



# THE DATASHEET OF GBU4D-BP





Micro Commercial Components



Micro Commercial Components  
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# GBU4A THRU GBU4M

## Features

- Halogen free available upon request by adding suffix "-HF"
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Glass Passivated Chip Junction
- High Surge Overload Rating
- Lead Free Finish/RoHS Compliant (NOTE 1) ("P" Suffix designates RoHS Compliant. See ordering information)

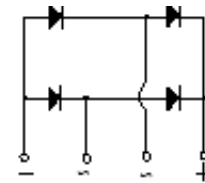
## Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989
- Mounting Torque: 5in-lbs.

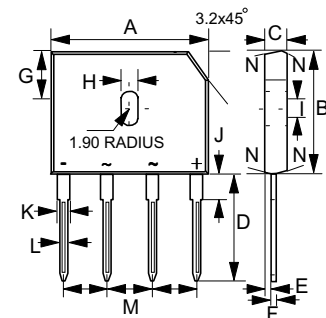
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBU4A	GBU4A	50V	35V	50V
GBU4B	GBU4B	100V	70V	100V
GBU4D	GBU4D	200V	140V	200V
GBU4G	GBU4G	400V	280V	400V
GBU4J	GBU4J	600V	420V	600V
GBU4K	GBU4K	800V	560V	800V
GBU4M	GBU4M	1000V	700V	1000V

## 4 Amp Single Phase Glass Passivated Bridge Rectifier 50 to 1000 Volts

### GBU



Case Style



## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current (NOTE 2)	$I_{F(AV)}$	4 A	$T_c = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	150A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM}=2A$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$ 500uA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical thermal resistance per leg	$R_{\theta JA}$ $R_{\theta JC}$	22°C/W 2.2°C/W	
Typical Junction Capacitance	$C_J$	45pF	Measured at 1.0MHz, $V_R=4.0V$

- Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7  
2. Unit case mounted on 1.6 x 1.6 x 0.06" thick (4.0 x 4.0 x 0.15 cm) aluminum plate

### 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				

[www.mccsemi.com](http://www.mccsemi.com)

GBU4A thru GBU4M

FIG.1 - FORWARD CURRENT DERATING CURVE

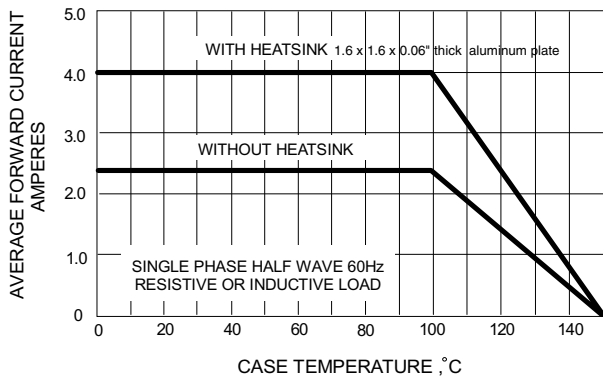


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

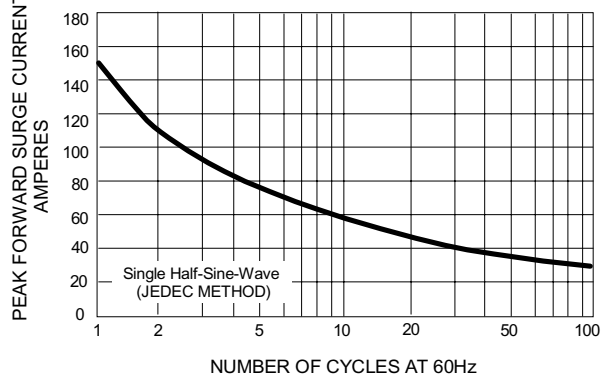


FIG.3 - TYPICAL JUNCTION CAPACITANCE

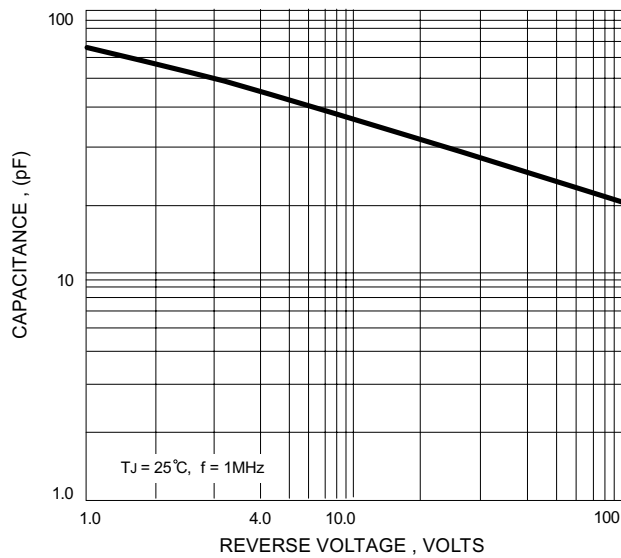


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

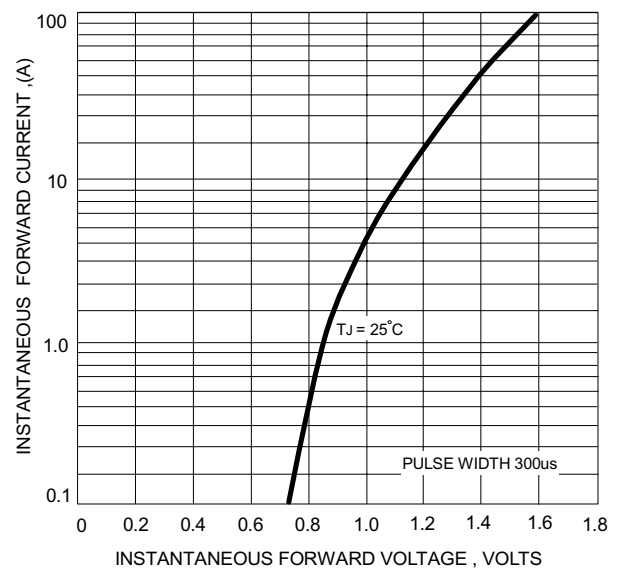
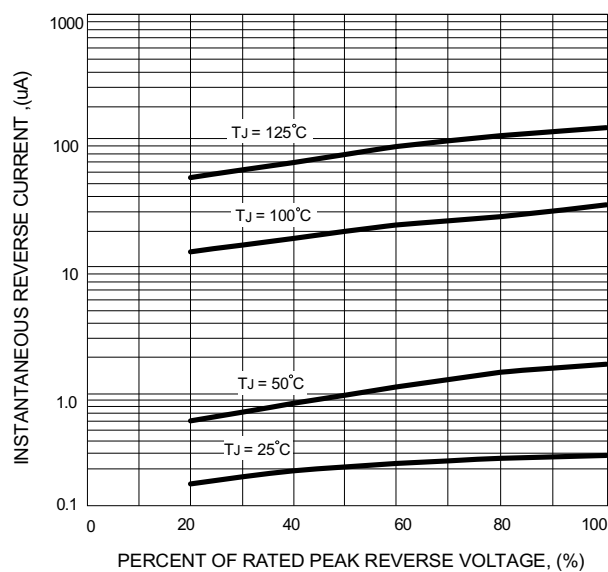


FIG.5 - TYPICAL REVERSE CHARACTERISTICS





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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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