



Micro Commercial Components



Micro Commercial Components  
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# MBR20120CT

## Features

- High Junction Temperature Capability
- Low Leakage Current
- Marking: type number
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0 and MSL Rating 1

## 20 Amp High Voltage Power Schottky Barrier Rectifier 120Volts

## Maximum Ratings

- Operating Junction Temperature : 150°C
- Storage Temperature: - 50°C to +150°C
- Per diode Thermal Resistance 2.2°C/W Junction to Case
- Mounting Torque: 5 in-lbs Maximum

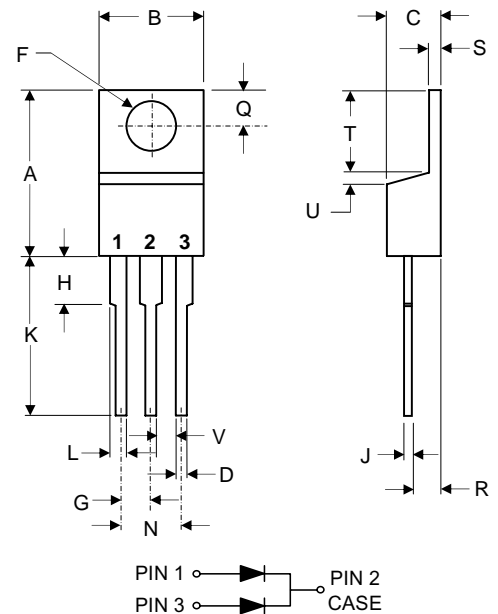
MCC Catalog Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBR20120CT	120V	84V	120V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	20 A	$T_C = 120^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine wave
Maximum Instantaneous Forward Voltage	$V_F$	.83V	$I_{FM} = 10A$ $T_J = 25^\circ\text{C}$
Maximum Reverse Current At Rated DC Blocking	$I_R$	500uA 25mA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$

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

## 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	----	

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Figure 1  
Typical Forward Characteristics

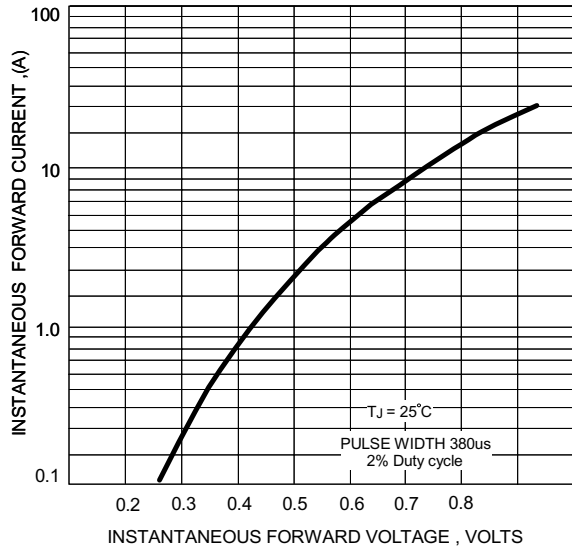
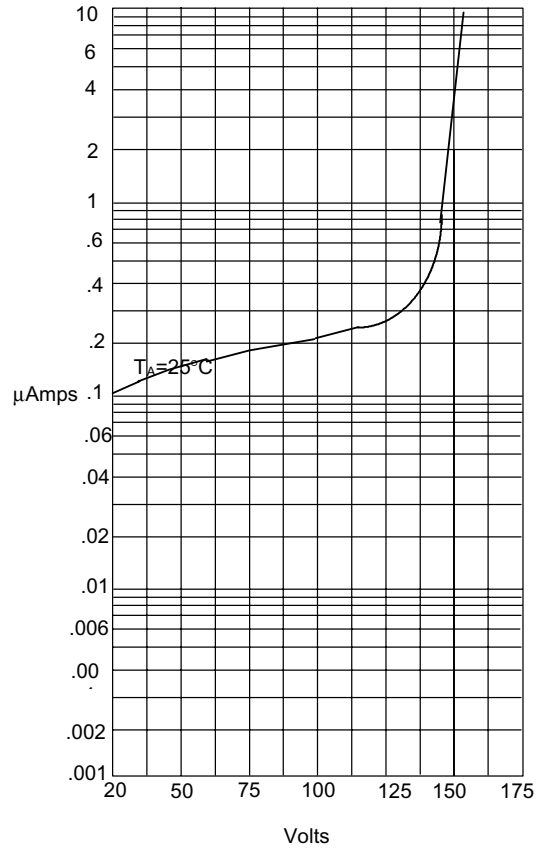
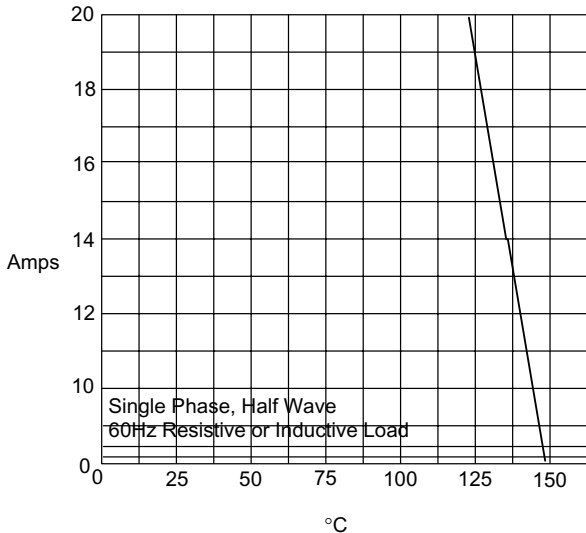


Figure 2  
Typical Reverse Characteristics



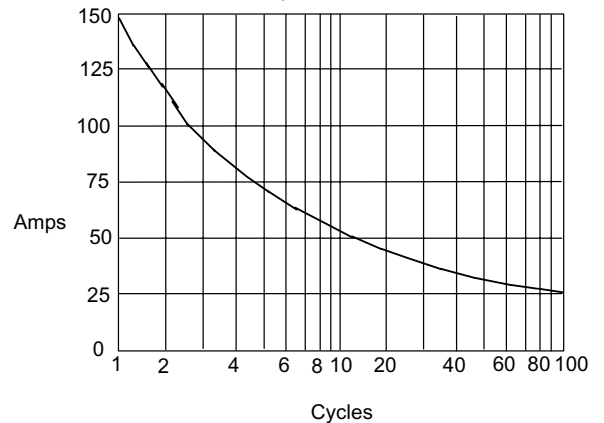
Instantaneous Reverse Leakage Current - MicroAmperes versus Percent Of Rated Peak Reverse Voltage - Volts

Figure 3  
Forward Derating Curve



Average Forward Rectified Current - Amperes versus Case 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

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