



MBR2020CT THRU MBR20100CT

Features

- Meatl of Silicon Rectifier, Majority Conduction
- Guard ring for transient protection
- High Current Capability, High Efficiency
- Low Forward Voltage Drop
- Marking : type number
- Halogen free available upon request by adding suffix "-HF"
- 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

20 Amp Schottky Barrier Rectifier 20 to 100 Volts

- Mounting Torque: 5 in-lbs Maximum

- Maximum Thermal Resistance Junction to Case : 2.0°C/W

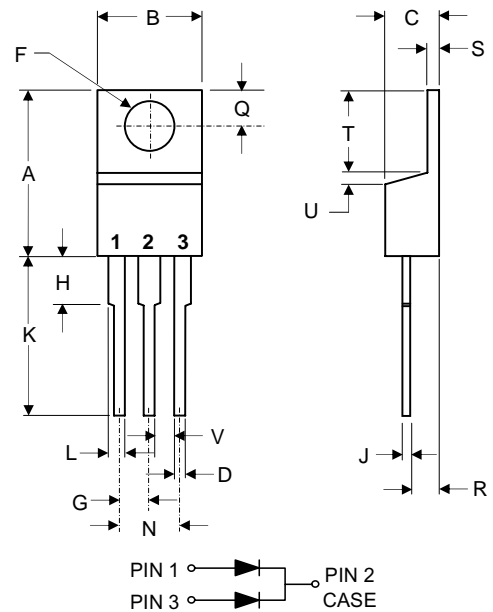
MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR2020CT	20V	14V	20V
MBR2030CT	30V	21V	30V
MBR2035CT	35V	24.5V	35V
MBR2040CT	40V	28V	40V
MBR2045CT	45V	31.5V	45V
MBR2060CT	60V	42V	60V
MBR2080CT	80V	56V	80V
MBR20100CT	100V	70V	100V

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

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

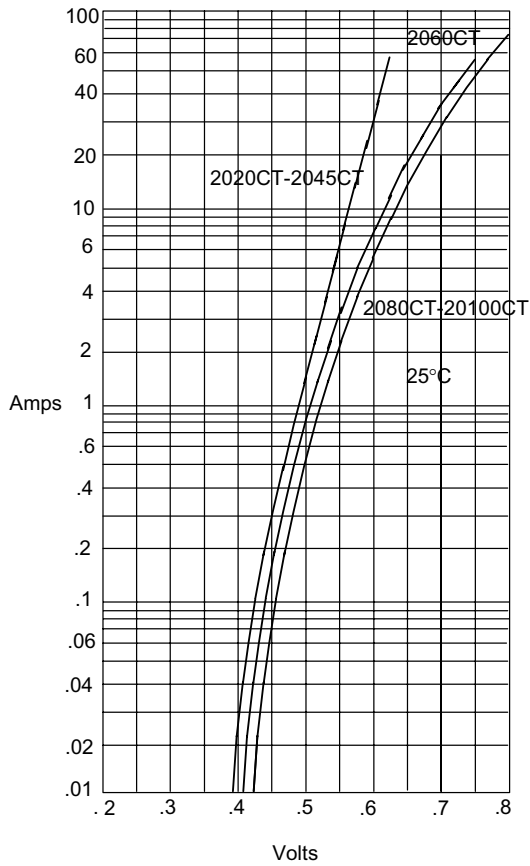
TO-220AB



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.140	.190	3.56	4.82	
D	.020	.045	0.51	1.14	
F	.139	.161	3.53	4.09	∅
G	.190	.110	2.29	2.79	
H	---	.250	---	6.35	
J	.012	.025	0.30	0.64	
K	.500	.580	12.70	14.73	
L	.045	.060	1.14	1.52	
N	.190	.210	4.83	5.33	
Q	.100	.135	2.54	3.43	
R	.080	.115	2.04	2.92	
S	.045	.055	1.14	1.39	
T	.230	.270	5.84	6.86	
U	-----	.050	-----	1.27	
V	.045	-----	1.15	-----	

MBR2020CT thru MBR20100CT

Figure 1
Typical Forward Characteristics



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

Figure 2
Typical Reverse Characteristics

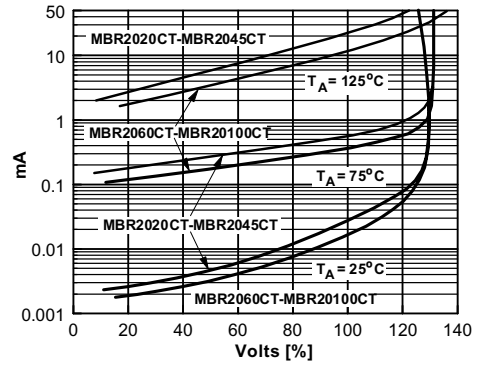
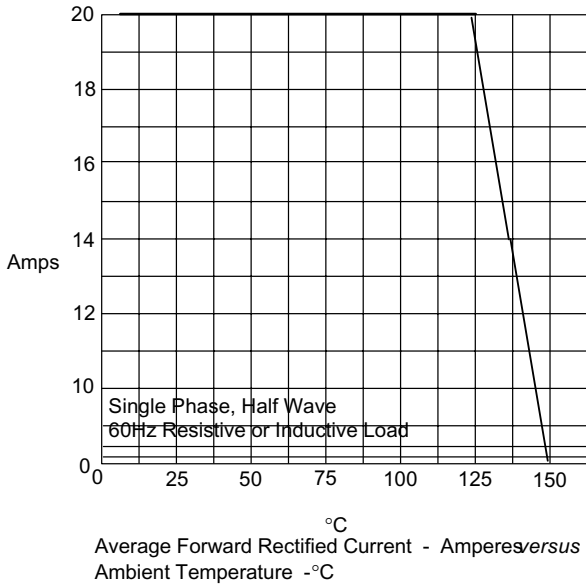
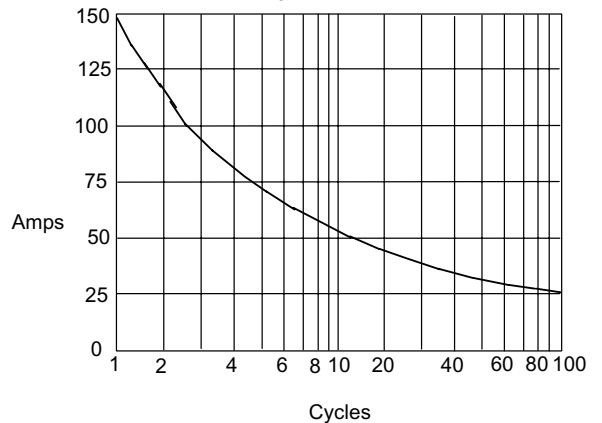


Figure 3
Forward Derating Curve



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