



Micro Commercial Components



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GBU6A THRU GBU6M

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
GBU6A	GBU6A	50V	35V	50V
GBU6B	GBU6B	100V	70V	100V
GBU6D	GBU6D	200V	140V	200V
GBU6G	GBU6G	400V	280V	400V
GBU6J	GBU6J	600V	420V	600V
GBU6K	GBU6K	800V	560V	800V
GBU6M	GBU6M	1000V	700V	1000V

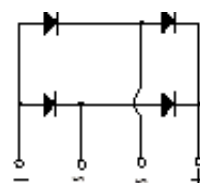
Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current (NOTE 2)	$I_{F(AV)}$	6 A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	175A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	V_F	1.0V	$I_{FM}=3A$ $T_J = 25^\circ\text{C}$
I^2t Rating for fusing	I^2t	127A ² S	($t < 8.3\text{ms}$)
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5 μA 500uA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	50pF	Measured at 1.0MHz, $V_R=4.0V$

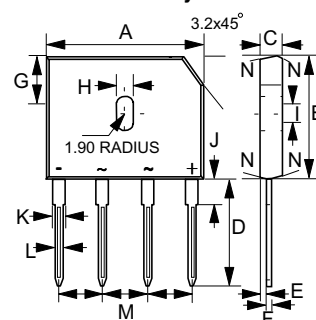
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7
2. Unit mounted on 50 x 50 x 1.6mm copper plate heatsink.

6 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	.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				

GBU6A thru GBU6M

FIG.1 - FORWARD CURRENT DERATING CURVE

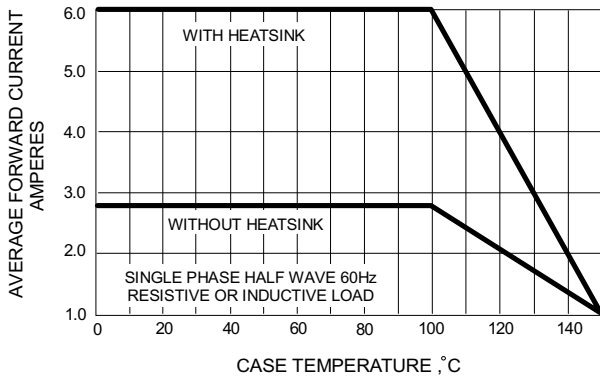


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

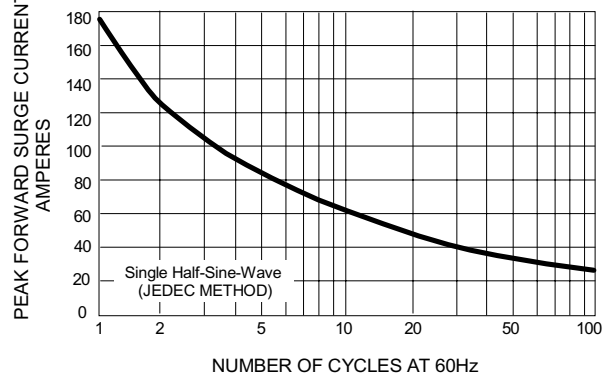


FIG.3 - TYPICAL JUNCTION CAPACITANCE

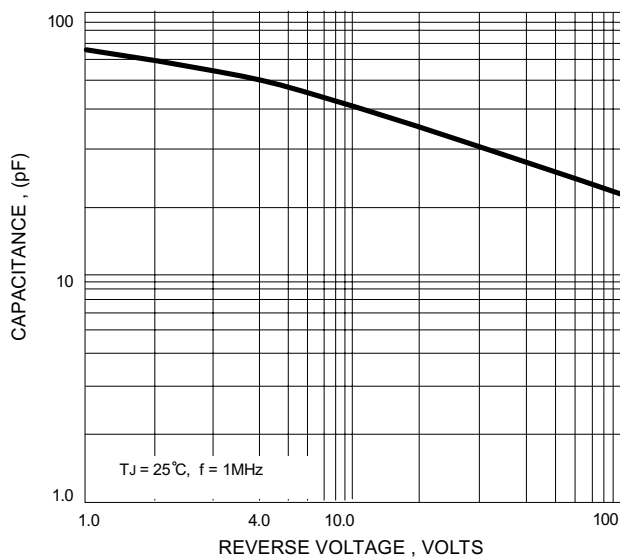


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

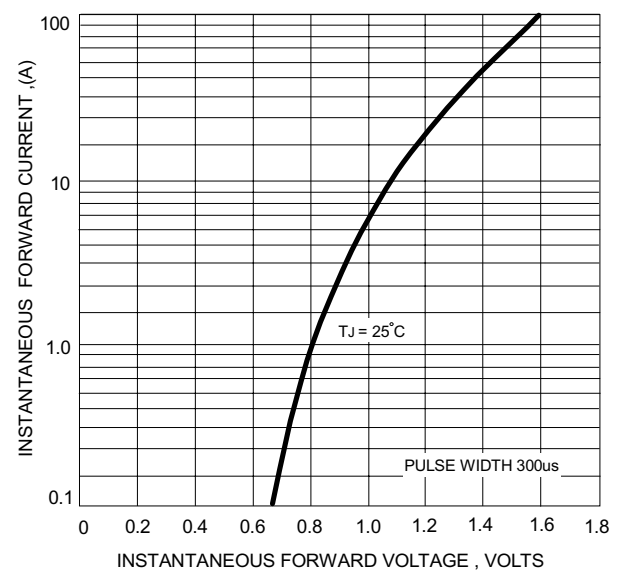
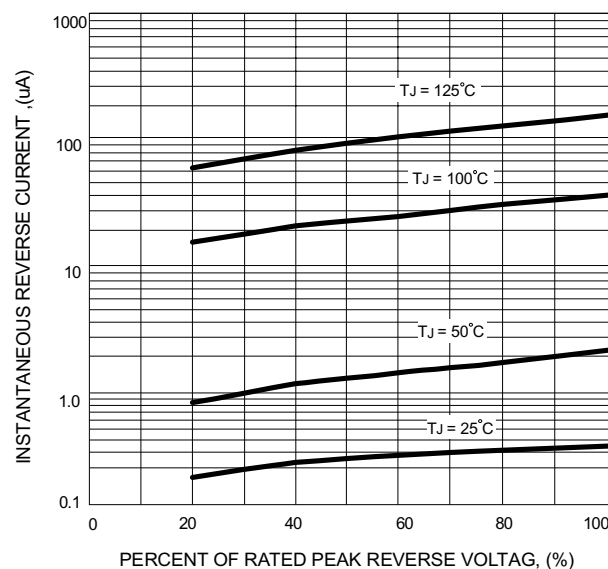


FIG.5 - TYPICAL REVERSE CHARACTERISTICS





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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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