

**Micro Commercial Components** 

ROHS

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# GBU4A THRU GBU4M

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

# **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**

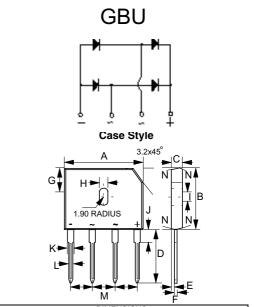
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989
- Mounting Torque: 5in-lbs.

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

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward	$I_{F(AV)}$	4 A	Tc = 100°C		
Current (NOTE 2)					
Peak Forward Surge	$I_{FSM}$	150A	8.3ms, half sine		
Current					
Maximum					
Instantaneous	$V_{F}$	1.0V	I <sub>FM</sub> =2A		
Forward Voltage			T <sub>J</sub> = 25°C		
Maximum DC					
Reverse Current At	$I_R$	5 μΑ	T <sub>J</sub> = 25°C		
Rated DC Blocking		500uA	T <sub>J</sub> = 125°C		
Voltage			<b>o</b>		
Typical thermal	$R_{ hetaJA}$	22°C/W			
resistance per leg	$R_{\theta JC}$	2.2°C/W			
Typical Junction	CJ	45pF	Measured at		
Capacitance		•	1.0MHz, V <sub>R</sub> =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  $(4.0 \times 4.0 \times 0.15 \text{ cm})$  aluminum plate

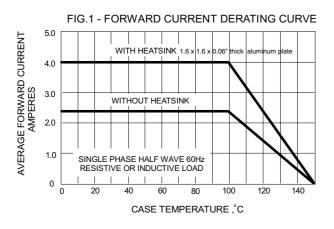


DIMENSIONS						
	INCHES		ММ			
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.860	.880	21.80	22.30		
В	.720	.740	18.30	18.80		
С	.130	.142	3.30	3.60		
D	.690	.717	17.50	18.20		
Е	.030	.039	0.76	1.00		
F	.018	.024	0.46	0.60		
G	.290	.310	7.40	7.90		
Τ	.140	.160	3.50	4.10		
	.065	.085	1.65	2.16		
۲	.060	.096	1.52	2.45		
Κ	.077	.098	1.95	2.50		
L	.040	.050	1.02	1.27		
M	.190	.210	4.83	5.33		
Ν	7.0° TYPICAL					



## GBU4A thru GBU4M

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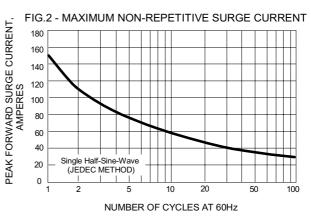


FIG.3 - TYPICAL JUNCTION CAPACITANCE

100

100

TJ=25°C, f=1MHz

1.0

10.0

REVERSE VOLTAGE, VOLTS

4.0

1.0

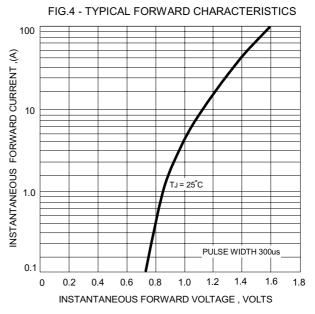
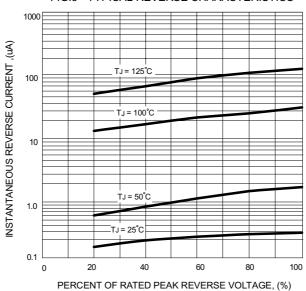


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

100





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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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