



Micro Commercial Components

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# GBU8A THRU GBU8M

## Features

- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"
- 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
- Typical Thermal Resistance 2.2°C/W Junction to Case
- UL Recognized File # E165989
- Mounting Torque: 5.0 in-lbs Maximum

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

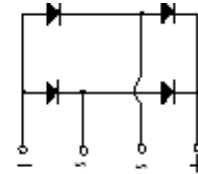
## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	8 A	$T_c = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	200A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM}=4A$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$ 500uA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
$I^2t$ Rating for fusing	$I^2t$	166A <sup>2</sup> S	( $t < 8.3\text{ms}$ )
Typical Junction Capacitance	$C_J$	60pF	Measured at 1.0MHz, $V_R=4.0V$

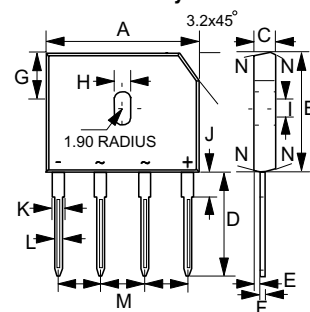
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7

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

### GBU



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	.140	3.30	3.56	
D	.690	.710	17.50	18.00	
E	.030	.039	0.76	1.00	
F	.018	.022	0.46	0.56	
G	.290	.310	7.40	7.90	
H	.140	.160	3.50	4.10	
I	.065	.085	1.65	2.16	
J	.089	.108	2.25	2.75	
K	.077	.093	1.95	2.35	
L	.040	.050	1.02	1.27	
M	.190	.210	4.83	5.33	
N	7.0° TYPICAL				

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FIG.1 - FORWARD CURRENT DERATING CURVE

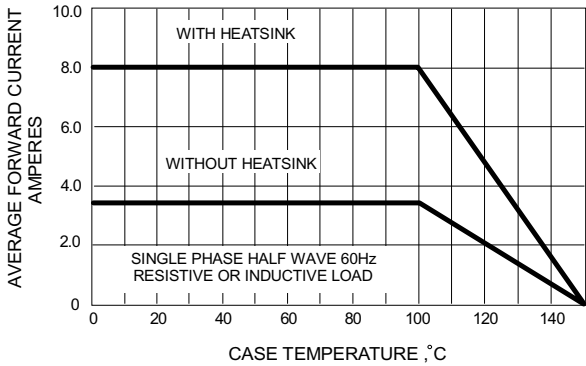


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

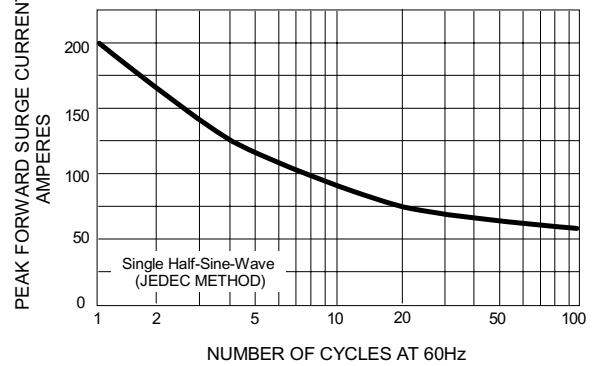


FIG.3 - TYPICAL JUNCTION CAPACITANCE

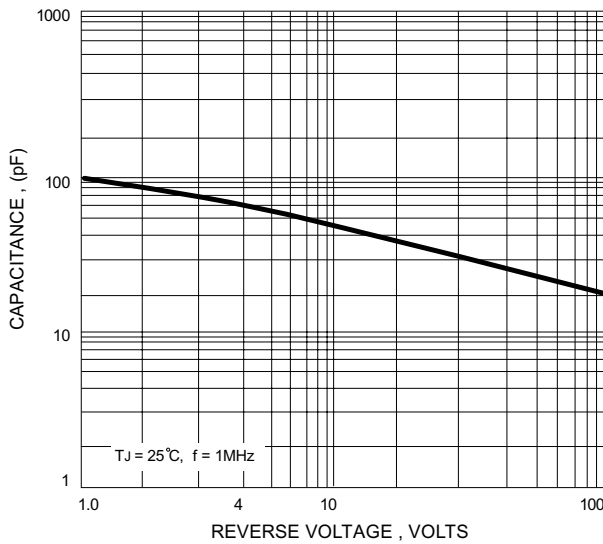


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

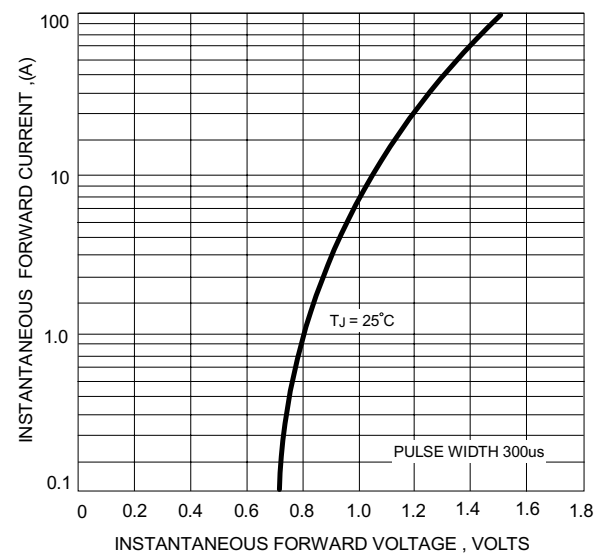
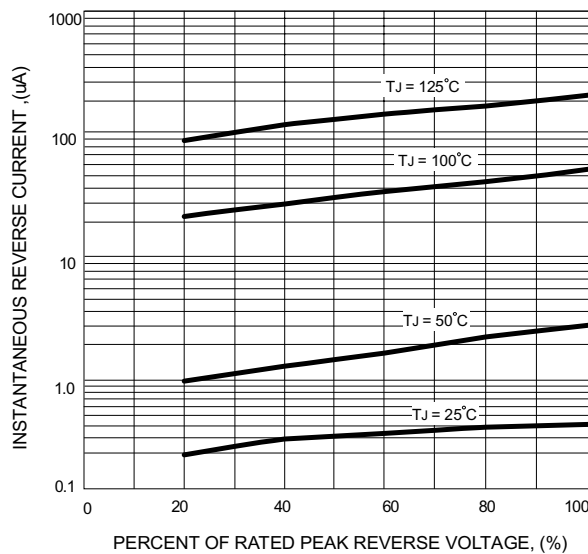


FIG.5 - TYPICAL REVERSE CHARACTERISTICS





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## Ordering Information

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

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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