



Micro Commercial Components



Micro Commercial Components  
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# MBR2020CT THRU MBR20100CT

## 20 Amp Schottky Barrier Rectifier 20 to 100 Volts

### 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

### Maximum Ratings

- Mounting Torque: 5 in-lbs Maximum
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C

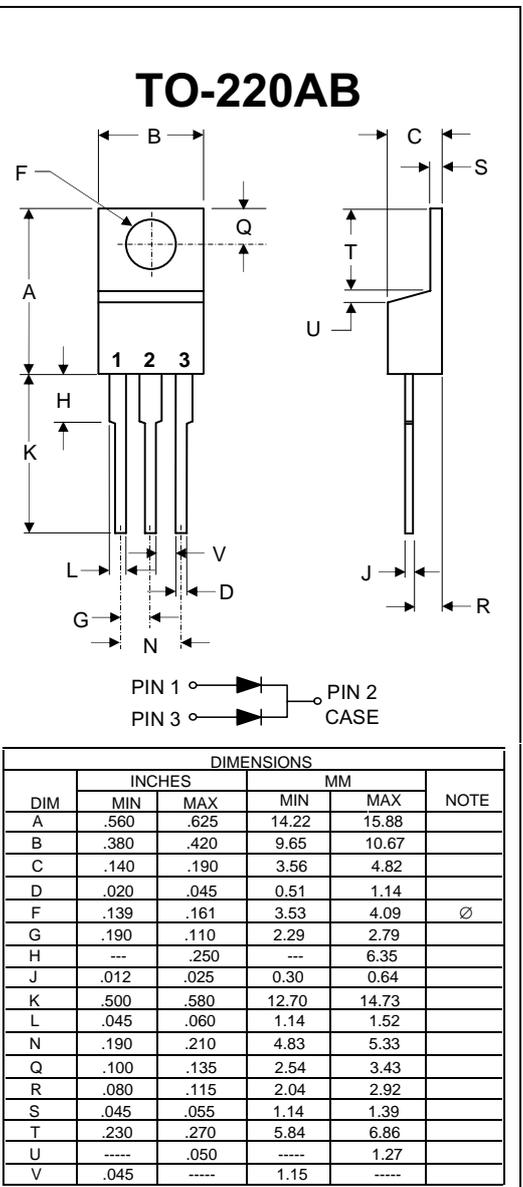
MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR2020CT	20V	14V	20V
MBR2030CT	30V	21V	30V
MBR2035CT	35V	24.5V	35V
MBR2040CT	40V	28V	40V
MBR2045CT	45V	31.5V	45V
MBR2060CT	60V	42V	60V
MBR2080CT	80V	56V	80V
MBR20100CT	100V	70V	100V

### 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	$V_F$	2020CT-2045CT 2060CT 2080CT-20100CT	$I_{FM} = 10A;$ $T_A = 25^\circ\text{C} *$	
		2020CT-2045CT 2060CT 2080CT-20100CT		$I_{FM} = 20A;$ $T_A = 25^\circ\text{C} *$
		2020CT-2045CT 2060CT 2080CT-20100CT		
		2020CT-2045CT 2060CT 2080CT-20100CT		
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	2020CT~2045CT 2060CT~20100CT 2020CT~2045CT 2060CT~20100CT	$T_A = 25^\circ\text{C}$	
			$T_A = 125^\circ\text{C}$	

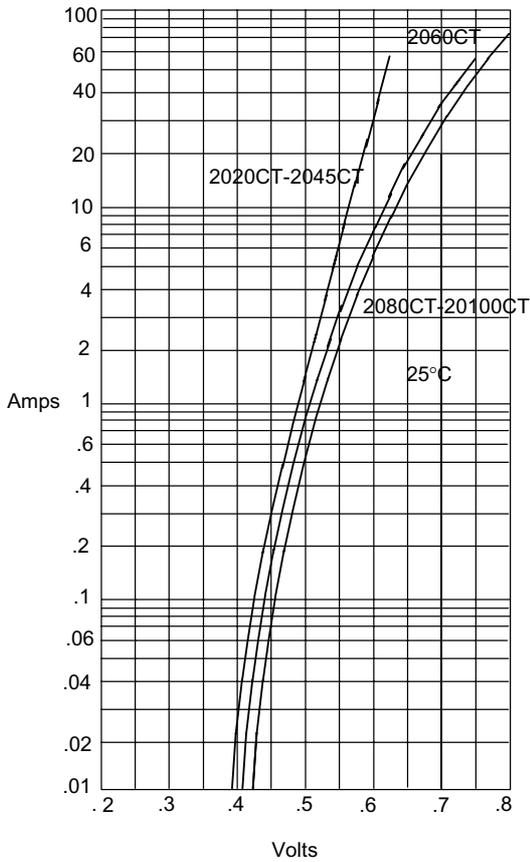
\*Pulse Test: Pulse Width 300µsec, Duty Cycle 2%

Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.



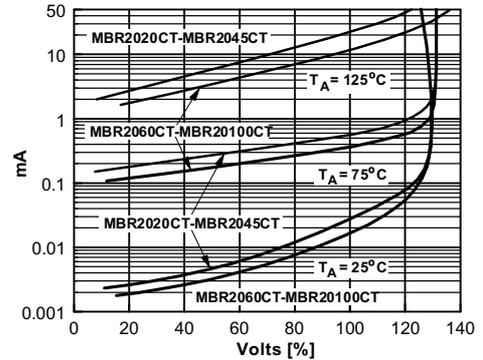
# MBR2020CT thru MBR20100CT

Figure 1  
Typical Forward Characteristics



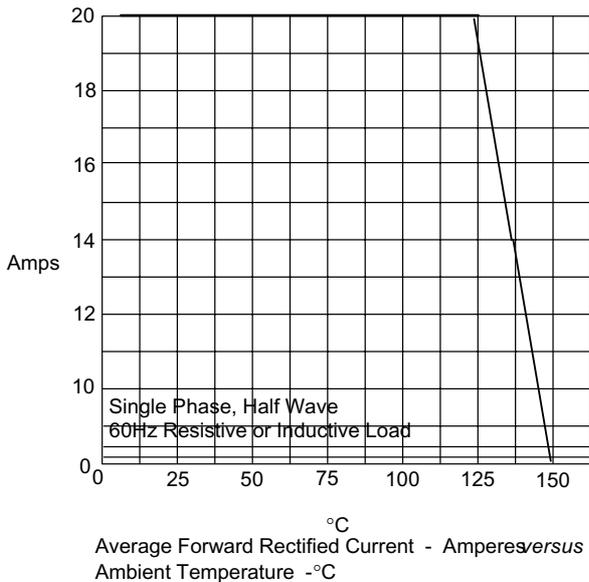
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
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Typical Reverse Characteristics



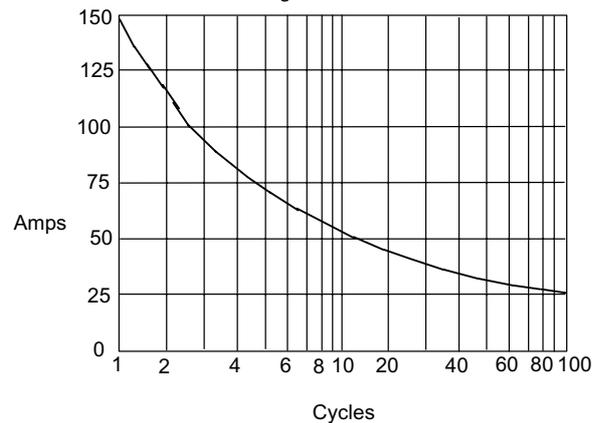
Instantaneous Reverse Leakage Current - mA  
Percent Of Rated Peak Reverse Voltage - Volts%

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



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## Ordering Information

Device	Packing
(Part Number)-BP	Bulk;1Kpcs/Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

### \*\*\*IMPORTANT NOTICE\*\*\*

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