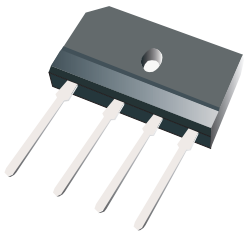
GBJ25005-G Thru. GBJ2510-G

Reverse Voltage: 50 to 1000V
Forward Current: 25.0A
RoHS Device



Features

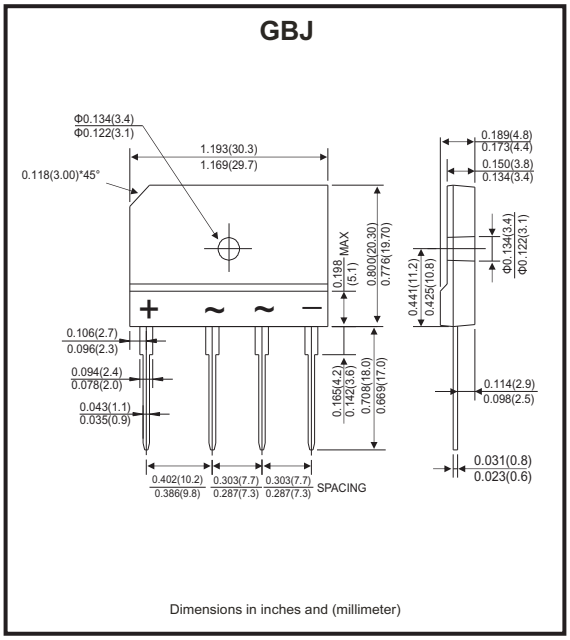
-Rating to 1000V PRV.

-Ideal for printed circuit board.

-Low forward voltage drop.

-High current capability.

-UL recognized file # E349301



Mechanical Data

-Epoxy: UL 94V-0 rate flame retardant.

-Case: Molded plastic, GBJ

-Mounting position: Any

-Weight: 6.81grams

Maximum ratings and electrical characteristics

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave ,60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Parameter	Symbol	GBJ 25005-G	GBJ 2501-G	GBJ 2502-G	GBJ 2504-G	GBJ 2506-G	GBJ 2508-G	GBJ 2510-G	Unit
Maximum Recurrent 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) Rectified Current @Tc=100°C (without heatsink)	$I_{(AV)}$	25.0 4.2							A
Peak Forward Surge Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I_{FSM}	350							A
Maximum Forward Voltage at 12.5A DC	V_F	1.0							V
Maximum DC Reverse Current @T_J=25°C At Rate DC Blocking Voltage @T_J=125°C	I_R	10.0 500							μA
I^2T Rating for Fusing (t<8.3ms)	I^2t	508							A^2s
Typical Junction Capacitance Per Element (Note 1)	C_J	85							pF
Typical Thermal Resistance	$R_{\theta JC}$	0.6							°C/W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}	-55 to +150							°C

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Device mounted on 300mm*300mm*1.6mm Cu plate heatsink.

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Rating and Characteristics Curves (GBJ25005-G Thru. GBJ2510-G)

Fig.1 - Forward Current Derating Curve

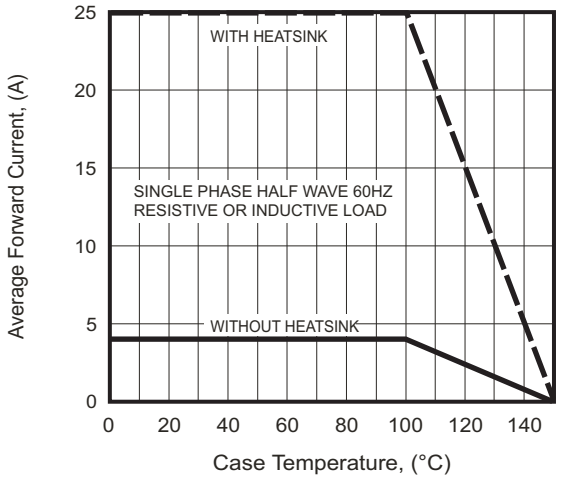


Fig.2 - Maximum Non-Repetitive Surge Current

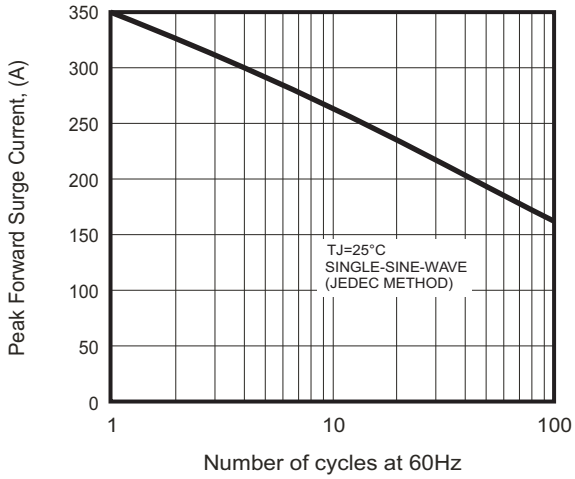


Fig.3 - Typical Junction Capacitance

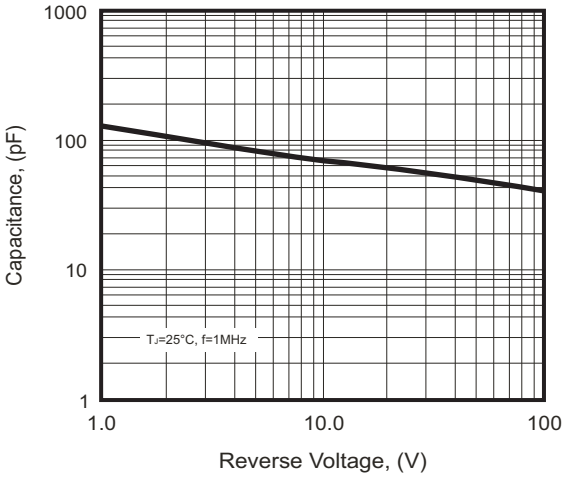


Fig.4 - Typical Forward Characteristics

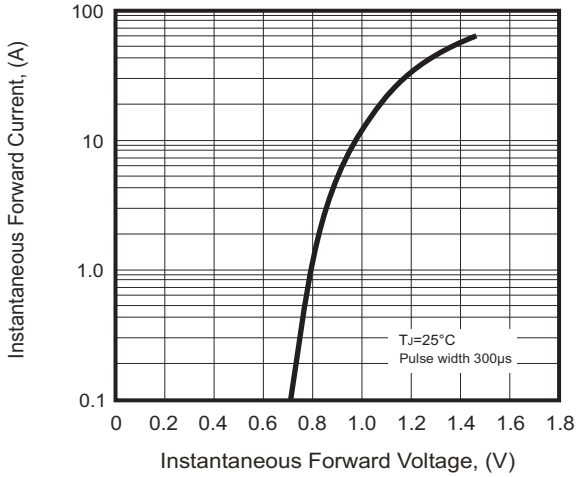
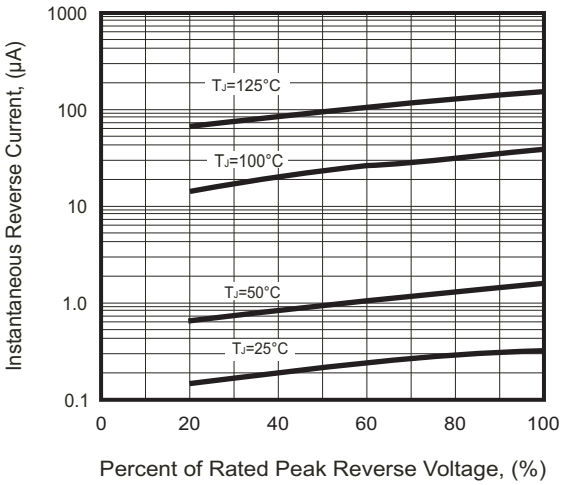


Fig.5 - Typical Reverse Characteristics



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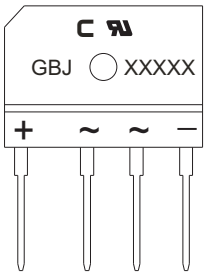
Marking Code

Part Number	Marking code
GBJ25005-G	GBJ25005
GBJ2501-G	GBJ2501
GBJ2502-G	GBJ2502
GBJ2504-G	GBJ2504
GBJ2506-G	GBJ2506
GBJ2508-G	GBJ2508
GBJ2510-G	GBJ2510



XXXXX / XXXX = Product type marking code

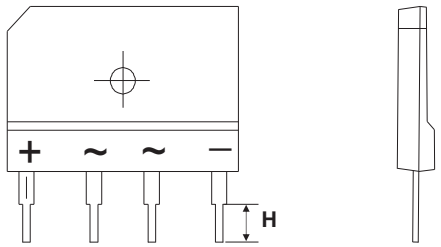
⊏ = Compchip Logo

Standard Packaging

Case Type	TUBE PACK	
	TUBE (pcs)	Carton (pcs)
GBJ	15	750

GBJ25005-03-G Thru. GBJ2510-06-G

Package outline(Cuts the foot)

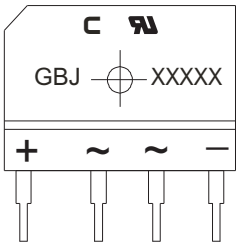


Part Number \ H	4.5±0.5 (mm)	4.0±0.5 (mm)	10.0±0.5 (mm)	5.0±0.5 (mm)
GBJ25005-G	GBJ25005-03-G	GBJ25005-04-G	GBJ25005-05-G	GBJ25005-06-G
GBJ2501-G	GBJ2501-03-G	GBJ2501-04-G	GBJ2501-05-G	GBJ2501-06-G
GBJ2502-G	GBJ2502-03-G	GBJ2502-04-G	GBJ2502-05-G	GBJ2502-06-G
GBJ2504-G	GBJ2504-03-G	GBJ2504-04-G	GBJ2504-05-G	GBJ2504-06-G
GBJ2506-G	GBJ2506-03-G	GBJ2506-04-G	GBJ2506-05-G	GBJ2506-06-G
GBJ2508-G	GBJ2508-03-G	GBJ2508-04-G	GBJ2508-05-G	GBJ2508-06-G
GBJ2510-G	GBJ2510-03-G	GBJ2510-04-G	GBJ2510-05-G	GBJ2510-06-G

Dimensions in inches and (millimeter)

Marking Code

4.5±0.5 (mm)	4.0±0.5 (mm)	10.0±0.5 (mm)	5.0±0.5 (mm)	Marking code
GBJ25005-03-G	GBJ25005-04-G	GBJ25005-05-G	GBJ25005-06-G	GBJ25005
GBJ2501-03-G	GBJ2501-04-G	GBJ2501-05-G	GBJ2501-06-G	GBJ2501
GBJ2502-03-G	GBJ2502-04-G	GBJ2502-05-G	GBJ2502-06-G	GBJ2502
GBJ2504-03-G	GBJ2504-04-G	GBJ2504-05-G	GBJ2504-06-G	GBJ2504
GBJ2506-03-G	GBJ2506-04-G	GBJ2506-05-G	GBJ2506-06-G	GBJ2506
GBJ2508-03-G	GBJ2508-04-G	GBJ2508-05-G	GBJ2508-06-G	GBJ2508
GBJ2510-03-G	GBJ2510-04-G	GBJ2510-05-G	GBJ2510-06-G	GBJ2510



XXXXX / XXXX = Product type marking code

⊏ = Compchip Logo

Standard Packaging

Case Type	TUBE PACK	
	TUBE (pcs)	Carton (pcs)
GBJ	15	750

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