

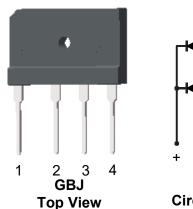
PGBJ10xxG Series Bridge Rectifiers

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

Mechanical Characteristics

Polarity: Symbols molded on bodyWeight: 0.24 ounces, 6.79 grams



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Circuit Diagram

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

Absolute maximum rating & Electrical Characteristics @25°C

Parameter		Symbol	PGBJ 10005G	PGBJ 1001G	PGBJ 1002G	PGBJ 1004G	PGBJ 1006G	PGBJ 1008G	PGBJ 1010G	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage		V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V _{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward(with heatsink Note 2)		I _(AV)	10						А	
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Super Imposed on Rated Load (JEDEC Method)		I _{FSM}	200						А	
Rating for fusing		l²t	166					A ² s		
Maximum Forward Voltage at 5A DC		V _F	1.0						V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _J = 25 ℃		5.0					- µА		
	T _J = 125 ℃	I _R	500							
Typical Junction Capacitance ¹⁾		CJ	66					pF		
Typical Thermal Resistance ²⁾		$R_{\theta JC}$	1.6						°C/W	
Operating and Storage Temperature Range		$T_{J,}T_{STG}$	-55~+150						°C	

Notes

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

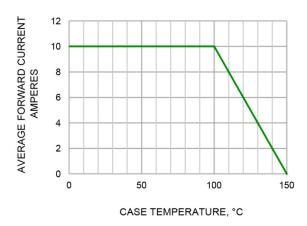


FIG.1-FORWARD CURRENT DERATING CURVE

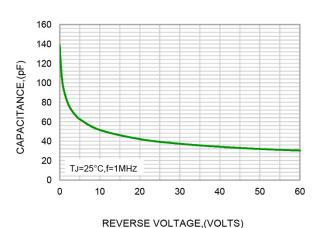


FIG.3-TYPICAL JUNCTION CAPACITANCE

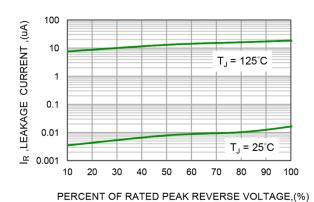
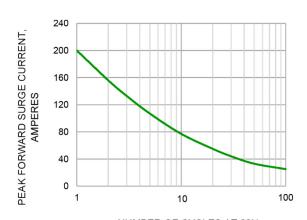
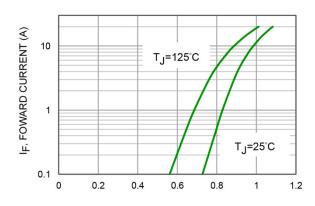


FIG.5-TYPICAL REVERSE CHARACTERISTICS



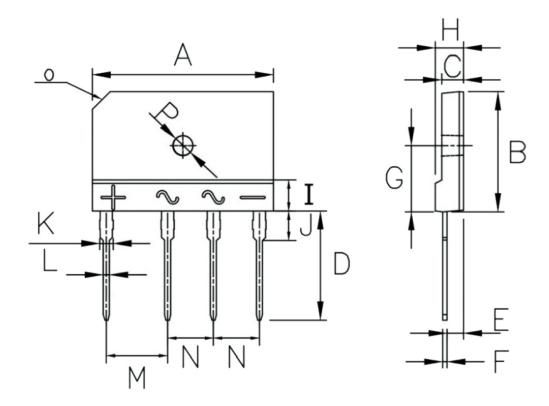
NUMBER OF CYCLES AT 60Hz FIG.2-MAXIMUM FOWARD SURGE CURRENT



INSTANTANEOUS FORWARD VOLTAGE, VOLTS

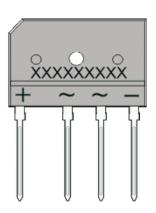
FIG.4-TYPICAL FORWARD CHARACTERISTICS

Product Dimension (GBJ)



Dim	Millim	neters	Inches		
Dim	Min	Max	Min	Max	
Α	29.70	30.30	1.169	1.193	
В	19.70	20.30	0.776	0.799	
С	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	
Н	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	
М	9.80	10.20	0.386	0.402	
N	7.30	7.70	0.287	0.303	
0	C3.0		C0.118		
Р	φ3.00	φ3.60	φ0.118	φ0.142	

Marking information



Type number	Marking code
PGBJ10005G	GBJ10005G
PGBJ1001G	GBJ1001G
PGBJ1002G	GBJ1002G
PGBJ1004G	GBJ1004G
PGBJ1006G	GBJ1006G
PGBJ1008G	GBJ1008G
PGBJ1010G	GBJ1010G

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