



Micro Commercial Components



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## Features

- UL Recognized File # E165989
- Glass Passivated Chip junction
- High Surge Overload Rating
- Case Material: Molded Plastic. UL Flammability Classification 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

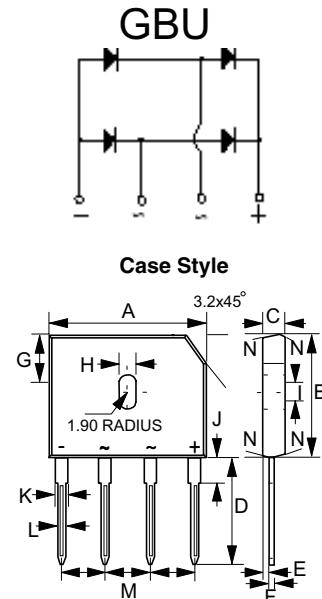
## Electrical Characteristics @ 25°C Unless Otherwise Specified

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

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

GBU10A  
THRU  
GBU10M

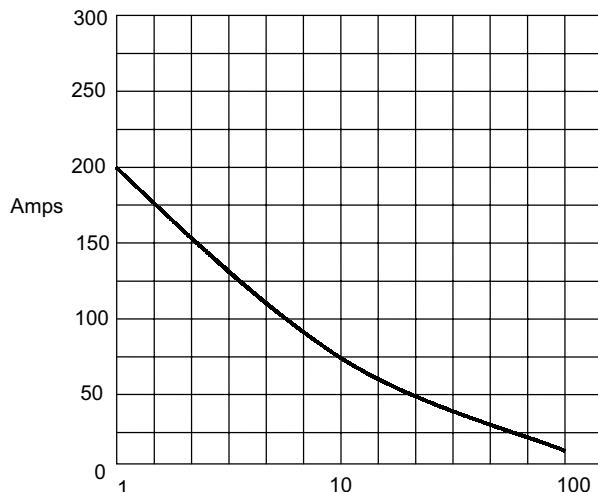
10 Amp Single Phase  
Glass Passivated  
Bridge Rectifiers  
50 to 1000 Volts



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	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		

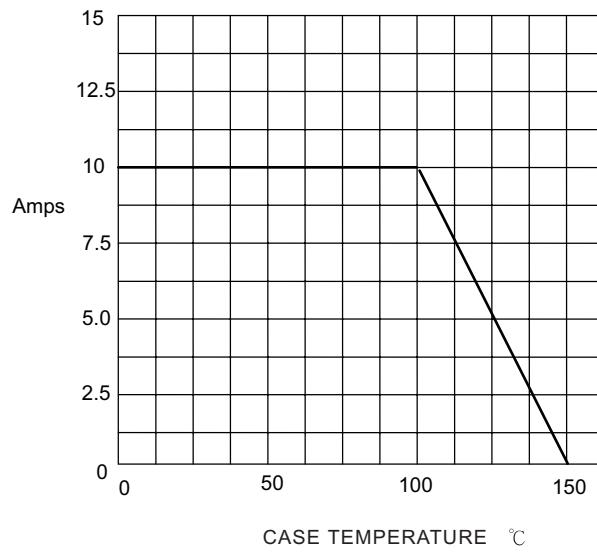
## GBU10A thru GBU10M

Figure1  
Maximum Forward Surge Current



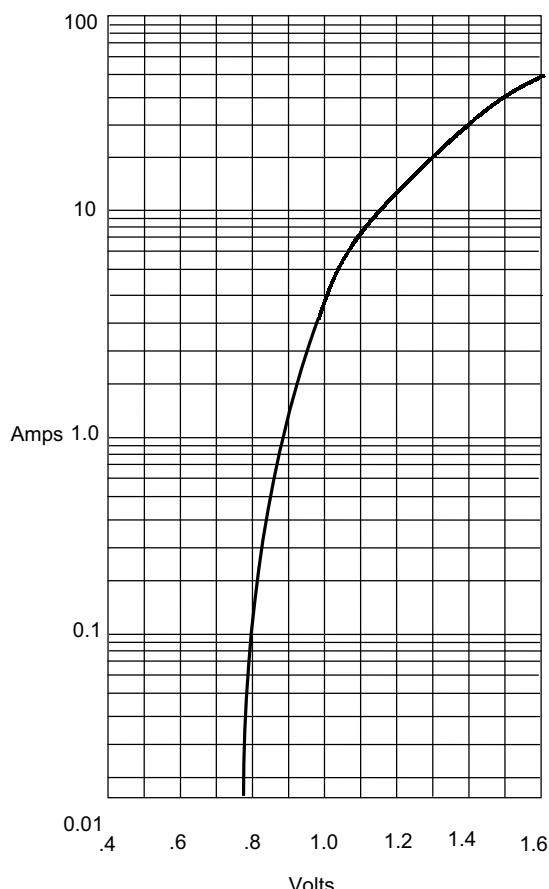
Peak Forward Surge Current - Amperes versus  
Number of Cycles At 60 Hz

Figure2  
Derating Curve Output Rectified Current



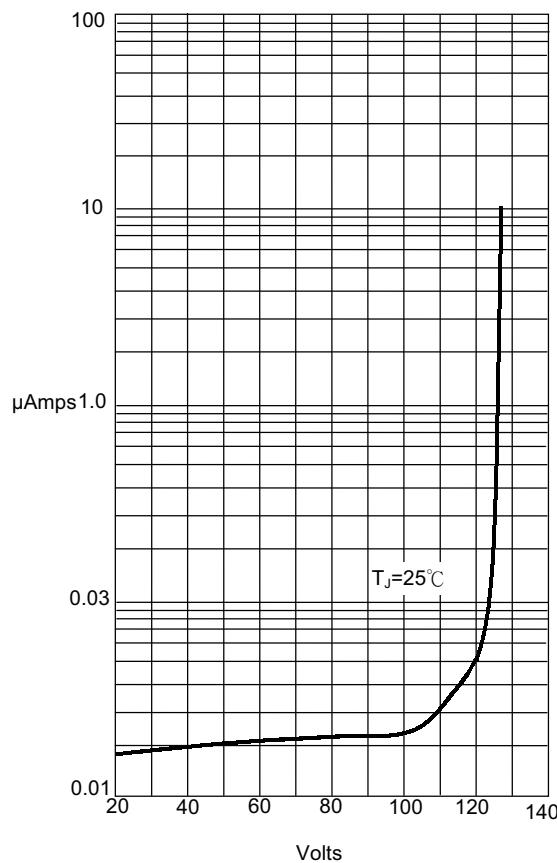
CASE TEMPERATURE °C

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

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