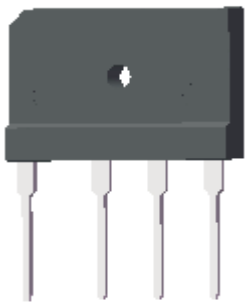
Prisemi®

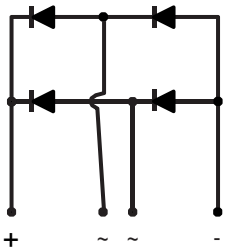
PGBJ15xxG Series
Bridge Rectifiers

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



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℃

Parameter		Symbol	PGBJ 15005G	PGBJ 1501G	PGBJ 1502G	PGBJ 1504G	PGBJ 1506G	PGBJ 1508G	PGBJ 1510G	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)		$I_{(AV)}$	15							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load		I_{FSM}	240							A
Rating for fusing		I^2t	239							A^2s
Maximum Forward Voltage at 7.5A DC		V_F	1.0							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_J = 25 ℃	I_R	5.0							μA
	T_J = 125 ℃		500							
Typical Junction Capacitance[1]		C_J	79							pF
Typical Thermal Resistance[2]		$R_{\theta JA}$	35							℃/W
		$R_{\theta JC}$	1.5							
Operating and Storage Temperature Range		T_J, T_{STG}	-55~+150							℃

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

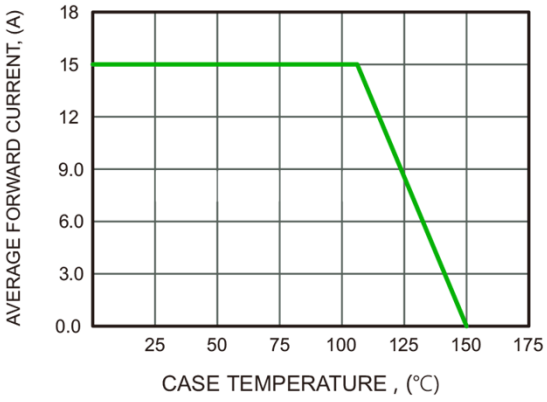


Fig.1 FORWARD CURRENT DERATING CURVE

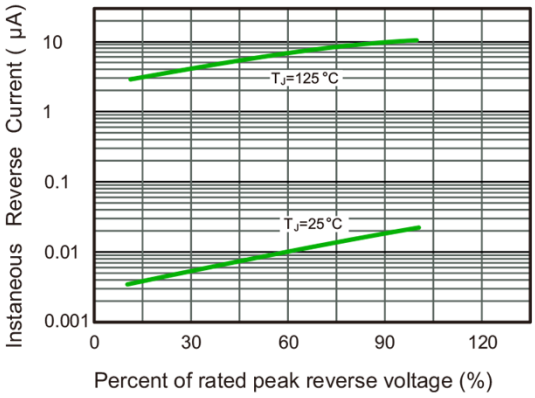


Fig.2 Typical Reverse Characteristics

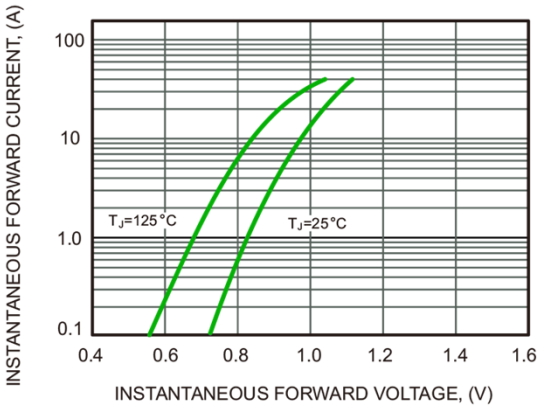


Fig.3 Typical Forworo Characteristics

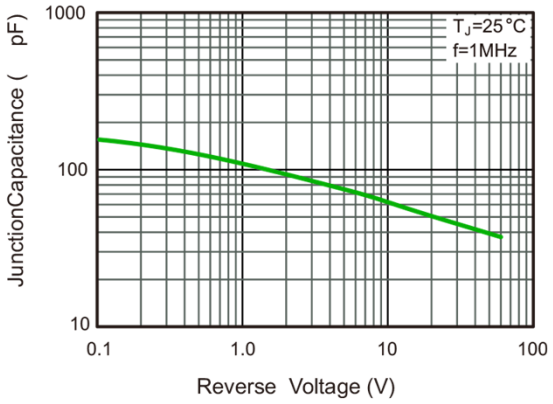


Fig.4 Typical Junction Capacitance

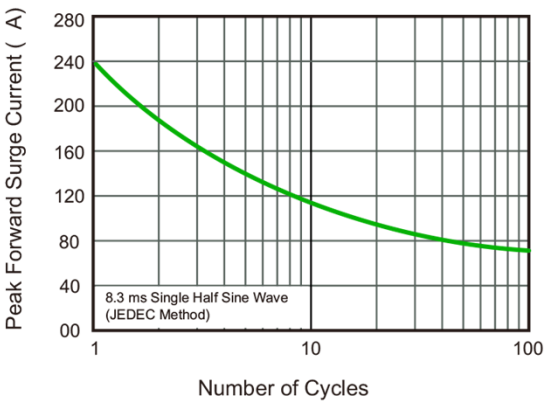
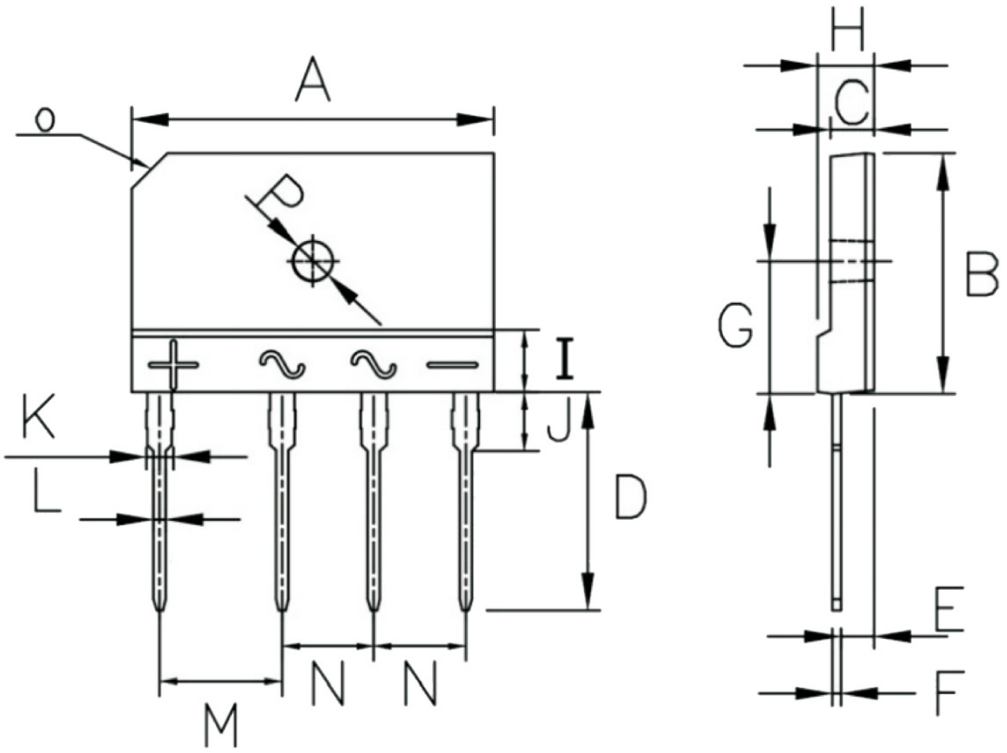


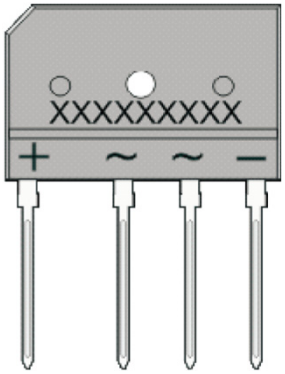
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

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
PGBJ15005G	GBJ15005G
PGBJ1501G	GBJ1501G
PGBJ1502G	GBJ1502G
PGBJ1504G	GBJ1504G
PGBJ1506G	GBJ1506G
PGBJ1508G	GBJ1508G
PGBJ1510G	GBJ1510G

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