	<b>E502650</b>
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### 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
- High Surge Overload Rating

### Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance(Per Leg): 2.2°C/W Junction to Case (Note 2)
- Thermal Resistance(Per Leg): 22°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
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

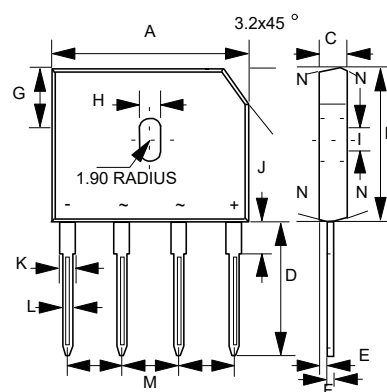
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current <sup>(NOTE 2)</sup>	$I_{F(AV)}$	4.0A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	160A 150A 320A 300A	$T_J = 25^\circ\text{C}$ 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	$I_{FM} = 2.0\text{A};$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$ 500 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Rating for fusing	$I^2t$	106.24A <sup>2</sup> s 51.2 A <sup>2</sup> s	$t < 8.3\text{ms}$ $t < 1.0\text{ms}$
Typical Junction Capacitance	$C_J$	45pF	Measured at 1.0MHz, $V_R = 4.0\text{V}$

Note: 1. High Temperature Solder Exemption Applied, See EU Directive Annex 7a  
2. Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

## 4 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

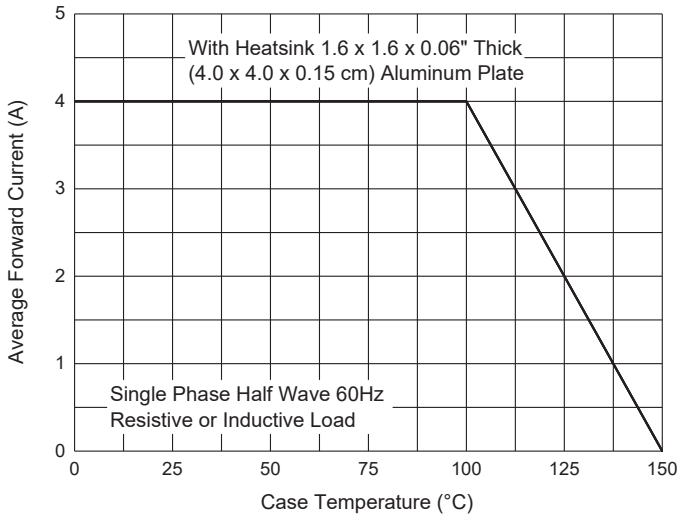


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

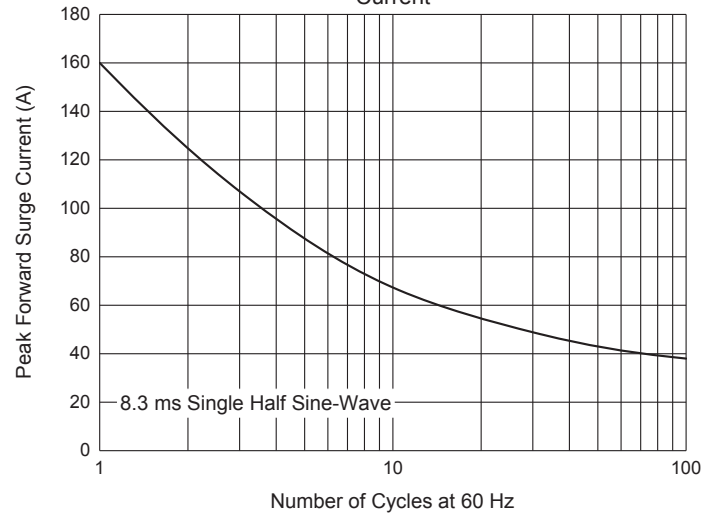


Fig. 3 - Typical Instantaneous Forward Characteristics

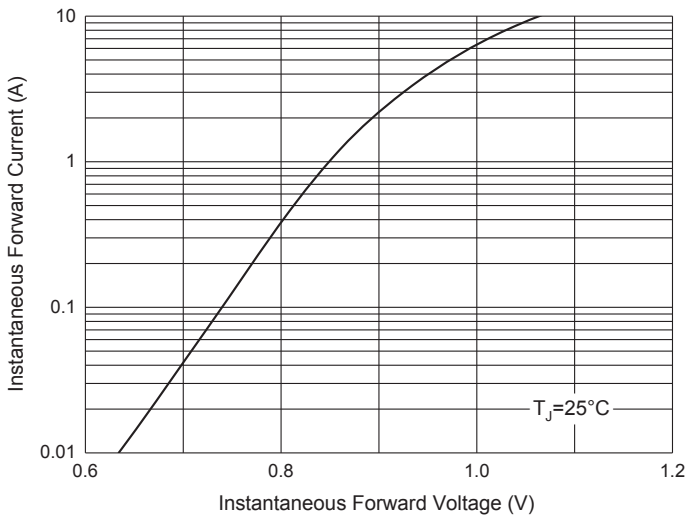
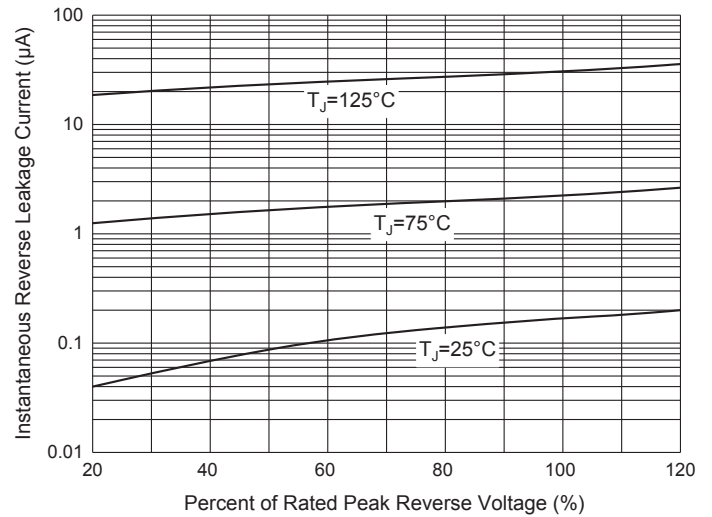


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

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

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

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