



THE DATASHEET OF GBU8D-BP



	E502650
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Features

- Halogen Free. "Green" Device (Note 1)
- Lead Free Finish/RoHS Compliant (Note 2) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating
- 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 (Note 3)
- 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

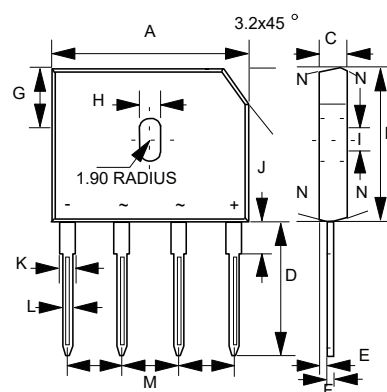
Average Forward Current	$I_{F(AV)}$	8.0A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	I_{FSM}	220A 200A 440A 400A	$T_J = 25^\circ\text{C}$ 8.3ms, Half Sine $T_J = 125^\circ\text{C}$ $T_J = 25^\circ\text{C}$ 1.0ms, Half Sine $T_J = 125^\circ\text{C}$
Maximum Instantaneous Forward Voltage	V_F	1.0V 1.2V	$I_{FM} = 4.0\text{A}; T_J = 25^\circ\text{C}$ $I_{FM} = 8.0\text{A}; T_J = 25^\circ\text{C}$
Rating for fusing	I^2t	200A ² s 96.8A ² s	$t < 8.3\text{ms}$ $t < 1.0\text{ms}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	I_R	5µA 500µA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical Junction Capacitance	C_J	60pF	Measured at 1.0MHz, $V_R = 4.0\text{V}$

Note:

1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
2. High temperature solder exemption applied, see EU directive annex 7a.
3. Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

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

GBU



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	0.860	0.880	21.80	22.30	
B	0.720	0.740	18.30	18.80	
C	0.130	0.142	3.30	3.60	
D	0.690	0.717	17.50	18.20	
E	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	
H	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	
M	0.190	0.210	4.83	5.33	
N	7.0° TYPICAL				

Curve Characteristics

Fig. 1 - Forward Current Derating Curve

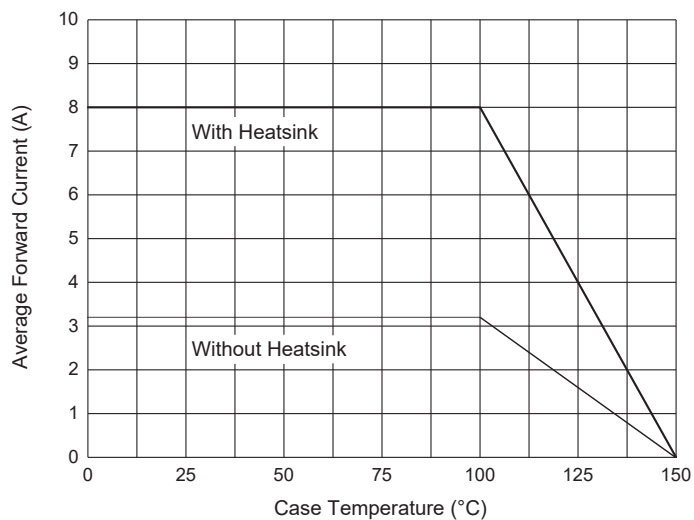


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

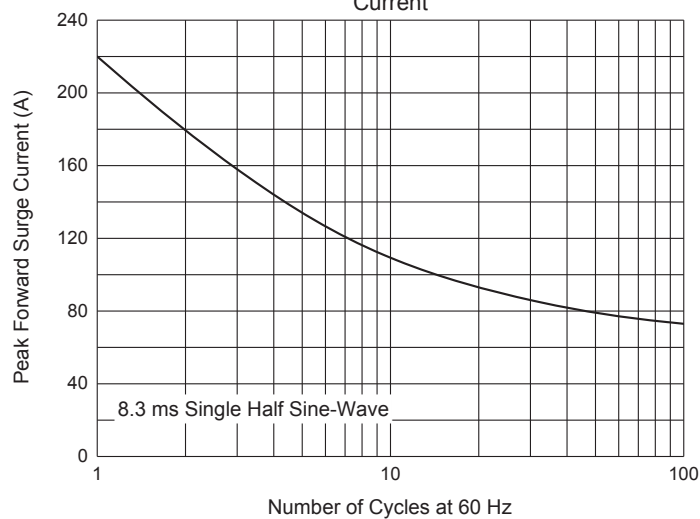


Fig. 3 - Typical Instantaneous Forward Characteristics

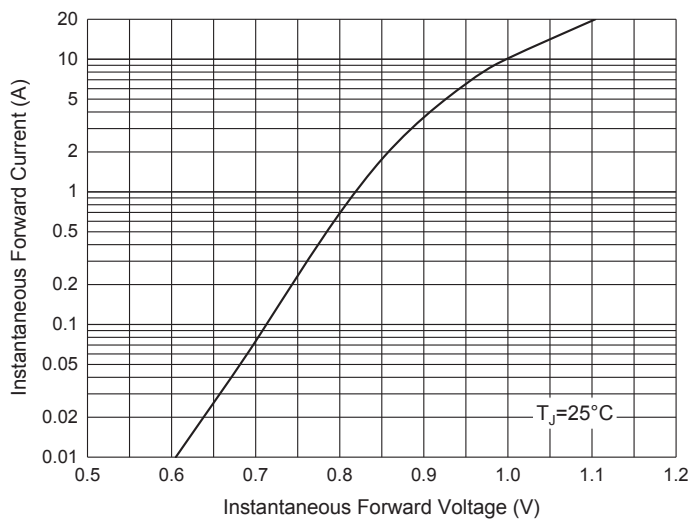
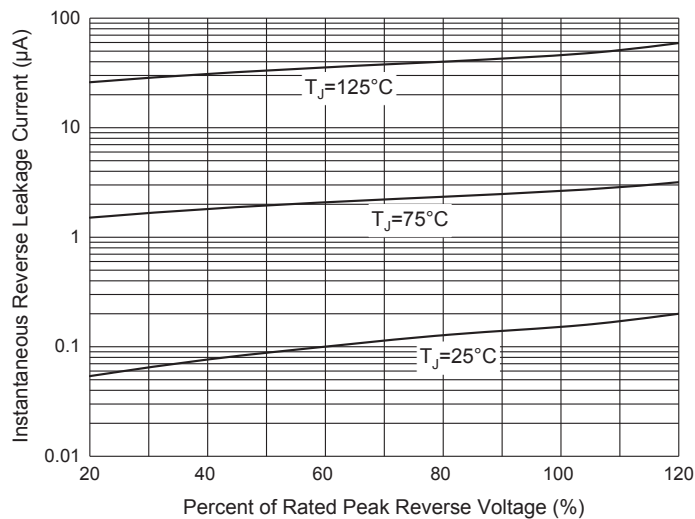


Fig. 4 - Typical Reverse Leakage Characteristics



Ordering Information

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

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