

# GBJ25005 THRU GBJ2510

## 25 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts

### Features

- Lead Free Finish/RoHS Compliant (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)
- Ideal for printed circuit board
- Low forward voltage drop, high current capability.
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Mounting: Through Hole for #6 Screw
- Recommended Torque: 5.7 cm-kg (5 in-lbs)
- Mounting Torque: 10 cm-kg (8.8 in-lbs) maximum
- Halogen free available upon request by adding suffix "-HF"

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

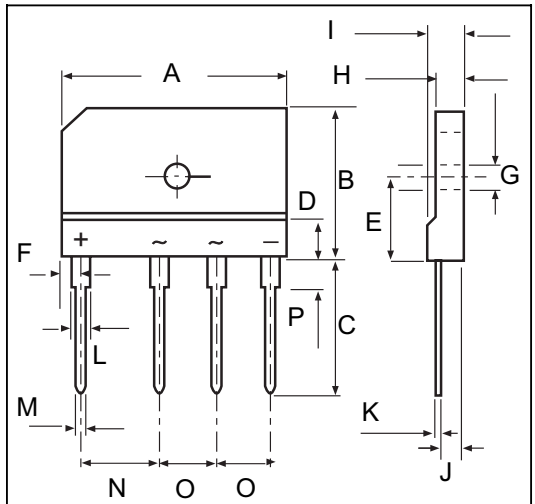
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBJ25005	GBJ25005	50V	35V	50V
GBJ2501	GBJ2501	100V	70V	100V
GBJ2502	GBJ2502	200V	140V	200V
GBJ2504	GBJ2504	400V	280V	400V
GBJ2506	GBJ2506	600V	420V	600V
GBJ2508	GBJ2508	800V	560V	800V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

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

Average Forward Current	$I_{F(AV)}$	25 A	$T_c = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	350A 700A	8.3ms, half sine 1.0ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM} = 12.5\text{ A}$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 500 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
$I^2t$ Rating for Fusing	$I^2t$	510A <sup>2</sup> S	$t < 8.3\text{ms}$
Typical thermal resistance, With heatsink	$R_{\theta J-C}$ $R_{\theta J-A}$	1.4°C/W 5.5°C/W	
Dielectric strength @ terminals to case, AC 1 minute	$V_{dis}$	2KV	
Typical Junction Capacitance	$C_J$	85 pF	Measured at 1.0MHz, $V_R = 4.0\text{V}$

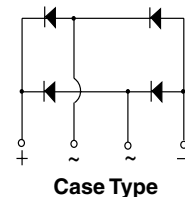
Notes: 1.High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a

### GBJ



### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.170	1.190	29.70	30.30	
B	.780	.800	19.70	20.30	
C	.670	.710	17.00	18.00	
D	.019	.019	4.70	4.90	
E	.430	.440	10.80	11.20	
F	.090	.110	2.30	2.70	
G	.120	.130	3.10	3.40	
H	.130	.150	3.40	3.80	
I	.170	.190	4.40	4.80	
J	.100	.110	2.50	2.90	
K	.020	.030	0.60	0.80	
L	.080	.090	2.00	2.40	
M	.040	.040	0.90	1.10	
N	.390	.400	9.80	10.20	
O	.290	.300	7.30	7.70	
P	.150	.170	3.80	4.20	



## Typical Characteristics

FIG.1 - FORWARD CURRENT DERATING CURVE

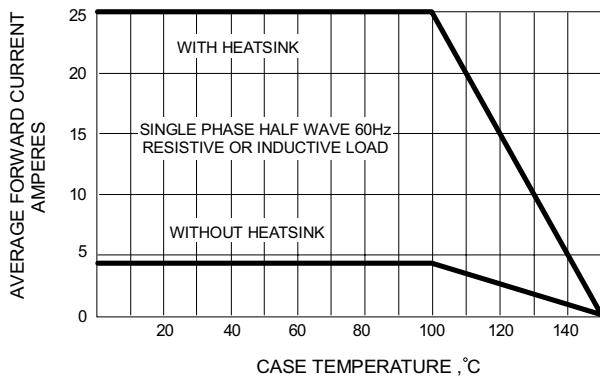


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

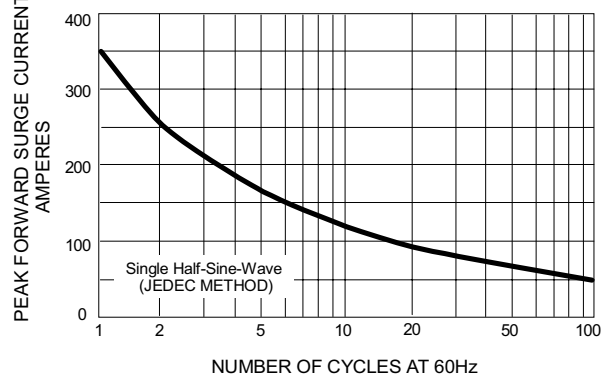


FIG.3 - TYPICAL JUNCTION CAPACITANCE

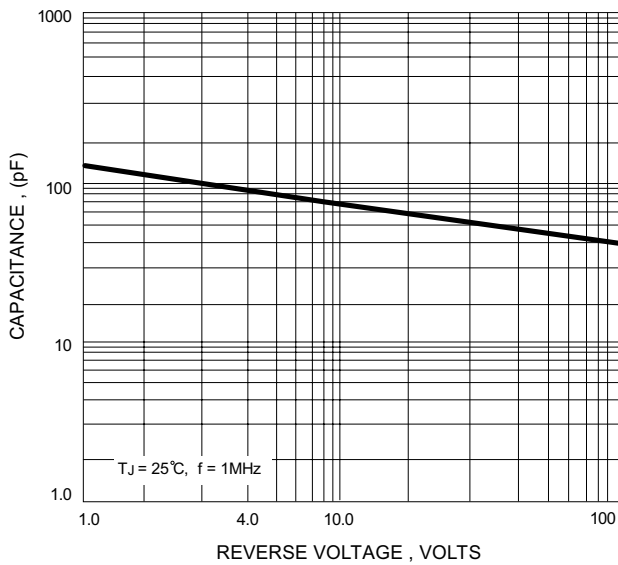


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

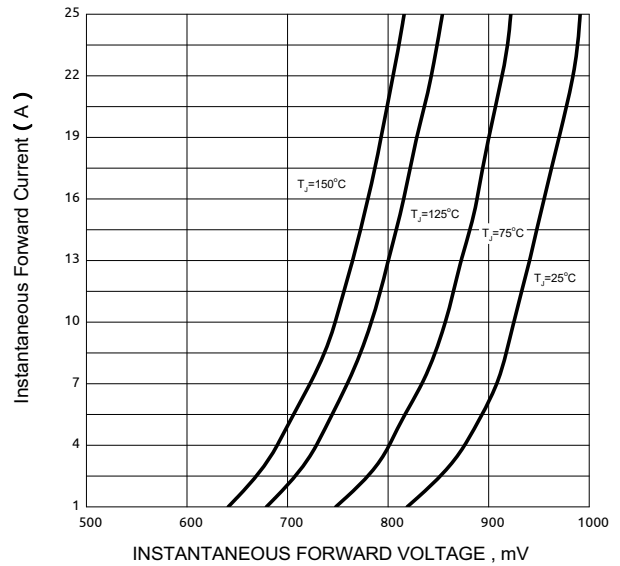
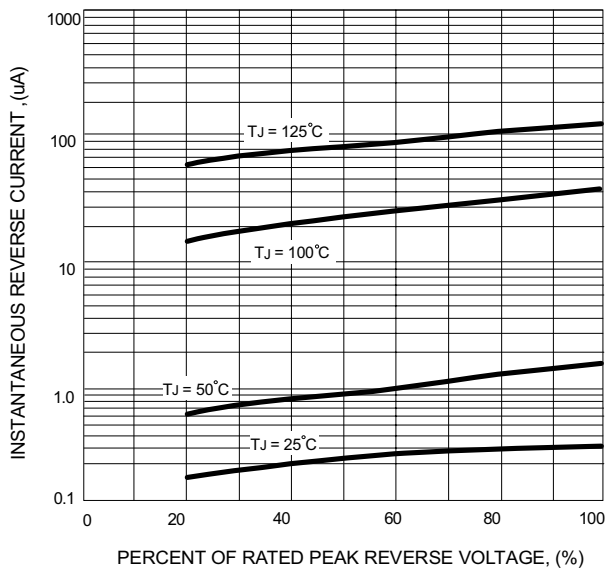


FIG.5 - TYPICAL REVERSE CHARACTERISTICS





**Ordering Information :**

Device	Packing
Part Number-BP	Bulk: 750pcs/Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

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