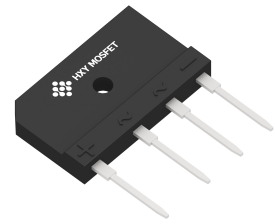




## Features

- This series is UL listed under the Recognized Component Index, file number E142814
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500VRMS  
Ideal for printed circuit boards
- High surge current capability

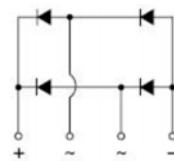


GBJ

## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
GBJ1505-F~GBJ1510-F	GBJ	GBJ15xx	500

x: From 005-10



## Maximum Ratings (Ta=25°C unless otherwise noted)

Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

Parameter	Symbol	GBJ 15005	GBJ 1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 1510	Unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	V
Maximum average forward rectified output current $T_c = 100^{\circ}\text{C}$ $T_A = 25^{\circ}\text{C}$	IF(AV)	15.0 (1) 7.5(2)							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	300							A
Rating for fusing ( $t < 8.3\text{ms}$ )	$I^2 t$	120							A <sup>2</sup> sec
Maximum thermal resistance per leg	RejA RejC	2.6(2) 5 (1)							°C/W
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150							°C

## Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Resistive or Inductive load, 60Hz.  
For Capacitive load derate by 20 %.

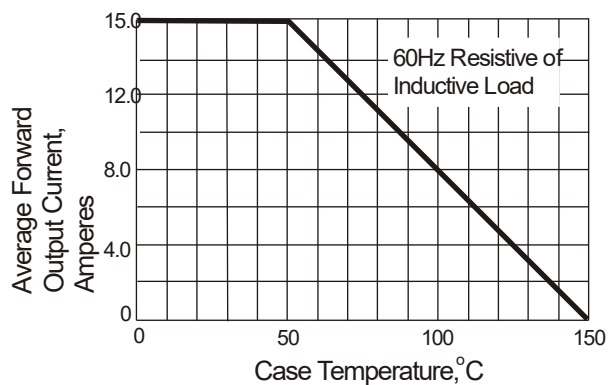
Parameter	Symbol	GBJ 15005	GBJ 1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 1510	Unit
Maximum instantaneous forward voltage drop per leg at 12.5 A	VF	1.1							V
Maximum DC reverse current at rated DC blocking voltage per element $T_A = 25^{\circ}\text{C}$ $T_A = 125^{\circ}\text{C}$	IR	10.0 500							uA

**Notes:** (1) Device mounted on 250mm x 250mm x 20mm aluminum plate heatsink.

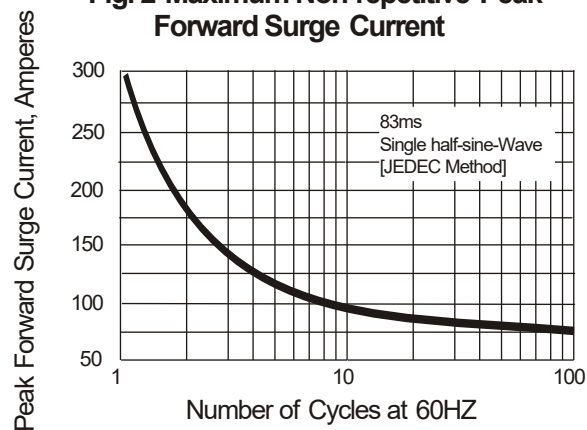


**Rating and Characteristic Curves ( $T_A=25^{\circ}\text{C}$  unless otherwise noted)**

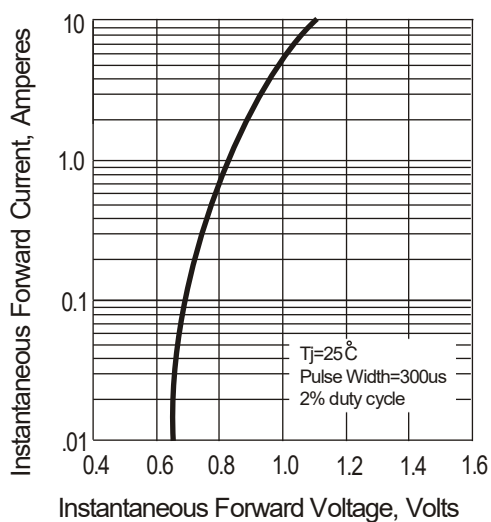
**Fig. 1 Derating Curve for Output Rectified Current**



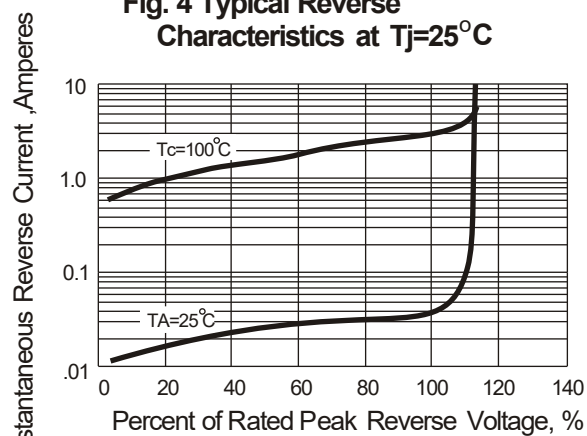
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



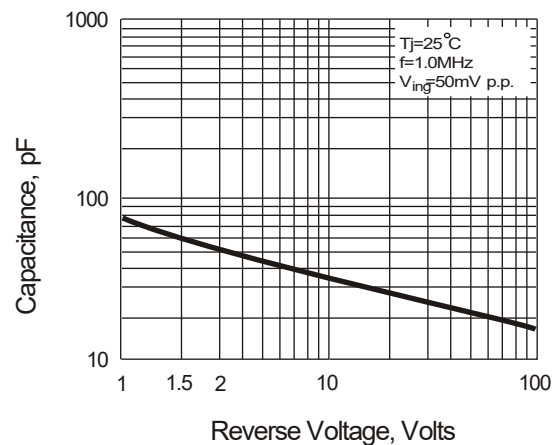
**Fig. 3 Typical Instantaneous Forward Characteristics**



**Fig. 4 Typical Reverse Characteristics at  $T_J=25^{\circ}\text{C}$**



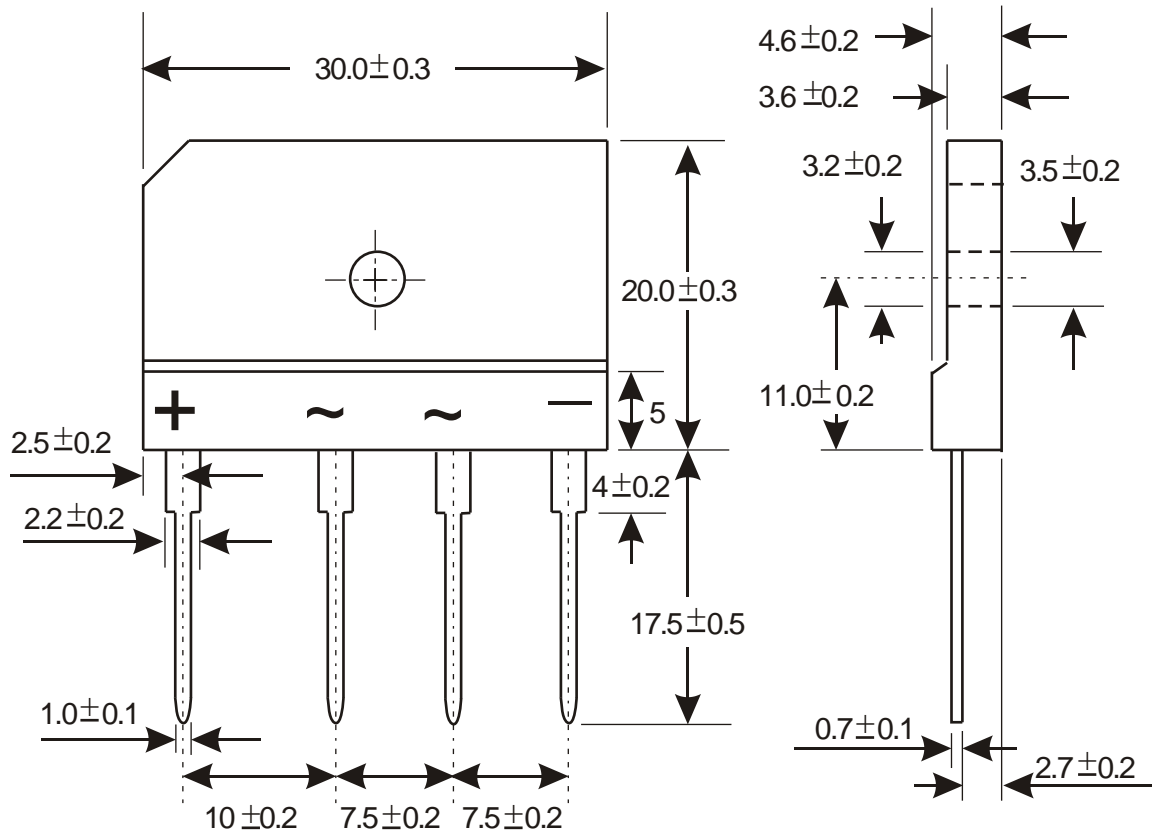
**Fig. 5 Typical Junction Capacitance**





## Package Outline Dimensions

GBJ





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