

**FL** E502650

## **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 Current Capability

# 25 Amp Glass Passivated Bridge Rectifier 50 - 1000 Volts

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 1°C/W Junction to Case
- Thermal Resistance:5.5°C/W Junction to Ambient (with heatsink)
- Thermal Resistance:22°C/W Junction to Ambient (without heatsink)

### **Mechanical Data**

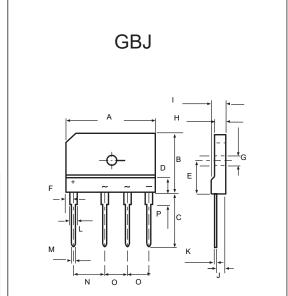
• Mounting Torque: 5in-lbs

MCC Part Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBJ25005	GBJ25005	50V	35V	50V
GBJ2501	GBJ2501	100V	70V	100V
GBJ2502	GBJ2502	200V	140V	200V
GBJ2504	GBJ2504	400V	280V	400V
GBJ2506	GBJ2506	600V	420V	600V
GBJ2508	GBJ2508	800V	560V	800V
GBJ2510	GBJ2510	1000V	700V	1000V

## Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	I <sub>F(AV)</sub>	25A	T <sub>C</sub> = 100°C	
Peak Forward Surge Current	I <sub>FSM</sub>	350A	8.3ms, Half Sine	
Current		700A	1.0ms, Half Sine	
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.0V	I <sub>FM</sub> = 12.5A;T <sub>J</sub> = 25°C	
Maximum DC Reverse	I <sub>R</sub>	10µA	T <sub>J</sub> = 25°C	
Current At Rated DC Blocking Voltage		500µA	T <sub>J</sub> = 125°C	
Typical Junction Capacitance	C <sub>J</sub>	85pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V	
Rating for Fusing	I²t	510 A <sup>2</sup> s	t<8.3ms	
Dielectric Strength@ Terminals to Case,AC 1 Minute	Vdis	2KV		

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



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	NOTE
Α	1.170	1.190	29.70	30.30	
В	0.780	0.800	19.70	20.30	
С	0.670	0.710	17.00	18.00	
D	0.190	0.190	4.70	4.90	
Е	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	
Н	0.130	0.150	3.40	3.80	
	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	
М	0.040	0.040	0.90	1.10	
Ν	0.390	0.400	9.80	10.20	
0	0.290	0.300	7.30	7.70	
Р	0.150	0.170	3.80	4.20	



## **Curve Characteristics**

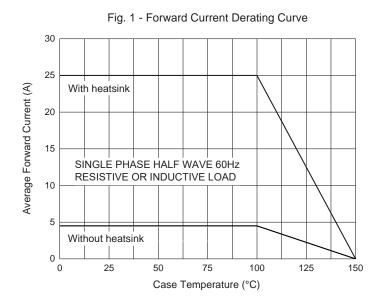


Fig. 3 - Typical Instantaneous Forward Characteristics

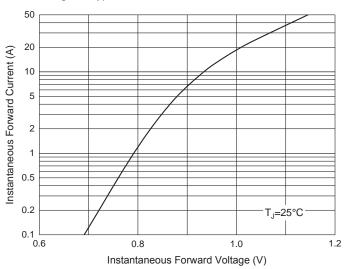
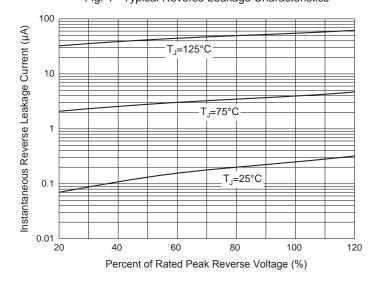


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current 400 350 Peak Forward Surge Current (A) 300 250 200 150 100 50 8.3 ms Single Half Sine-Wave 0 10 100 Number of Cycles at 60 Hz

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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