-----	.250	-----	6.35	
G	.500	.580	12.70	14.73	
H	.090	.110	2.29	2.79	
I	.020	.045	0.51	1.14	
J	.012	.025	0.30	0.64	
K	.139	.161	3.53	4.09	∅
L	.140	.190	3.56	4.83	
M	.045	.055	1.14	1.40	
N	.080	.115	2.03	2.92	

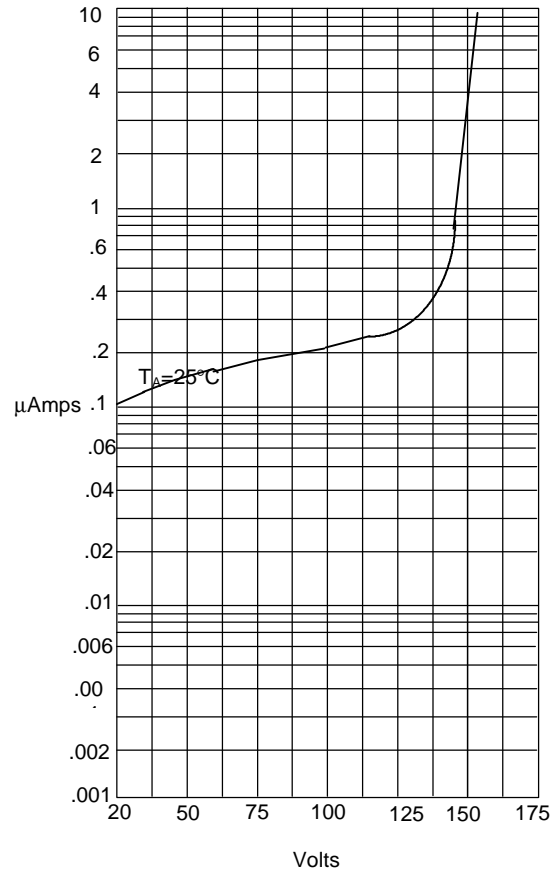
# MBR2020CT thru MBR20100CT

Figure 1  
Typical Forward Characteristics



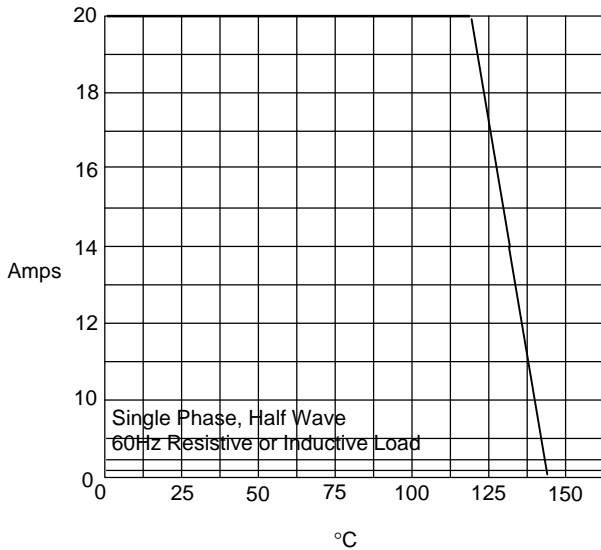
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



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

Figure 4  
Peak Forward Surge Current



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