

	<b>E502650</b>
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### Features

- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Low Forward Voltage Drop, High Current Capability
- Lead Free Finish/RoHS Compliant (Note1) ("P" Suffix Designates Compliant. See Ordering Information)
- Epoxy Meets UL 94 V-0 Flammability Rating

### Maximum Ratings

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Typical Thermal Resistance: 0.8°C/W Junction to Case (Note 2)
- Typical Thermal Resistance: 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
GBJ50005	GBJ50005	50V	35V	50V
GBJ5001	GBJ5001	100V	70V	100V
GBJ5002	GBJ5002	200V	140V	200V
GBJ5004	GBJ5004	400V	280V	400V
GBJ5006	GBJ5006	600V	420V	600V
GBJ5008	GBJ5008	800V	560V	800V
GBJ5010	GBJ5010	1000V	700V	1000V

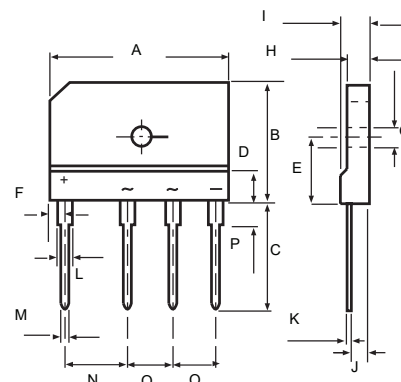
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	50A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	400A	8.3ms, Half Sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM} = 25A; T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu$ A	$T_J = 25^\circ\text{C}$
Dielectric Strength@ Terminals to Case, AC 1 Minute	$V_{dis}$	2.5KV	
Rating for Fusing	$I^2t$	664 A <sup>2</sup> s	$t < 8.3\text{ms}$

- 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.

# 50 Amp Glass Passivated Bridge Rectifier 50 - 1000 Volts

## GBJ



DIM	DIMENSIONS				NOTE
	INCHES		MM		
A	MIN	MAX	MIN	MAX	
A	1.170	1.190	29.70	30.30	
B	0.780	0.800	19.70	20.30	
C	0.670	0.710	17.00	18.00	
D	0.190	0.190	4.70	4.90	
E	0.430	0.440	10.80	11.20	
F	0.090	0.110	2.30	2.70	
G	0.120	0.130	3.10	3.40	
H	0.130	0.150	3.40	3.80	
I	0.170	0.190	4.40	4.80	
J	0.100	0.110	2.50	2.90	
K	0.020	0.030	0.60	0.80	
L	0.080	0.090	2.00	2.40	
M	0.040	0.040	0.90	1.10	
N	0.390	0.400	9.80	10.20	
O	0.290	0.300	7.30	7.70	
P	0.150	0.170	3.80	4.20	

**Curve Characteristics**

Fig. 1 - Forward Current Derating Curve

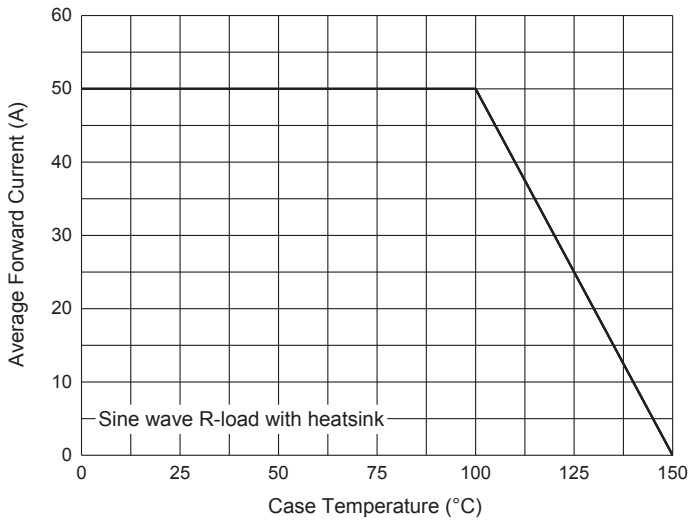


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current

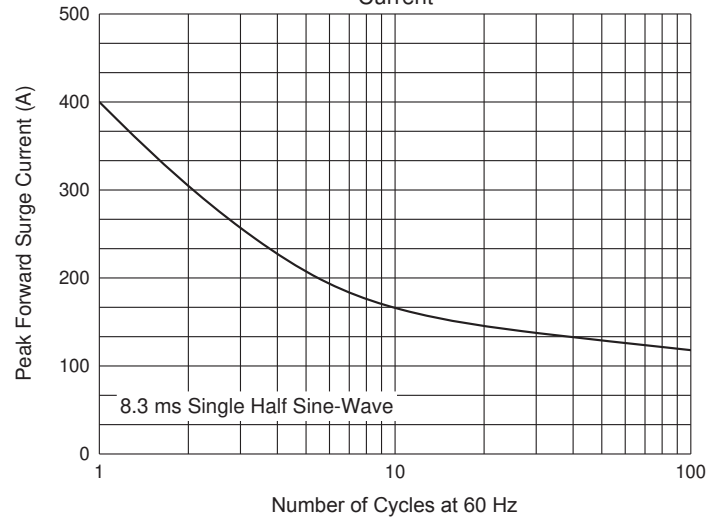


Fig. 3 - Typical Instantaneous Forward Characteristics

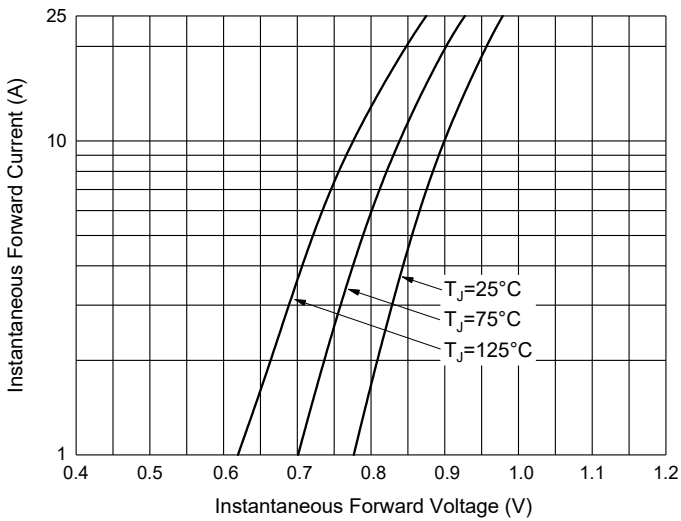
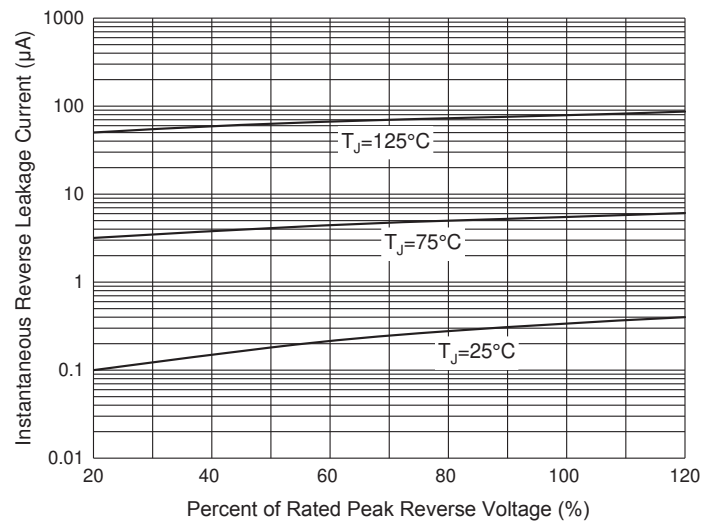


Fig. 4 - Typical Reverse Leakage Characteristics



## Ordering Information

Device	Packing
Part Number-BP	Bulk:15pcs/Tube,750pcs/Box,1500pcs/Carton

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

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