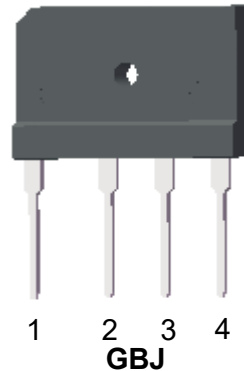
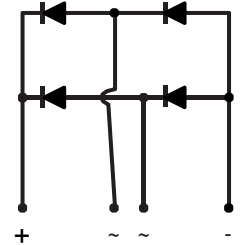


## Feature

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- Plastic material has U/L
- The flammability classification 94V-0



GBJ  
Top View



Circuit Diagram

## Mechanical Characteristics

- Polarity : Symbols molded on body
- Weight : 0.24 ounces, 6.79 grams

PIN	DESCRIPTION
1	Output Anode (+)
2	Input Pin (~)
3	Input Pin (~)
4	Output Cathode (-)

## Absolute maximum rating & Electrical Characteristics @25°C

Parameter		Symbol	PGBJ 20005G	PGBJ 2001G	PGBJ 2002G	PGBJ 2004G	PGBJ 2006G	PGBJ 2008G	PGBJ 2010G	Units
Maximum Repetitive Peak Reverse Voltage		V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS voltage		V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2)		I <sub>(AV)</sub>	20							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Super Imposed on Rated Load (JEDEC Method)		I <sub>FSM</sub>	270							A
Rating for fusing		I <sup>2</sup> t	300							A <sup>2</sup> s
Maximum Forward Voltage at 10A DC		V <sub>F</sub>	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T <sub>J</sub> = 25 °C	I <sub>R</sub>	5.0							μA
	T <sub>J</sub> = 125 °C		500							
Typical Junction Capacitance <sup>1)</sup>		C <sub>J</sub>	70							pF
Typical Thermal Resistance <sup>2)</sup>		R <sub>θJC</sub>	1.2							°C/W
Operating and Storage Temperature Range		T <sub>J</sub> , T <sub>STG</sub>	-55~+150							°C

Notes:

1) Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2) Device mounted on 150mm\*150mm\*1.6mm Cu Plate Heat sink

## Typical Characteristics

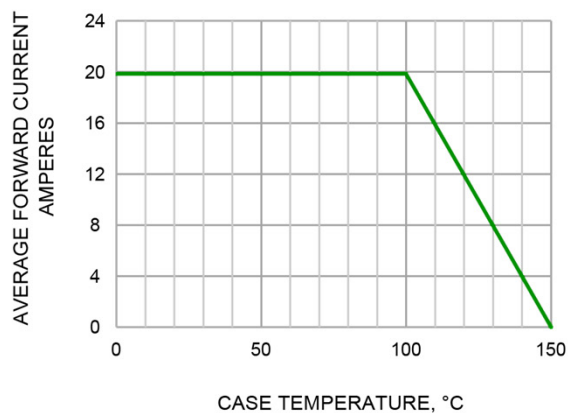


FIG.1-FORWARD CURRENT DERATING CURVE

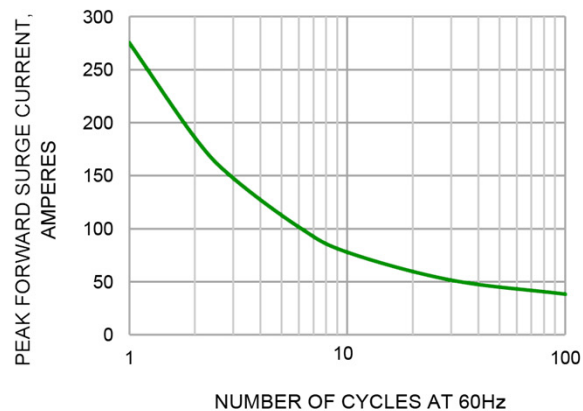


FIG.2-MAXIMUM FOWARD SURGE CURRENT

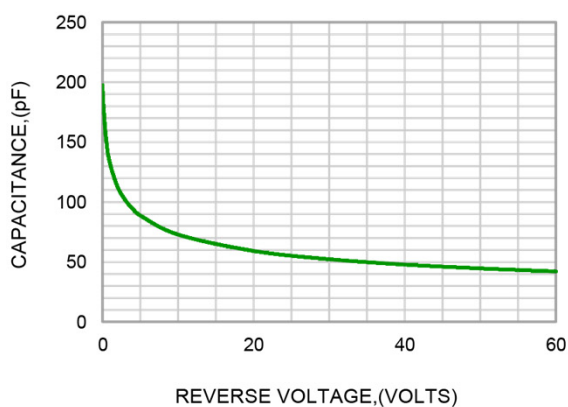


FIG.3-TYPICAL JUNCTION CAPACITANCE

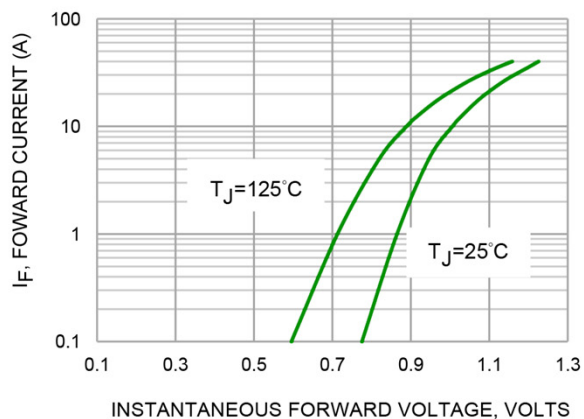


FIG.4-TYPICAL FORWARD CHARACTERISTICS

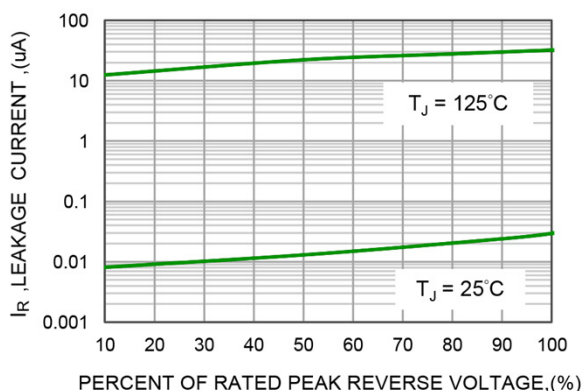
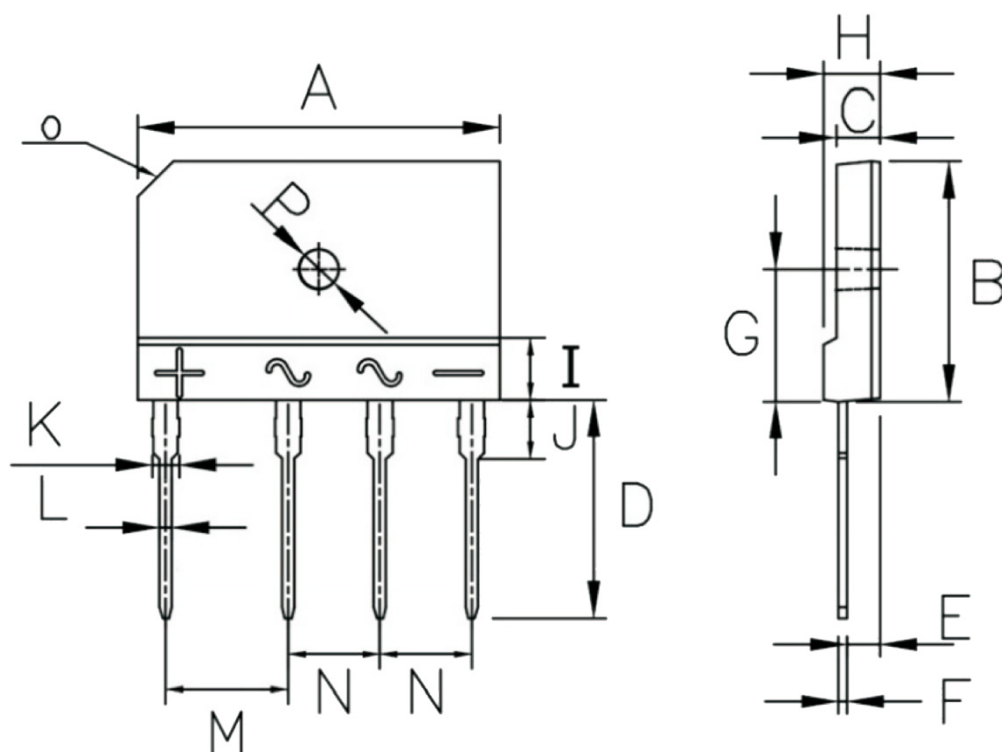


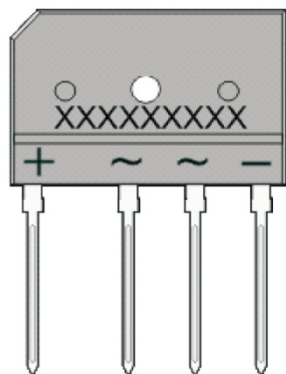
FIG.5-TYPICAL REVERSE CHARACTERISTICS

## Product Dimension (GBJ)




Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	29.70	30.30	1.169	1.193
B	19.70	20.30	0.776	0.799
C	3.40	3.80	0.134	0.150
D	17.00	18.00	0.669	0.709
E	2.50	2.90	0.098	0.114
F	0.55	0.80	0.022	0.031
G	10.80	11.20	0.425	0.441
H	4.40	4.80	0.173	0.189
I	4.80	5.80	0.189	0.228
J	3.80	4.20	0.150	0.165
K	2.00	2.40	0.079	0.094
L	0.90	1.15	0.035	0.045
M	9.80	10.20	0.386	0.402
N	7.30	7.70	0.287	0.303
O	C3.0		C0.118	
P	φ3.00	φ3.60	φ0.118	φ0.142

Marking information



Type number	Marking code
PGBJ20005G	GBJ20005G
PGBJ2001G	GBJ2001G
PGBJ2002G	GBJ2002G
PGBJ2004G	GBJ2004G
PGBJ2006G	GBJ2006G
PGBJ2008G	GBJ2008G
PGBJ2010G	GBJ2010G


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