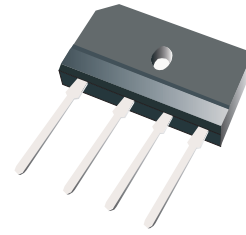


## GBJ25005-G Thru. GBJ2510-G

Reverse Voltage: 50 to 1000V

Forward Current: 25.0A

RoHS Device

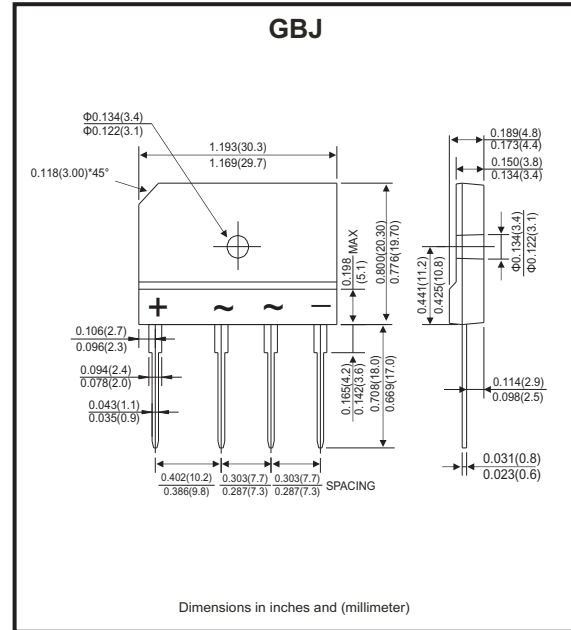


### Features

- 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 @ $T_c=100^\circ\text{C}$ (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				350				A
Maximum Forward Voltage at 12.5A DC	$V_F$	1.0				1.0				V
Maximum DC Reverse Current @ $T_J=25^\circ\text{C}$ At Rate DC Blocking Voltage @ $T_J=125^\circ\text{C}$	$I_R$	10.0				500				$\mu\text{A}$
$I^2 T$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2 t$	508				508				$\text{A}^2\text{s}$
Typical Junction Capacitance Per Element (Note 1)	$C_J$	85				85				pF
Typical Thermal Resistance	$R_{\theta JC}$	0.6				0.6				$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to +150				-55 to +150				$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150				-55 to +150				$^\circ\text{C}$

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.

Company reserves the right to improve product design, functions and reliability without notice.

REV: F

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

Fig.1 - Forward Current Derating Curve



Fig.2 - Maximum Non-Repetitive Surge Current

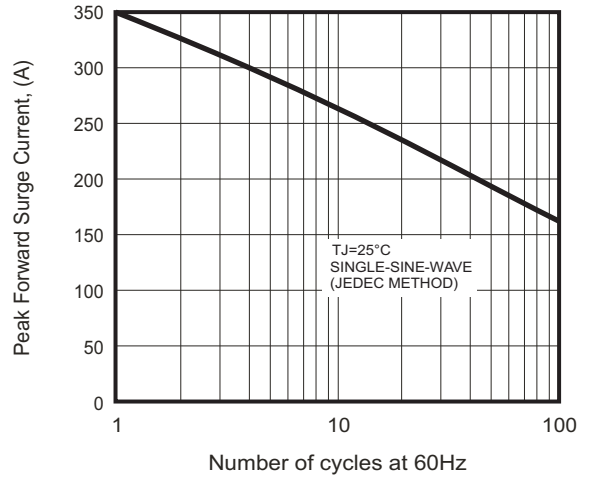


Fig.3 - Typical Junction Capacitance

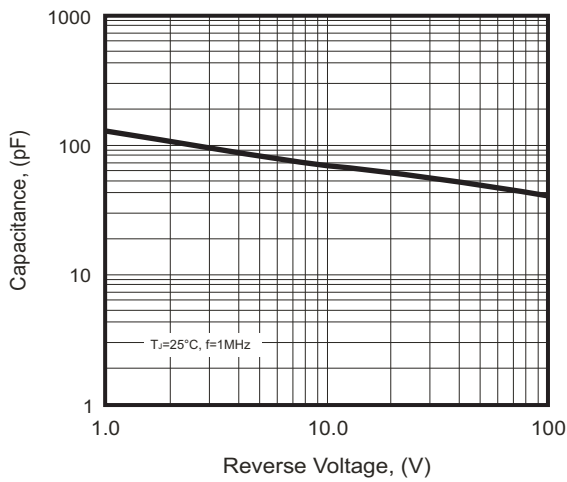


Fig.4 - Typical Forward Characteristics

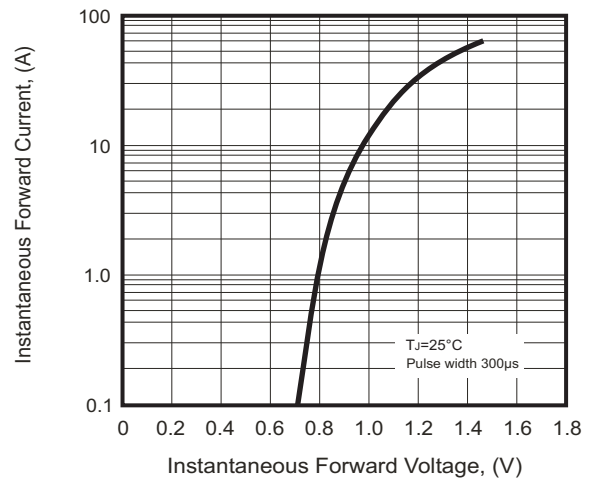
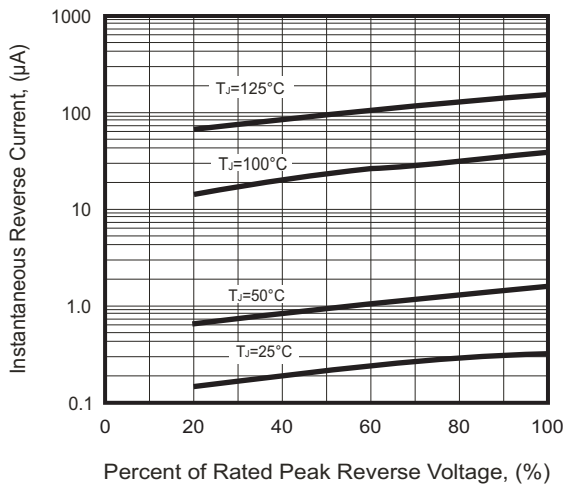
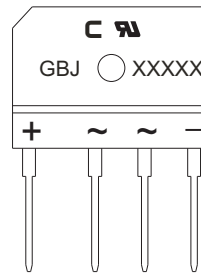


Fig.5 - Typical Reverse Characteristics



## 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

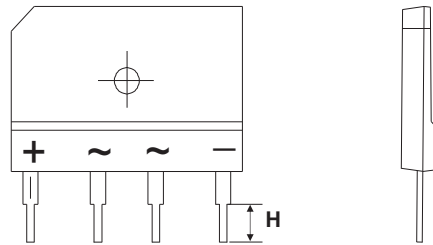
C = Compchip Logo

## 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)

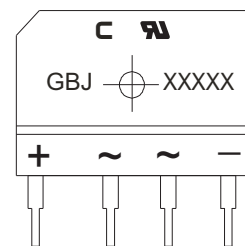


H	4.5±0.5 (mm)	4.0±0.5 (mm)	10.0±0.5 (mm)	5.0±0.5 (mm)
Part Number	GBJ25005-G	GBJ25005-G	GBJ25005-G	GBJ25005-G
	GBJ25005-03-G	GBJ25005-04-G	GBJ25005-05-G	GBJ25005-06-G
	GBJ2501-G	GBJ2501-G	GBJ2501-G	GBJ2501-G
	GBJ2501-03-G	GBJ2501-04-G	GBJ2501-05-G	GBJ2501-06-G
	GBJ2502-G	GBJ2502-G	GBJ2502-G	GBJ2502-G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

C = Compchip Logo

### Standard Packaging

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