

## Features

- Glass Passivated Chip Junction
- High Surge Forward Current Capability
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/Rohs Compliant (Note 1) ("P" Suffix Designates Compliant. See Ordering Information)
- Halogen Free Available Upon Request By Adding Suffix "-HF"

## Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Max Thermal Resistance: 1.0°C/W Junction to Case (Note 2)
- Max Thermal Resistance: 22°C/W Junction to Ambient
- Mounting Torque: 5in-lbs Maximum

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBU30005	GBU30005	50V	35V	50V
GBU3001	GBU3001	100V	70V	100V
GBU3002	GBU3002	200V	140V	200V
GBU3004	GBU3004	400V	280V	400V
GBU3006	GBU3006	600V	420V	600V
GBU3008	GBU3008	800V	560V	800V
GBU3010	GBU3010	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

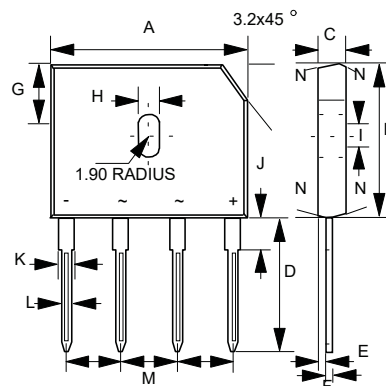
Maximum Average Forward Current	$I_{F(AV)}$	30A	$T_C = 90^\circ\text{C}$ ; With Heatsink
Peak Forward Surge Current	$I_{FSM}$	350A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM} = 15\text{A}$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current at Rated DC Blocking Voltage	$I_R$	5 $\mu\text{A}$	$T_J = 25^\circ\text{C}$
Rating for Fusing	$I^2t$	508A <sup>2</sup> s	$t < 8.3\text{ms}$
Dielectric strength	$V_{dis}$	2.5KV	Terminals to Case, AC 1 Minute

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

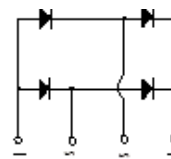
2. Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

# 30 Amp Single Phase Glass Passivated Bridge Rectifiers 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				



Case Style

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

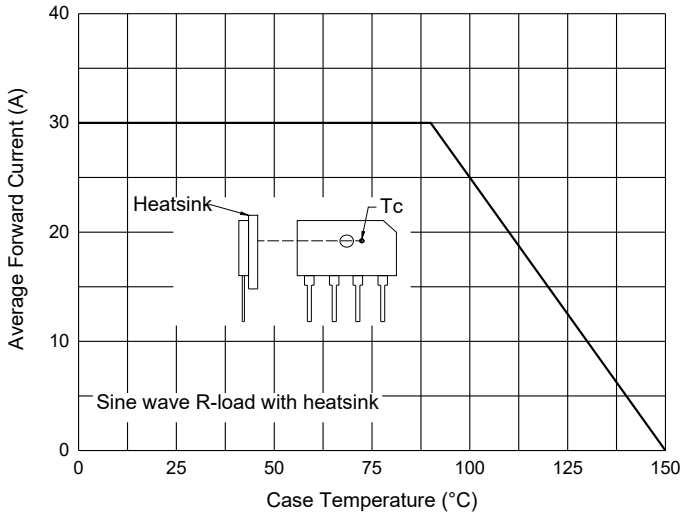


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

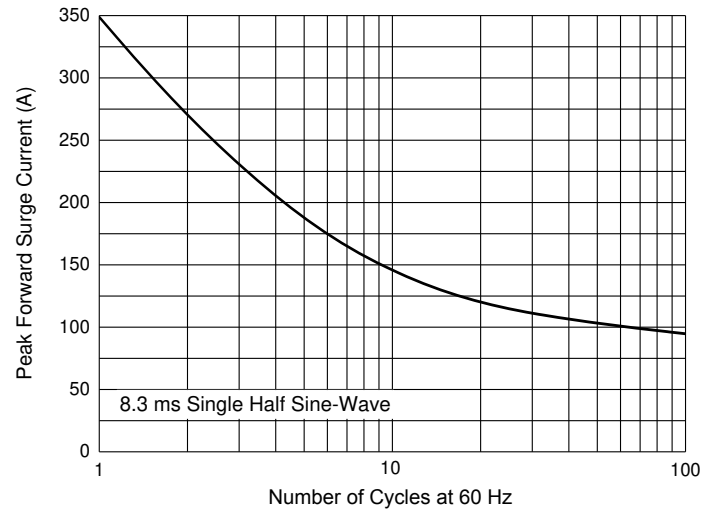


Fig. 3 - Typical Instantaneous Forward Characteristics

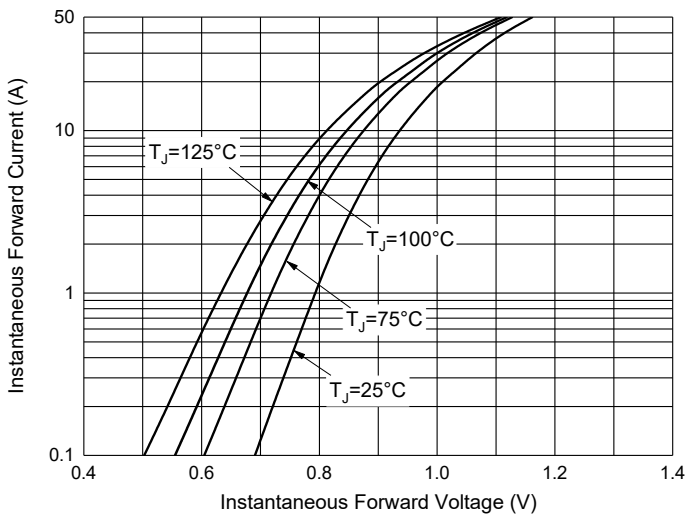
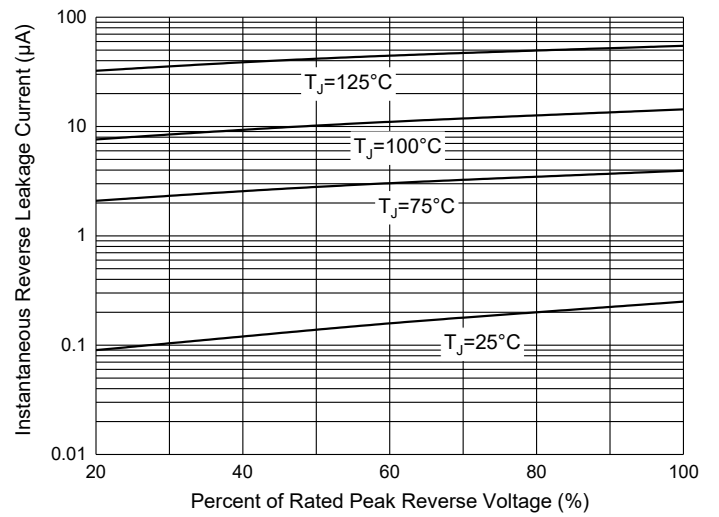


Fig. 4 - Typical Reverse Leakage Characteristics



## 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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