





Micro Commercial Components



Micro Commercial Components  
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# MBRB2020CT THRU MBRB20100CT

## 20 Amp Schottky Barrier Rectifier 20 to 100 Volts

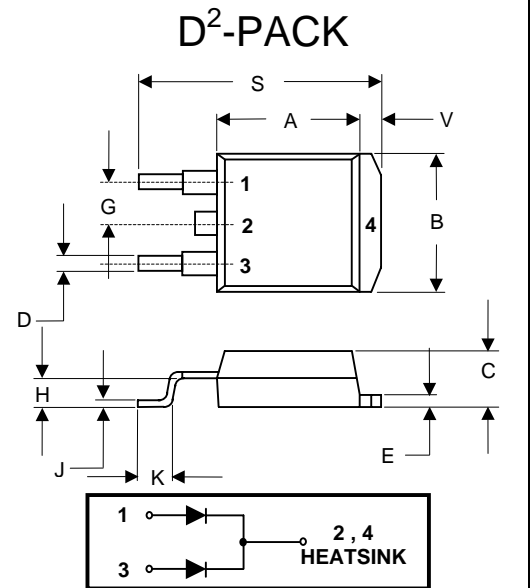
### Features

- Guard ring for transient protection
- Low Forward Voltage Drop
- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Marking : type number
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Maximum Thermal Resistance: 2.0°C/W Junction to Case

MCC Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
MBRB2020CT	20V	14V	20V
MBRB2030CT	30V	21V	30V
MBRB2035CT	35V	24.5V	35V
MBRB2040CT	40V	28V	40V
MBRB2045CT	45V	31.5V	45V
MBRB2060CT	60V	42V	60V
MBRB2080CT	80V	56V	80V
MBRB20100CT	100V	70V	100V

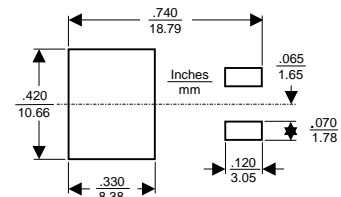


### Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter	Symbol	Value	Conditions
Average Forward Current	$I_{F(AV)}$	20 A	$T_A = 125^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	.84V .80V .85V	$I_{FM} = 20\text{A};$ $I_{FM} = 10\text{A}$ $T_A = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	0.1mA 0.15mA	$T_A = 25^\circ\text{C}$

DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	.320	.359	8.13	9.14	
B	.380	.411	9.65	10.45	
C	.160	.190	4.06	4.83	
D	.020	.035	0.51	0.89	
E	.045	.055	1.14	1.40	
G	.095	.105	2.41	2.67	
H	.096	.120	2.43	3.03	
J	.014	.021	0.35	0.53	
K	.090	.110	2.29	2.79	
S	.575	.625	14.60	15.80	
V	.045	.055	1.14	1.40	

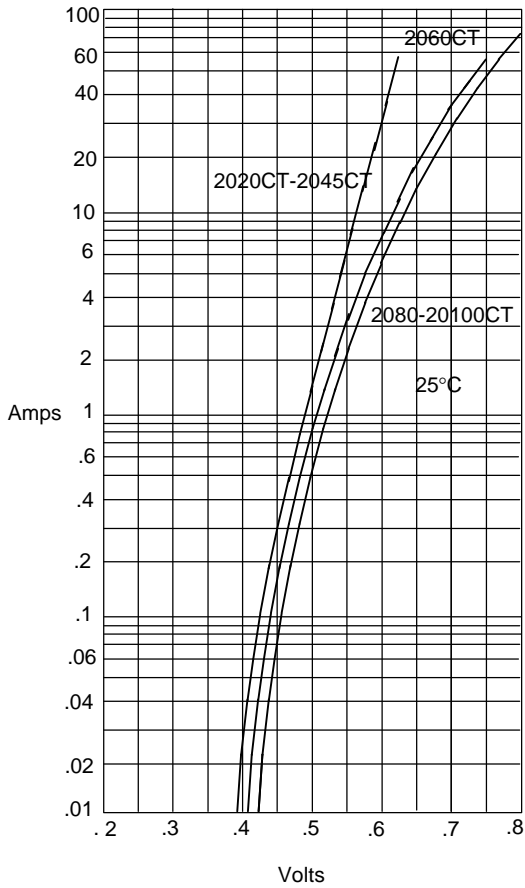
### SUGGESTED SOLDER PAD LAYOUT



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

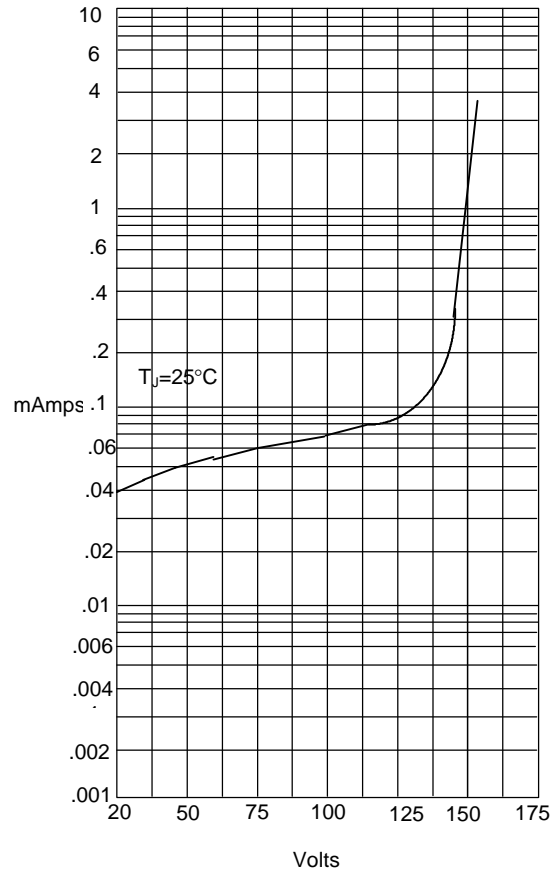
MBRB2020CT thru MBRB20100CT

Figure 1  
Typical Forward Characteristics



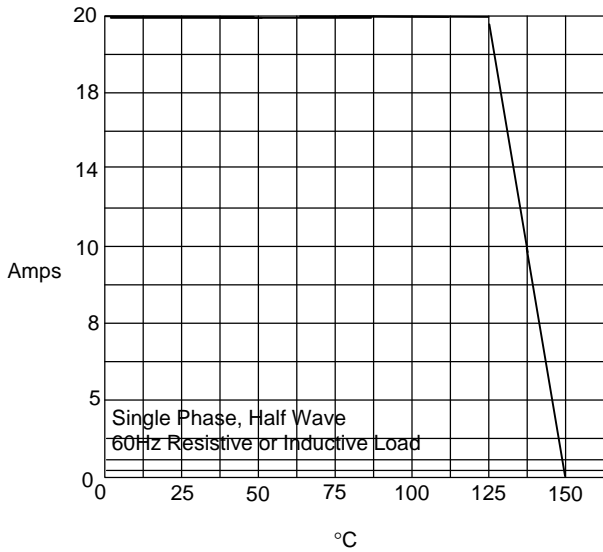
Instantaneous Forward Current - Amperes versus  
Instantaneous Forward Voltage - Volts

Figure 2  
Typical Reverse Characteristics



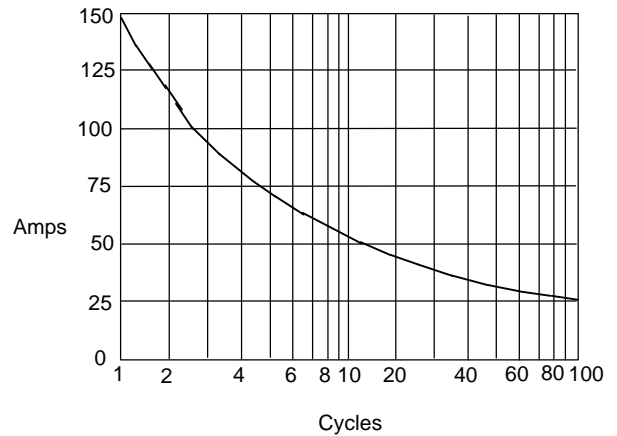
Instantaneous Reverse Leakage Current - MicroAmperes versus  
Percent Of Rated Peak Reverse Voltage - Volts

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



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## Ordering Information :

Device	Packing
Part Number-TP	Tape&Reel: 800pcs/Reel
Part Number-BP	Tube: 1Kpcs/Box

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

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