

**W** 

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

# **Maximum Ratings**

- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- ESD Voltage: HBM:4KV; MM:400V; CDM:800V
- Typical Thermal Resistance: 0.8°C/W Junction to Case(Note 2)
- Typical Thermal Resistance:3.5°C/W Junction to Lead(Without Heatsink)
- Typical Thermal Resistance:12°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
GBJ15005	GBJ15005	50V	35V	50V
GBJ1501	GBJ1501	100V	70V	100V
GBJ1502	GBJ1502	200V	140V	200V
GBJ1504	GBJ1504	400V	280V	400V
GBJ1506	GBJ1506	600V	420V	600V
GBJ1508	GBJ1508	800V	560V	800V
GBJ1510	GBJ1510	1000V	700V	1000V

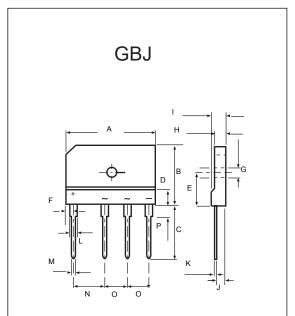
# Electrical Characteristics @ 25°C Unless Otherwise Specified

	1			
Average Forward Current	I <sub>F(AV)</sub>	15A	T <sub>C</sub> = 110°C	
Peak Forward Surge Current	I <sub>FSM</sub>	240A	8.3ms, Half Sine	
Maximum Instantaneous Forward Voltage	V <sub>F</sub>	1.0V	I <sub>FM</sub> = 7.5A;T <sub>J</sub> = 25°C	
Maximum DC Reverse Current At Rated DC Blocking Voltage	I <sub>R</sub>	10μA 500μA	T <sub>J</sub> = 25°C T <sub>J</sub> = 125°C	
Typical Junction Capacitance	C <sub>J</sub>	60pF	Measured at 1.0MHz, V <sub>R</sub> =4.0V	
Rating for Fusing	I <sup>2</sup> t	240 A <sup>2</sup> s	t<8.3ms	
Dielectric Strength	V <sub>dis</sub>	2.5 KV	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.

# 15 Amp Glass Passivated Bridge Rectifier 50 - 1000 Volts



	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		
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		
Н	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		
0	0.290	0.300	7.30	7.70		
Р	0.150	0.170	3.80	4.20		



## **Curve Characteristics**

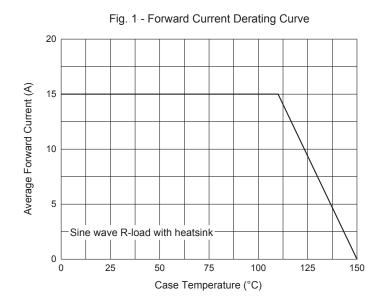


Fig. 3 - Typical Instantaneous Forward Characteristics

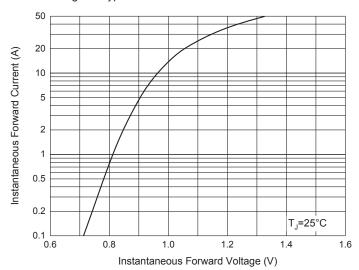
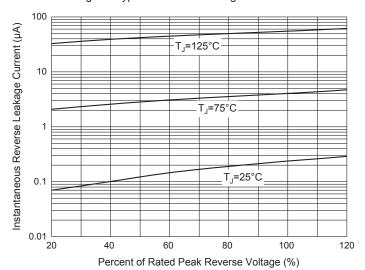


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge
Current

280
240
240
40
8.3 ms Single Half Sine-Wave
0
1 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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