

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

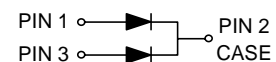
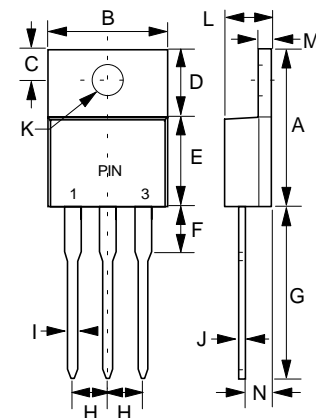
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +175°C
- Typical Thermal Resistance 2°C/W Junction to Case

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	$I_{FM} = 10\text{A};$ $T_A = 25^\circ\text{C}$
2020CT-2045CT		.80V	
2060CT		.85V	
2080CT-20100CT		.84V	$I_{FM} = 20\text{A};$ $T_A = 25^\circ\text{C}$
2020CT-2045CT		.95V	
2060CT		.95V	
2080CT-20100CT	.72V	$I_{FM} = 20\text{A};$ $T_A = 125^\circ\text{C}$	
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	

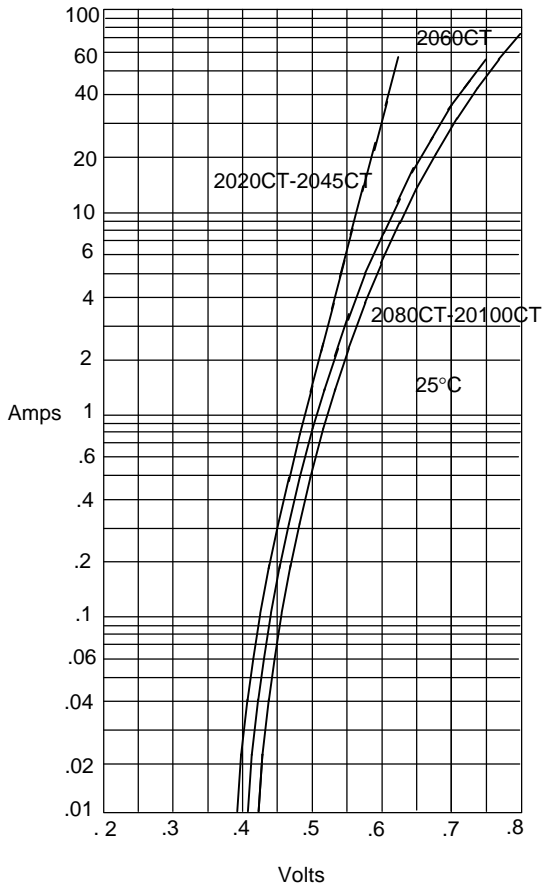
TO-220AB



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
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	

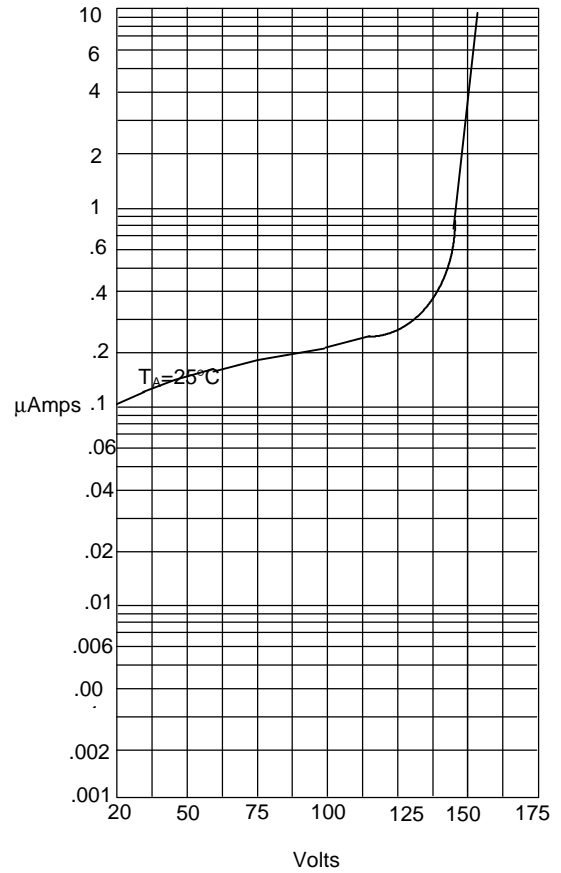
MBR2020CT thru MBR20100CT

Figure 1
Typical Forward Characteristics



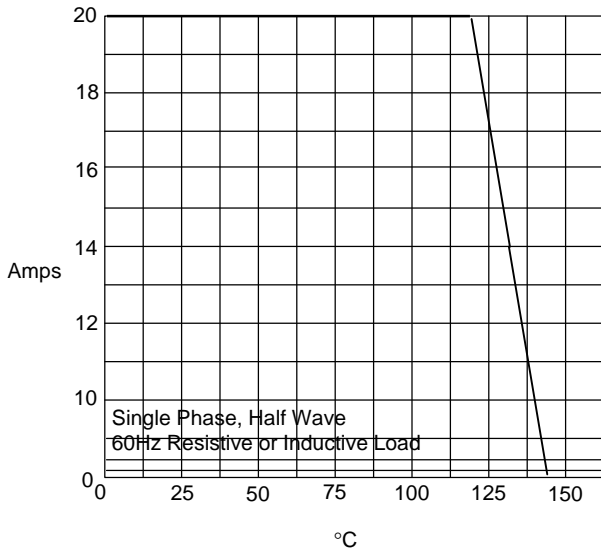
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



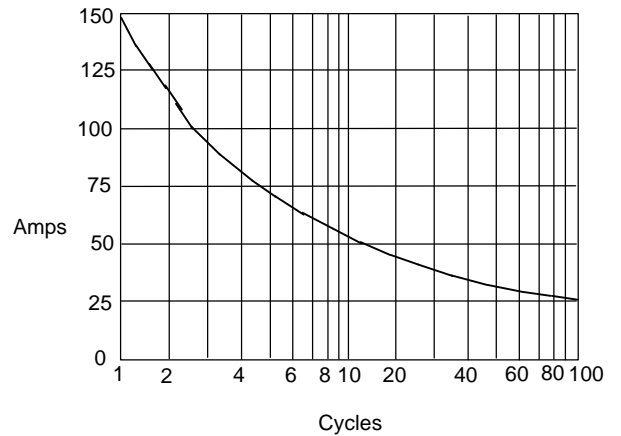
Instantaneous Reverse Leakage Current - MicroAmperes *versus*
Percent Of Rated Peak Reverse Voltage - Volts

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