



Micro Commercial Components



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# GBJL20005 THRU GBJL2010

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

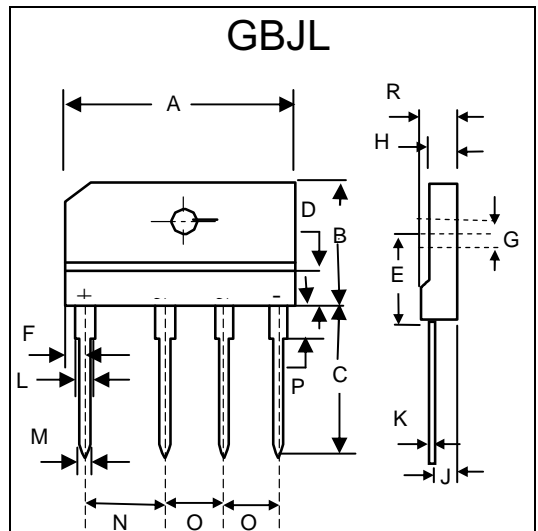
### Features

- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Rating to 1000V PRV
- Low forward voltage drop, high current capability.
- Ideal for printed circuit board
- Halogen free available upon request by adding suffix "-HF"

### Maximum Ratings

- UL Recognized File # E165989
- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Mounting torque: 5in-lbs.

MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBJL20005	GBJL20005	50V	35V	50V
GBJL2001	GBJL2001	100V	70V	100V
GBJL2002	GBJL2002	200V	140V	200V
GBJL2004	GBJL2004	400V	280V	400V
GBJL2006	GBJL2006	600V	420V	600V
GBJL2008	GBJL2008	800V	560V	800V
GBJL2010	GBJL2010	1000V	700V	1000V



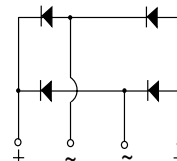
### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	20 A	$T_C = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	240A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.05V	$I_{FM} = 10.0 \text{ A}$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 500uA	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical thermal resistance	$R_{\theta JC}$	0.8°C/W	
Typical Junction Capacitance	$C_J$	60 pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

\*Pulse Test: Pulse Width 300 $\mu\text{sec}$ , Duty Cycle 1%

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

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.067	1.091	27.10	27.70	
B	.551	.575	14.00	14.60	
C	.570	.610	14.50	15.50	
D	.071 typ		1.80 typ		
E	.339	.354	8.60	9.00	
F	.071	.087	1.80	2.20	
G	.120	.134	3.00	3.40	
H	.110	.126	2.80	3.20	
J	.098	.114	2.50	2.90	
K	.012	.028	0.30	0.70	
L	.098	.114	2.50	2.90	
M	.035	.043	0.90	1.10	
N	.390	.400	9.80	10.20	
O	.290	.300	7.30	7.70	
P	.079	.094	2.00	2.40	
R	.150	.157	3.60	4.00	



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**RATING AND CHARACTERISTIC CURVES**  
GBJL20005 thru GBJL2010

FIG.1 - FORWARD CURRENT DERATING CURVE

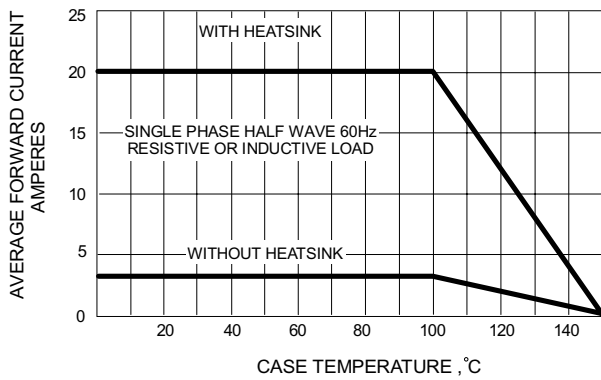


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

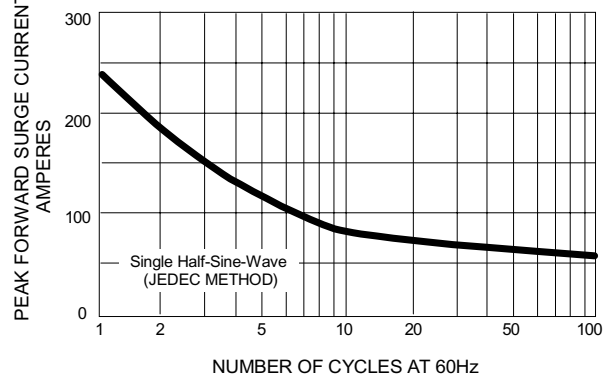


FIG.3 - TYPICAL JUNCTION CAPACITANCE

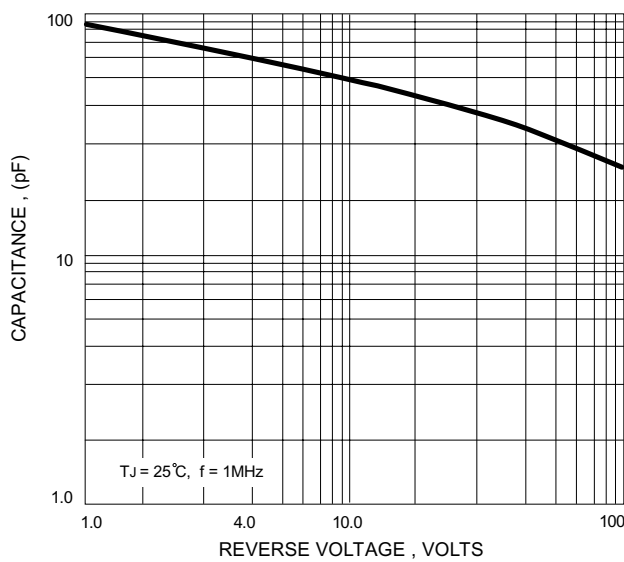


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

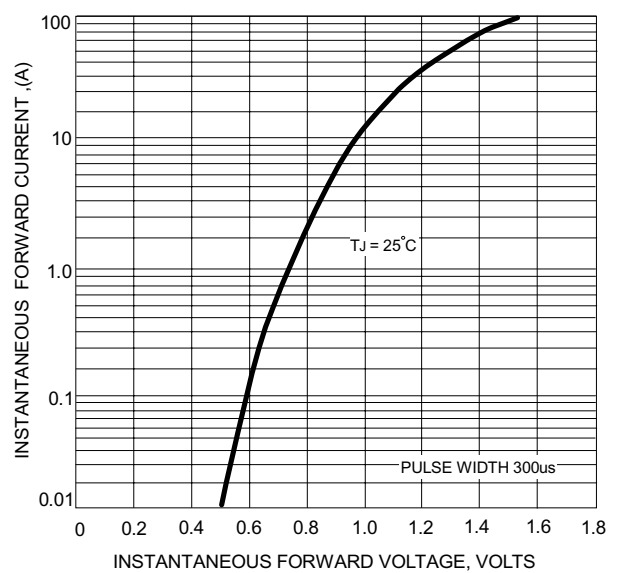
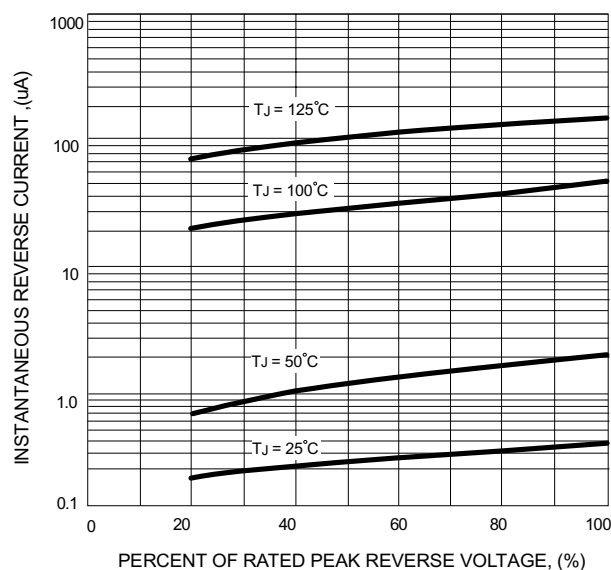


FIG.5 - TYPICAL REVERSE CHARACTERISTICS





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Ordering Information :

Device	Packing
Part Number-BP	Bulk: 2.2 K/Ctn

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

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