

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311

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

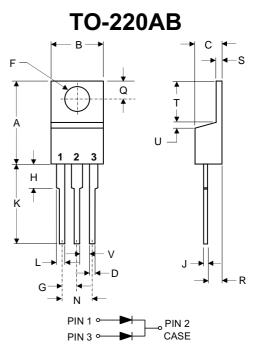
MCC	Maximum	Maximum	Maximum
Catalog	Recurrent	RMS	DC
Number	Peak Reverse	Voltage	Blocking
	Voltage		Voltage
MBR2020CT	20V	14V	20V
MBR2030CT	30V	21V	30V
MBR2035CT	35V	24.5V	35V
MBR2040CT	40V	28V	40V
MBR2045CT	45V	31.5V	45V
MBR2060CT	60V	42V	60V
MBR2080CT	80V	56V	80V
MBR20100CT	100V	70V	100V

Electrical Characteristics @ 25°C Unless Otherwise Specified

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Average Forward Current	$I_{F(AV)}$	20 A	T _A = 120°C
Peak Forward Surge Current	I _{FSM}	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage			
2020CT-2045CT 2060CT 2080CT-20100CT 2020CT-2045CT 2060CT 2080CT-20100CT 2020CT-2045CT 2060CT 2080CT-20100CT	V _F	.70V .80V .85V .84V .95V .95V .72V .85V	$I_{FM} = 10A;$ $T_A = 25^{\circ}C *$ $I_{FM} = 20A;$ $T_A = 25^{\circ}C *$ $I_{FM} = 20A;$ $I_{FM} = 125^{\circ}C *$
Maximum DC Reverse Current At Rated DC Blocking Voltage 2020CT~2045CT 2060CT~20100CT 2020CT~2045CT 2060CT~20100CT	I _R	0.1mA 0.15mA 50mA 150mA	T _A = 25°C T _A = 125°C

^{*}Pulse Test: Pulse Width 300μsec, Duty Cycle 2%

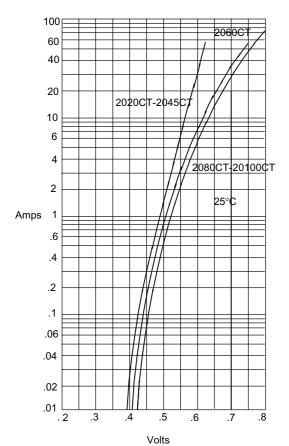
Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.



DIMENSIONS					
	INCHES			MM	
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.560	.625	14.22	15.88	
В	.380	.420	9.65	10.67	
С	.140	.190	3.56	4.82	
D	.020	.045	0.51	1.14	
F	.139	.161	3.53	4.09	Ø
G	.190	.110	2.29	2.79	
Н		.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	
Т	.230	.270	5.84	6.86	·
U		.050		1.27	
V	.045		1.15		

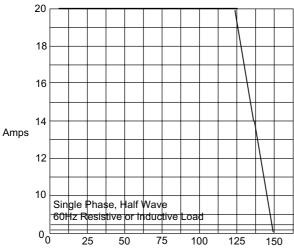
MBR2020CT thru MBR20100CT

Figure 1
Typical Forward Characteristics



Instantaneous Forward Current - Amperesversus Instantaneous Forward Voltage - Volts

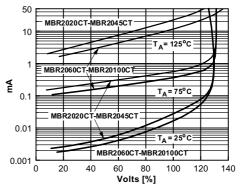




°C
Average Forward Rectified Current - Amperes/ersus
Ambient Temperature -°C

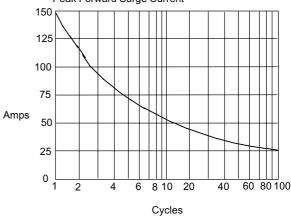


Figure 2 **Micro Commercial Components**Typical Reverse Characteristics



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





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



Ordering Information

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

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

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