



Micro Commercial Components



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

# GBU10A THRU GBU10M

## Features

- UL Recognized File # E165989
- Glass Passivated Chip junction
- High Surge Overload Rating
- Case Material: Molded Plastic. UL Flammability Classificatio Rating 94-0 and MSL Rating 1
- Lead Free Finish/RoHS Compliant (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)
- High Case Dielectric Strength of 1500 V<sub>RMS</sub>

## Maximum Ratings

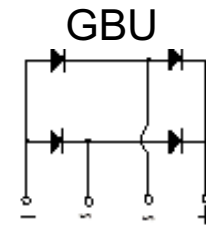
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Typical Thermal Resistance: 2.2°C/W Junction to Case(Heatsink)
- Mounting Torque: 5.0 in-lbs Maximum

MCC Part Number	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBU10A	50V	35V	50V
GBU10B	100V	70V	100V
GBU10D	200V	140V	200V
GBU10G	400V	280V	400V
GBU10J	600V	420V	600V
GBU10K	800V	560V	800V
GBU10M	1000V	700V	1000V

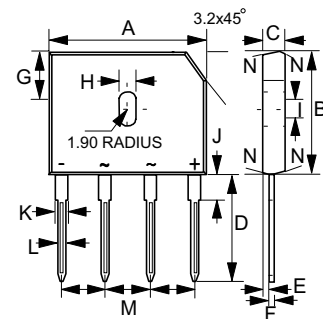
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Maximum Average Forward Current (with heatsink Note 1)	I <sub>F(AV)</sub>	10 A	T <sub>C</sub> = 100°C
Peak Forward Surge Current	I <sub>FSM</sub>	200A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.1V	At 5A DC
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5.0uA 500uA	T <sub>A</sub> = 25°C T <sub>A</sub> = 125°C
Typical Junction Capacitance	C <sub>J</sub>	70pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V
I <sup>2</sup> t Rating for Fusing	I <sup>2</sup> t	200A <sup>2</sup> S	t < 8.3ms

## 10 Amp Single Phase Glass Passivated Bridge Rectifiers 50 to 1000 Volts



Case Style



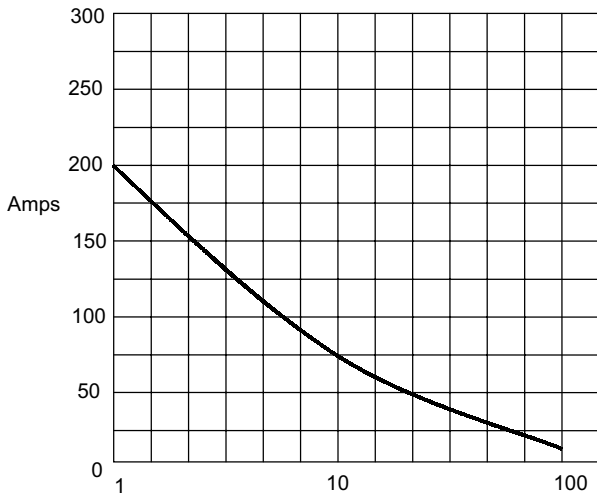
DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.860	.880	21.80	22.30	
B	.720	.740	18.30	18.80	
C	.130	.142	3.30	3.60	
D	.690	.717	17.50	18.20	
E	.030	.039	0.76	1.00	
F	.018	.024	0.46	0.60	
G	.290	.310	7.40	7.90	
H	.140	.160	3.50	4.10	
I	.065	.085	1.65	2.16	
J	.060	.096	1.52	2.45	
K	.077	.098	1.95	2.50	
L	.040	.050	1.02	1.27	
M	.190	.210	4.83	5.33	
N	7.0° TYPICAL				

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

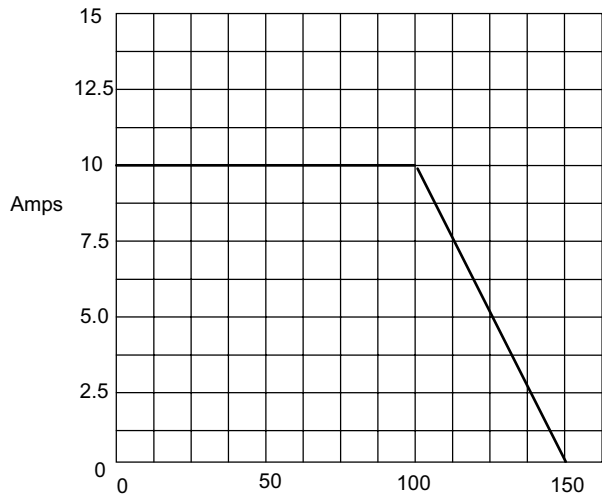
GBU10A thru GBU10M

Figure1  
Maximum Forward Surge Current



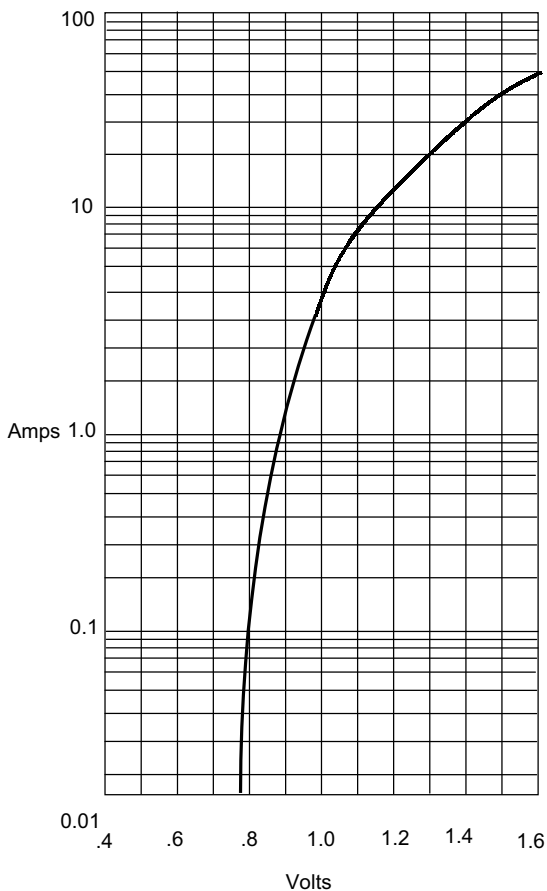
Peak Forward Surge Current - Amperes versus Number of Cycles At 60 Hz

Figure2  
Derating Curve Output Rectified Current



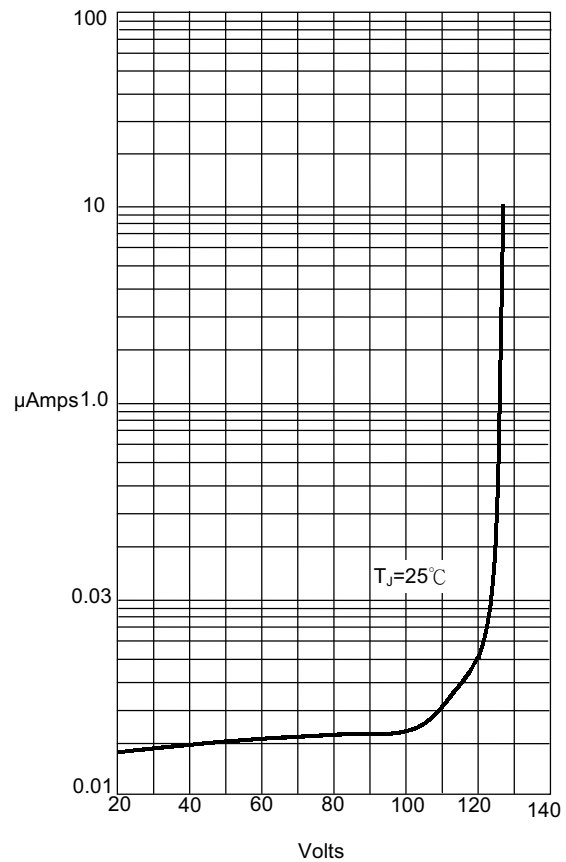
CASE TEMPERATURE °C

Figure 3  
Typical Forward Characteristics



Instantaneous Forward Current -Amperes versus Instantaneous Forward Voltage - Volts

Figure 4  
Typical Reverse Characteristics



Instantaneous Reverse Current - MicroAmperes versus Percent of Rated Peak Reverse Voltage - Volts

## Ordering Information

Device	Packing
(Part Number)-BP	Bulk;1K/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.