



Micro Commercial Components



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# GBJL10005 THRU GBJL1010

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

### Features

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

### 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
GBJL10005	GBJL10005	50V	35V	50V
GBJL1001	GBJL1001	100V	70V	100V
GBJL1002	GBJL1002	200V	140V	200V
GBJL1004	GBJL1004	400V	280V	400V
GBJL1006	GBJL1006	600V	420V	600V
GBJL1008	GBJL1008	800V	560V	800V
GBJL1010	GBJL1010	1000V	700V	1000V

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

Average Forward Current	$I_{F(AV)}$	10 A	$T_c = 110^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	170A	8.3ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.05V	$I_{FM}=5.0\text{A}$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 500 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical thermal resistance	$R_{\theta JA}$ $R_{\theta JC}$	22 $^\circ\text{C}/\text{W}$ 1.4 $^\circ\text{C}/\text{W}$	Units mounted on PCB without heatsink Unit case mounted on Al plate heatsink
Typical Junction Capacitance	$C_J$	55 pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7  
2. Pulse Test: Pulse Width 300usec, Duty Cycle 1%

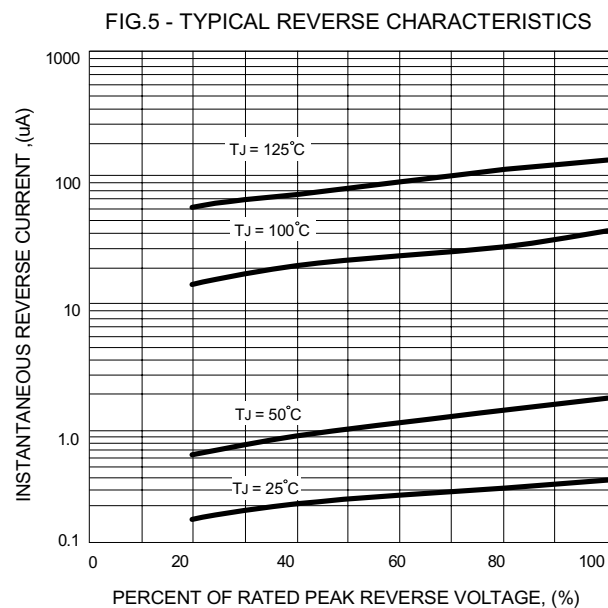
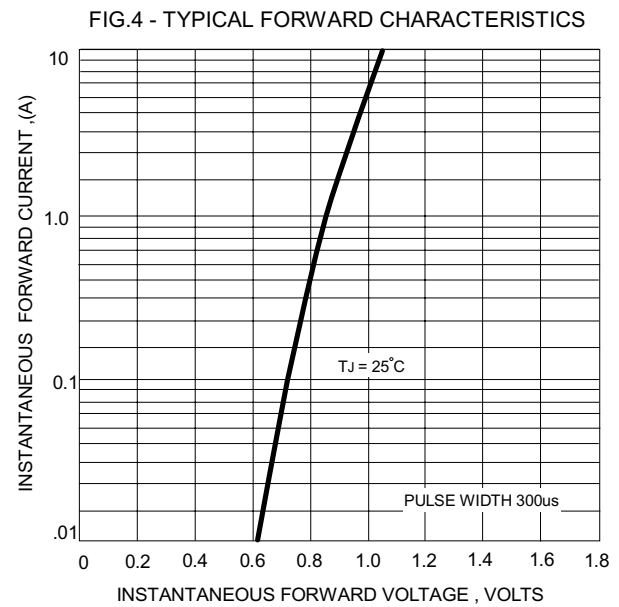
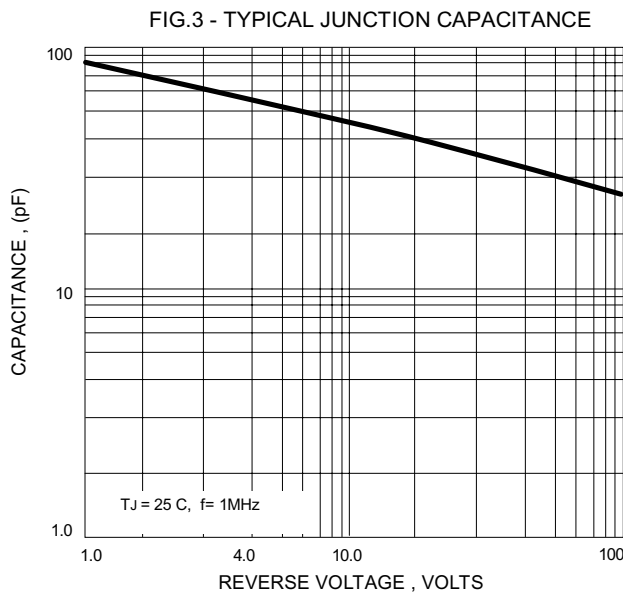
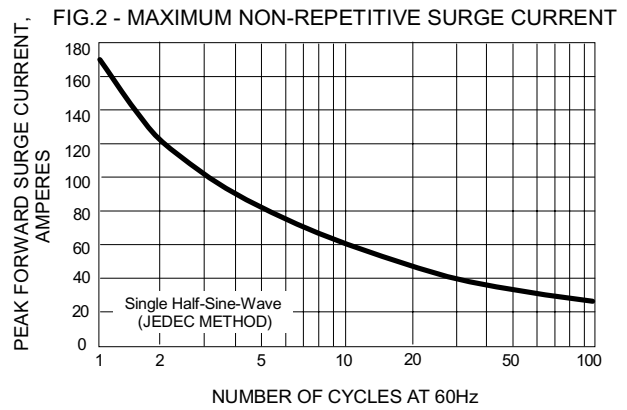
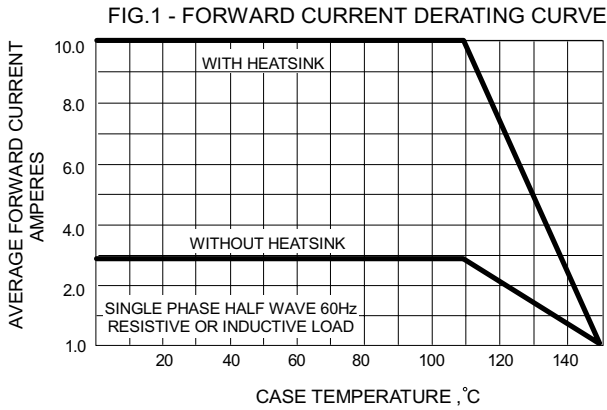
GBJL

DIMENSIONS

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	

Case Type

[www.mccsemi.com](http://www.mccsemi.com)





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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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