

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

Phone: (818) 701-4933 (818) 701-4939 Fax:

MBRB2020CT **THRU MBRB20100CT**

Features

- Guard ring for transient protection
- Low Forward Voltage Drop
- High Current Capability, High Efficiency
- 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

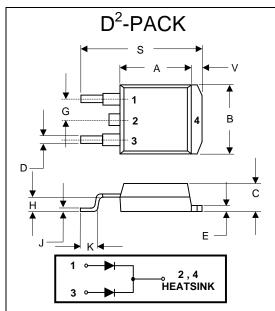
MCC	Maximum	Maximum	Maximum
	Recurrent	RMS	DC
Number	Peak Reverse	Voltage	Blocking
	Voltage		Voltage
MBRB2020CT	20V	14V	20V
MBRB2030CT	30V	21V	30V
MBRB2035CT	35V	24.5V	35V
MBRB2040CT	40V	28V	40V
MBRB2045CT	45V	31.5V	45V
MBRB2060CT	60V	42V	60V
MBRB2080CT	80V	56V	80V
MBRB20100CT	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward	$I_{F(AV)}$	20 A	T _A = 125°C
Current Peak Forward Surge	I _{FSM}	150A	8.3ms, half sine
Current	· FOIVI	100/1	o.omo, nan omo
Maximum Instantaneous Forward Voltage 2020CT-2045CT 2060CT 2080CT-20100CT	V _F	.84V .80V .85V	I _{FM} = 20A; I _{FM} =10 A T _A = 25°C
Maximum DC Reverse Current At Rated DC Blocking Voltage 2020CT-2045CT	l _R	0.1mA	T _A = 25°C
2060CT-20100CT	14	0.15mA	23 0

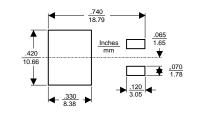
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7.

20 Amp Schottky Barrier Rectifier 20 to 100 Volts



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	.320	.359	8.13	9.14	
В	.380	.411	9.65	10.45	
С	.160	.190	4.06	4.83	
D	.020	.035	0.51	0.89	
Е	.045	.055	1.14	1.40	
O	.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	

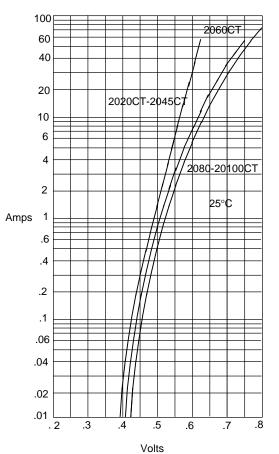
SUGGESTED SOLDER PAD LAYOUT



MBRB2020CT thru MBRB20100CT

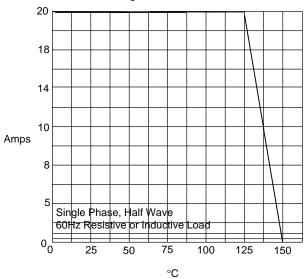
 $\cdot M \cdot C \cdot C \cdot$

Figure 1
Typical Forward Characteristics



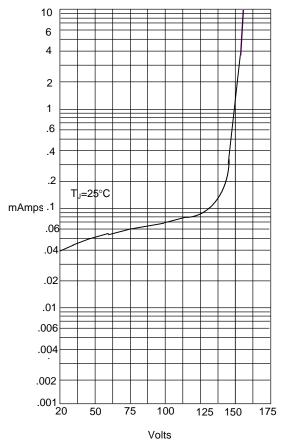
Instantaneous Forward Current - Amperes*versus* Instantaneous Forward Voltage - Volts





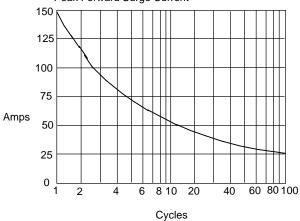
Average Forward Rectified Current - Amperes/ersus Ambient Temperature -°C

Figure 2 Micro Commercial Components
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



Micro Commercial Components

Ordering Information:

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

IMPORTANT NOTICE

Micro Commercial Components Corp. reserves the right to make changes without further notice to any product herein to make corrections, modifications, enhancements, improvements, or other changes. **Micro Commercial Components Corp.** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights, nor the rights of others. The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp.** and all the companies whose products are represented on our website, harmless against all damages.

LIFE SUPPORT

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

CUSTOMER AWARENESS

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources. MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Micro Commercial Components (MCC):

MBRB20100CT-TP