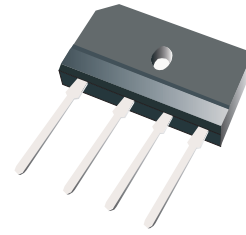


GBJ25005-G Thru. GBJ2510-G

Reverse Voltage: 50 to 1000V

Forward Current: 25.0A

RoHS Device

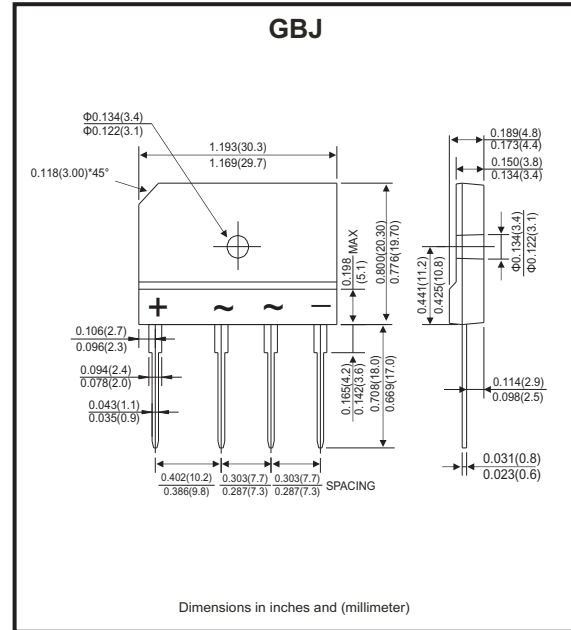


Features

- 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				μA
$I^2 T$ Rating for Fusing ($t < 8.3\text{ms}$)	$I^2 t$	508				508				A^2s
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

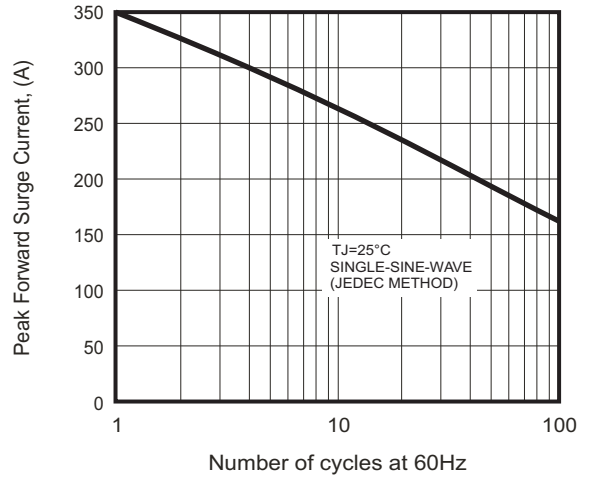


Fig.3 - Typical Junction Capacitance

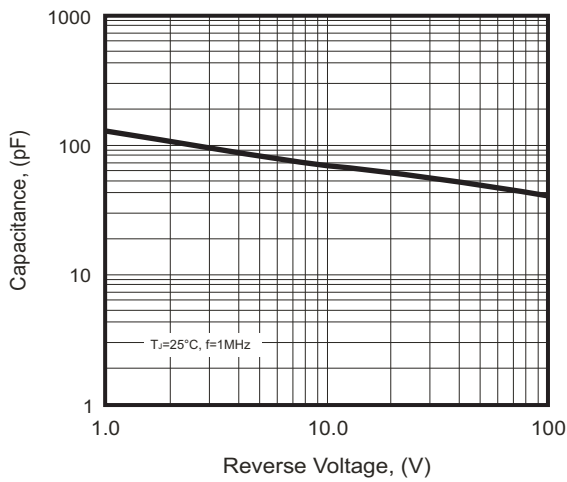


Fig.4 - Typical Forward Characteristics

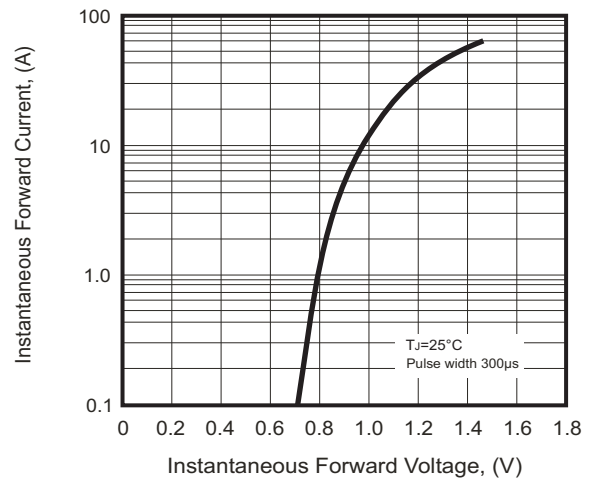
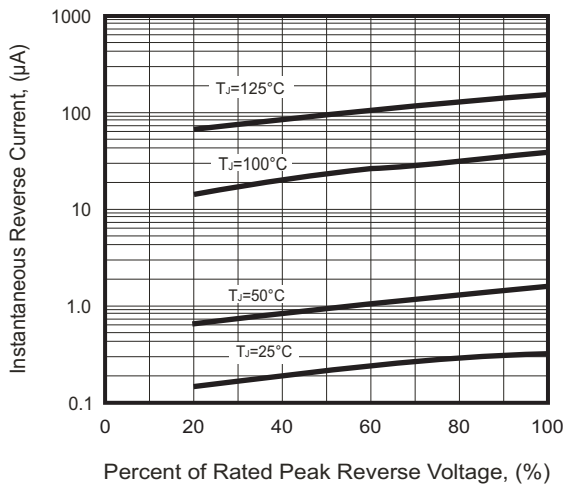
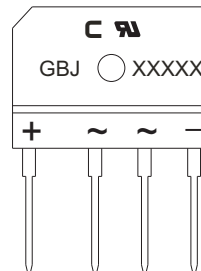


Fig.5 - Typical Reverse Characteristics



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