



Shanghai Miyue  
Semiconductors Co.,Ltd  
Tel:0086-21-57159233  
Fax:0086-21-60415325

# GBJ20005 THRU GBJ2010

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

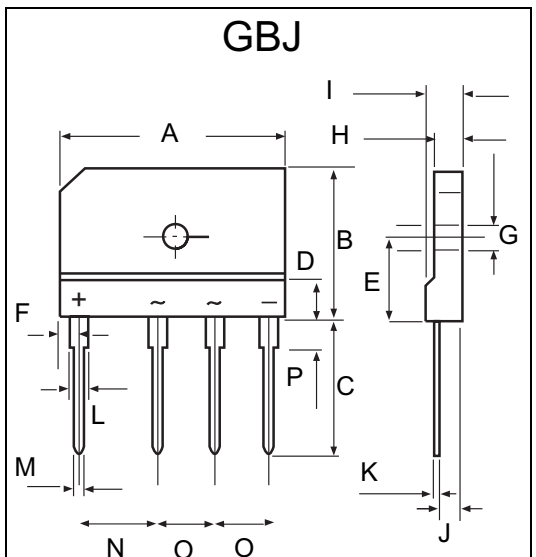
### Features

- 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
- Ideal for printed circuit board
- Low forward voltage drop, high current capability.

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- Mounting torque: 5in-lbs.

Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBJ20005	GBJ20005	50V	35V	50V
GBJ2001	GBJ2001	100V	70V	100V
GBJ2002	GBJ2002	200V	140V	200V
GBJ2004	GBJ2004	400V	280V	400V
GBJ2006	GBJ2006	600V	420V	600V
GBJ2008	GBJ2008	800V	560V	800V
GBJ2010	GBJ2010	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 $\mu\text{A}$ 500 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
Typical thermal resistance	$R_{\theta JC}$	0.8°C/W	
Typical Junction Capacitance	$C_J$	60 pF	Measured at 1.0MHz, $V_R=4.0\text{V}$

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	

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

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

# RATING AND CHARACTERISTIC CURVES

## GBJ2005 thru GBJ2010

FIG.1 - FORWARD CURRENT DERATING CURVE

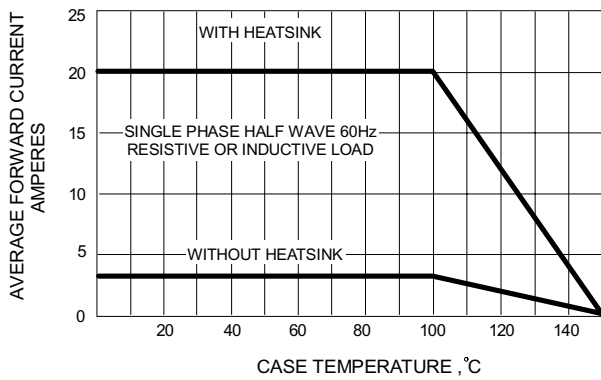


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

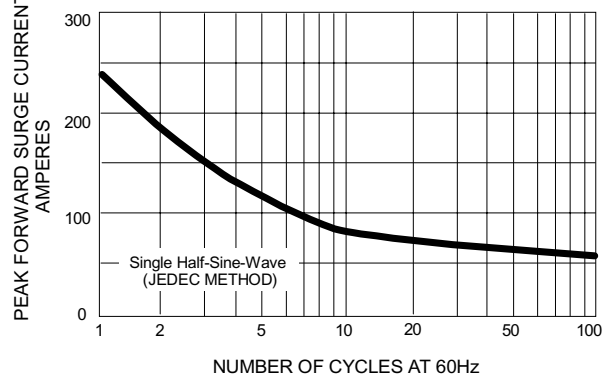


FIG.3 - TYPICAL JUNCTION CAPACITANCE

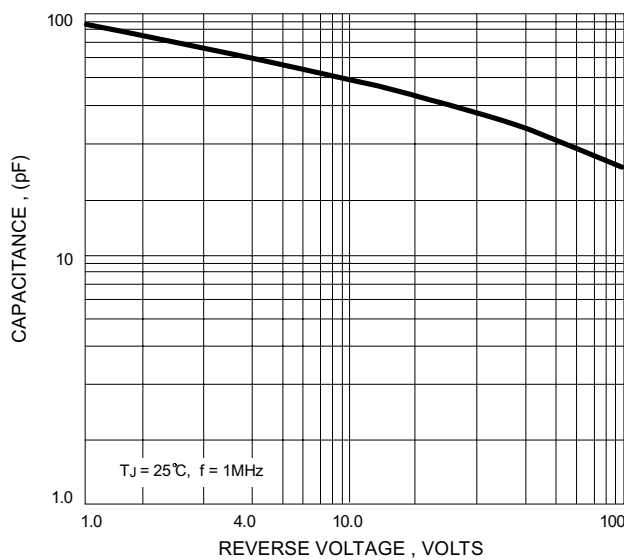


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

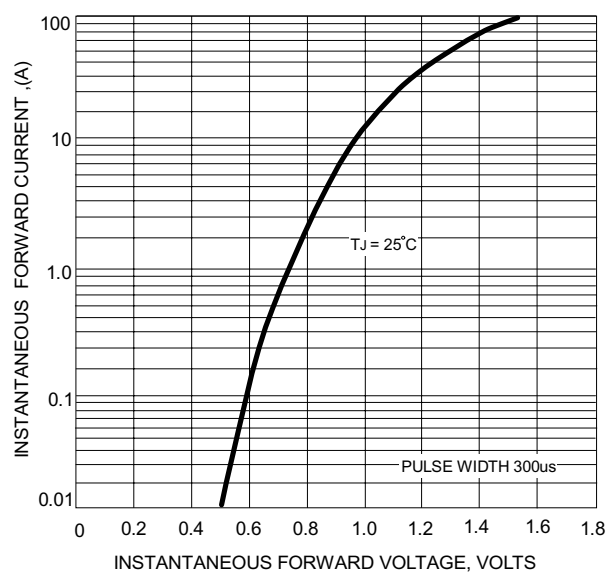


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

