

Micro Commercial Corp. 21201 Itasca St. Chatsworth, CA 91311 Phone: (818) 701-4933 Fax: (818) 701-4939

# MBR2020CT THRU MBR20100CT

## 20 Amp Schottky Barrier Rectifier 20 to 100 Volts

### **Features**

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

### Maximum Ratings

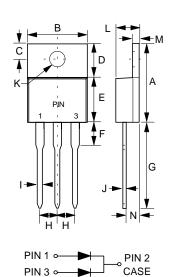
- Operating Temperature: -55°C to +150°C
   Storage Temperature: -55°C to +175°C
- Typical Thermal Resistance 2°C/W Junction to Case

1400			
MCC	Maximum	Maximum	Maximum
Catalog	Recurrent	RMS	DC
Number	Peak Reverse	Voltage	Blocking
	Voltage	_	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 <sub>A</sub> = 120°C
Peak Forward Surge	I <sub>FSM</sub>	150A	8.3ms, half sine
Current			
Maximum			
Instantaneous			
Forward Voltage			
2020CT-2045CT	$V_{F}$	.70V	$I_{FM} = 10A;$
2060CT		.80V	T <sub>A</sub> =25°C
2080CT-20100CT		.85V	== =
2020CT-2045CT		.84V	$I_{FM} = 20A;$
2060CT		.95V	T <sub>A</sub> =25°C
2080CT-20100CT	•	.95V	== -
2020CT-2045CT		.72V	$I_{FM} = 20A;$
2060CT		.85V	T <sub>A</sub> =125°C
2080CT-20100CT		.85V	
Maximum DC Reverse	I_		
Current At Rated DC	I <sub>R</sub>		
Blocking Voltage 2020CT~2045CT		0.1mA	T <sub>A</sub> = 25°C
2020CT~2043CT 2060CT~20100CT		0.15mA	1A - 20 O
2020CT~2045CT		50mA	$T_A = 125^{\circ}C$
2060CT~20100CT		150mA	

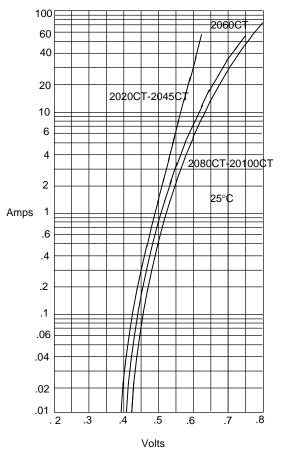
### **TO-220AB**



DIMENSIONS							
	INCHES		ММ				
DIM	MIN	MAX	MIN	MAX	NOTE		
Α	.560	.625	14.22	15.88			
В	.380	.420	9.65	10.67			
С	.100	.135	2.54	3.43			
D	.230	.270	5.84	6.86			
Е	.380	.420	9.65	10.67			
F		.250		6.35			
G	.500	.580	12.70	14.73			
Η	.090	.110	2.29	2.79			
	.020	.045	0.51	1.14			
J	.012	.025	0.30	0.64			
K	.139	.161	3.53	4.09	Ø		
L	.140	.190	3.56	4.83			
M	.045	.055	1.14	1.40			
N	.080	.115	2.03	2.92			

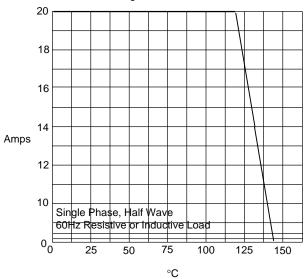
#### MBR2020CT thru MBR20100CT

Figure 1 Typical Forward Characteristics



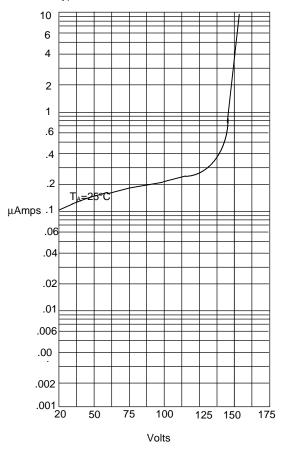
Instantaneous Forward Current - Amperes*versus* Instantaneous Forward Voltage - Volts

Figure 3
Forward Derating Curve



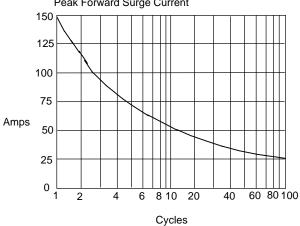
Average Forward Rectified Current - Amperes/ersus Ambient Temperature -°C

Figure 2 Typical Reverse Characteristics



Instantaneous Reverse Leakage Current - MicroAmperesversus Percent Of Rated Peak Reverse Voltage - Volts

Figure 4 Peak Forward Surge Current



Peak Forward Surge Current - Amperesversus Number Of Cycles At 60Hz - Cycles