

**FI** E502650

## **Features**

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Lead Free Finish/RoHS Compliant (Note1) ("P"Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- · Moisture Sensitivity Level 1
- · High Surge Overload Rating

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 2.2°C/W Junction To Case
- Typical Thermal Resistance: 20°C/W Junction To Ambient

## **Mechanical Data**

• Mounting Torque: 5in-lbs

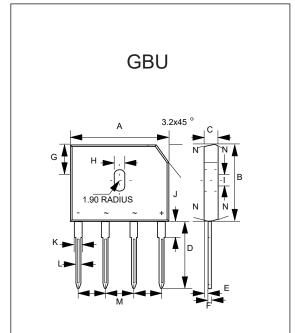
MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBU8A	GBU8A	50V	35V	50V
GBU8B	GBU8B	100V	70V	100V
GBU8D	GBU8D	200V	140V	200V
GBU8G	GBU8G	400V	280V	400V
GBU8J	GBU8J	600V	420V	600V
GBU8K	GBU8K	800V	560V	800V
GBU8M	GBU8M	1000V	700V	1000V

#### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	8.0A	T <sub>C</sub> = 100°C	
Peak Forward Surge Current	I <sub>FSM</sub>	220A 200A 440A 400A	$T_J = 25^{\circ}C$ 8.3ms, $T_J = 125^{\circ}C$ Half Sine $T_J = 25^{\circ}C$ 1.0ms, $T_J = 125^{\circ}C$ Half Sine	
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.0V 1.2V	I <sub>FM</sub> = 4.0A; T <sub>J</sub> = 25°C I <sub>FM</sub> = 8.0A; T <sub>J</sub> = 25°C	
Rating for fusing	l²t	200A <sup>2</sup> s 96.8A <sup>2</sup> s	t<8.3ms t<1.0ms	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	5μΑ 500μΑ	T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C	
Typical Junction Capacitance	CJ	60pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V	

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

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



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	0.860	0.880	21.80	22.30	
В	0.720	0.740	18.30	18.80	
С	0.130	0.142	3.30	3.60	
D	0.690	0.717	17.50	18.20	
Е	0.030	0.039	0.76	1.00	
F	0.018	0.024	0.46	0.60	
G	0.290	0.310	7.40	7.90	
Н	0.140	0.160	3.50	4.10	
I	0.065	0.085	1.65	2.16	
J	0.060	0.096	1.52	2.45	
K	0.077	0.098	1.95	2.50	
L	0.040	0.050	1.02	1.27	
М	0.190	0.210	4.83	5.33	
N	7.0° TYPICAL				



## **Curve Characteristics**

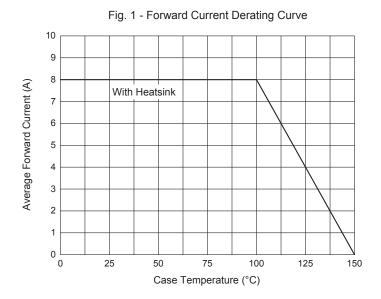


Fig. 3 - Typical Instantaneous Forward Characteristics

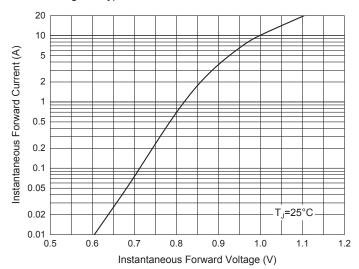


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

240

200

160

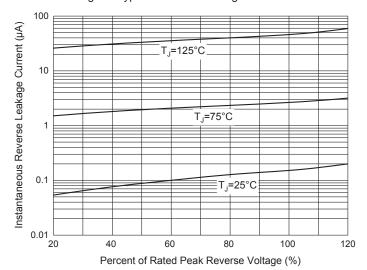
80

8.3 ms Single Half Sine-Wave

1 10

Number of Cycles at 60 Hz

Fig. 4 - Typical Reverse Leakage Characteristics





## **Ordering Information**

Device	Packing	
Part Number-BP	Bulk:20pcs/Tube,1Kpcs/Box,2Kpcs/Carton	

Note: Adding "-HF" Suffix For Halogen Free, eg. Part Number-BP-HF

#### \*\*\*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. **Micro Commercial Components Corp**, products are sold subject to the general terms and conditions of commercial sale, as published at

https://www.mccsemi.com/Home/TermsAndConditions.

#### \*\*\*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.

Rev.3-2-12012020 3/3 MCCSEMI.COM