

Micro Commercial Components



Micro Commercial Components 20736 Marilla Street Chatsworth CA 91311 Phone: (818) 701-4933 (818) 701-4939 Fax:

Features

- Metal of silicon rectifier, majority carrier conduction
- Guard ring for transient protection
- Low power loss high efficiency
- High surge capacity, High current capability
- 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

Maximum Ratings

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

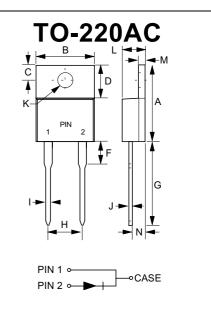
Storage Temperature: -55°C to +150°C							
MCC	Device	Maximum	Maximum	Maximum			
Catalog	Marking	Recurrent	RMS	DC			
Number		Peak Reverse	Voltage	Blocking			
		Voltage		Voltage			
MBR2020	MBR2020	20V	14V	20V			
MBR2030	MBR2030	30V	21V	30V			
MBR2040	MBR2040	40V	28V	40V			
MBR2045	MBR2045	45V	31.5V	45V			
MBR2050	MBR2050	50V	35V	50V			
MBR2060	MBR2060	60V	42V	60V			
MBR2080	MBR2080	80V	56V	80V			
MBR20100	MBR20100	100V	70V	100V			
MBR20150	MBR20150	150V	105V	150V			
MBR20200	MBR20200	200V	140V	200V			

Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I _{F(AV)}	20A	T _C = 135°C
Peak Forward Surge Current	I _{FSM}	200A	8.3ms, half sine
Maximum Forward Voltage Drop Per Element MBR2020-2045 MBR2050-2060 MBR2080-20100 MBR20150 MBR20200	V _F	0.60V 0.75V 0.85V 0.90V 0.95V	I _{FM} = 20A per element; T _A = 25°C*
Maximum DC Reverse Current At Rated DC Blocking Voltage	IR	0.5mA	T _J = 25°C

MBR2020 THRU **MBR20200**

20 Amp **Schottky Barrier** Rectifier 20 to 200 Volts



DIMENSIONS					
	INCHES		MM		
DIM	MIN	MAX	MIN	MAX	NOTE
Α	.560	.625	14.22	15.88	
В	.380	.420	9.65	10.67	
С	.100	.135	2.54	3.43	
D	.230	.270	5.84	6.86	
F		.250		6.35	
G	.500	.580	12.70	14.73	
Н	.190	.210	4.83	5.33	
1	.020	.045	0.51	1.14	
J	.012	.025	0.30	0.64	
К	.139	.161	3.53	4.09	Ø
L	.140	.190	3.56	4.83	
М	.045	.055	1.14	1.40	
Ν	.080	.115	2.03	2.92	

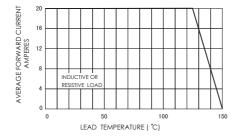
*Pulse test: Pulse width 300 µsec, Duty cycle 1% Notes:1.High Temperature Solder Exemption Applied, see EU Directive Annex 7.

• www.mccsemi.com

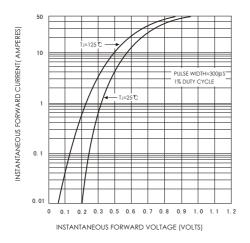
MBR2020 thru MBR20200



FIG.1-FORWARD CURRENT DERATING CURVE









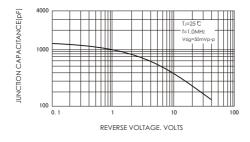


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

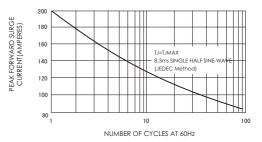


FIG.4-TYPICAL REVERSE CHARACTERISTICS

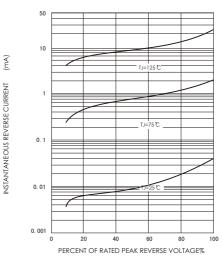
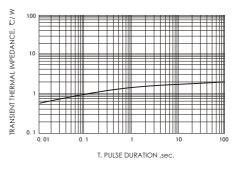


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



www.mccsemi.com



Ordering Information

Device	Packing
(Part Number)-BP	Bulk;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.

www.mccsemi.com