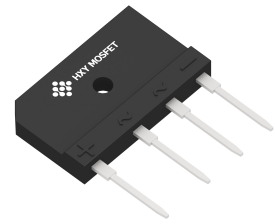




## Features

- 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

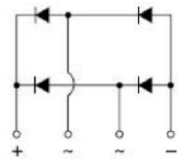


GBJ

## Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
GBJ3501-F~GBJ3510-F	GBJ	GBJ35xx	500

xx: From 001-10



## 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 35001	GBJ 3502	GBJ 3503	GBJ 3504	GBJ 3506	GBJ 3508	GBJ 3510	Unit
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS bridge input 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 (with heatsink note1 ) rectified current at Tc=100°C (without heatsink)	IF(AV)	30.0 4.2							A
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	350							A
Rating for fusing ( t<8.3ms)	I <sup>2</sup> t	510							A <sup>2</sup> sec
Typical thermal resistance per element (note 1)	RthJC	1.0							°C / W
Operating junction and storage temperature range	TJ, TSTG	-55 to + 150							°C

## Electrical Characteristics

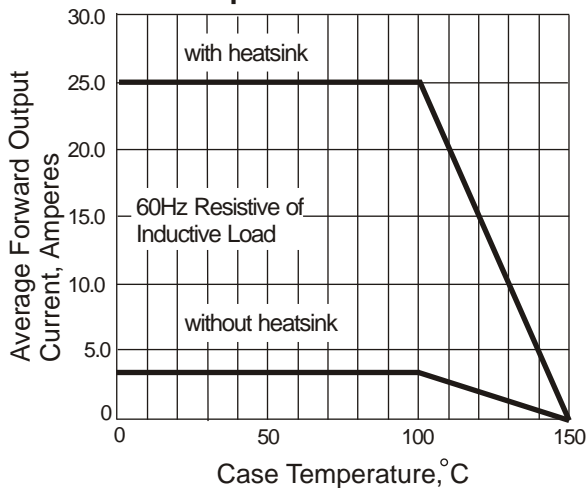
Parameter	Symbol	GBJ 35001	GBJ 3502	GBJ 3503	GBJ 3504	GBJ 3506	GBJ 3508	GBJ 3510	Unit
Maximum instantaneous forward voltage drop per leg at 12.5 A	VF	1.05							V
Maximum DC reverse current at rated TA =25°C DC blocking voltage per element TA =125°C	IR	10.0 500							μA

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

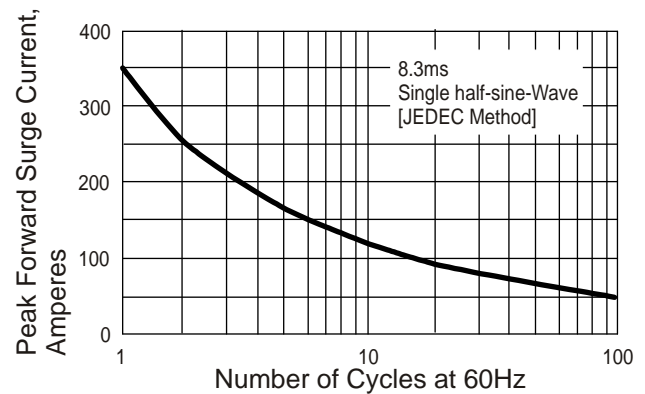


## Rating and Characteristic Curves ( $T_A=25^{\circ}\text{C}$ unless otherwise noted)

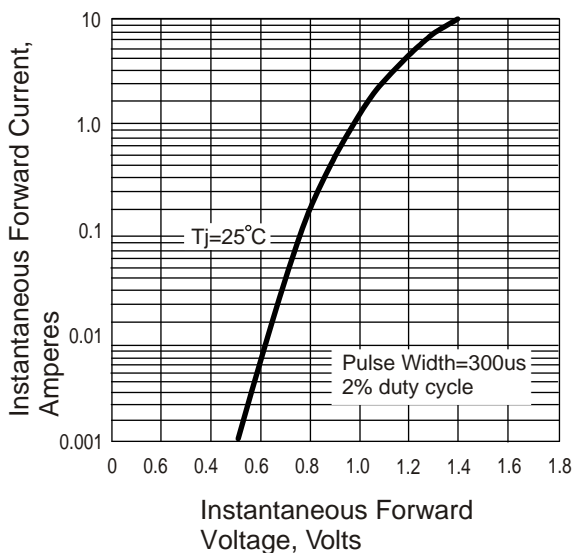
**Fig. 1 Derating Curve for Output Rectified Current**



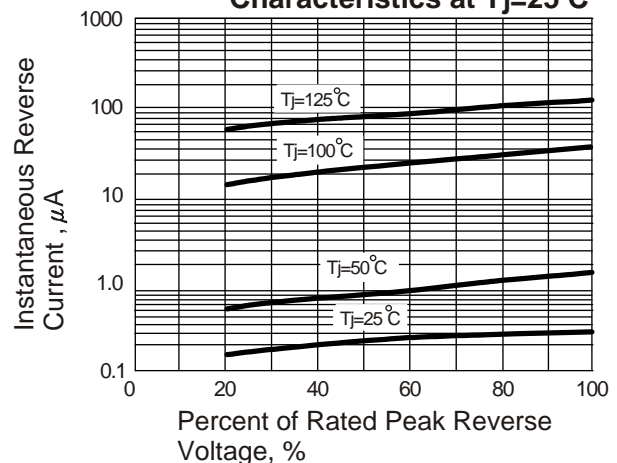
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



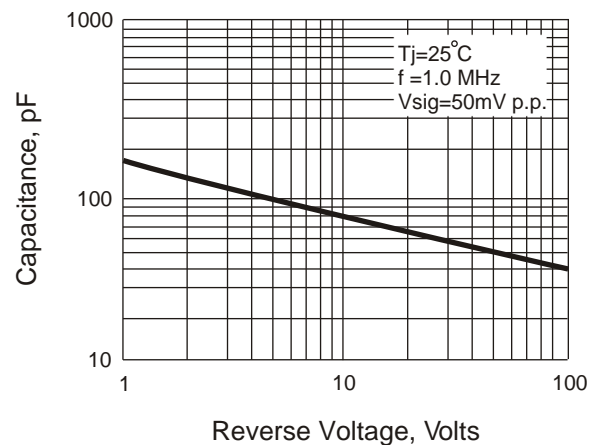
**Fig. 3 Typical Instantaneous Forward Characteristics**



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

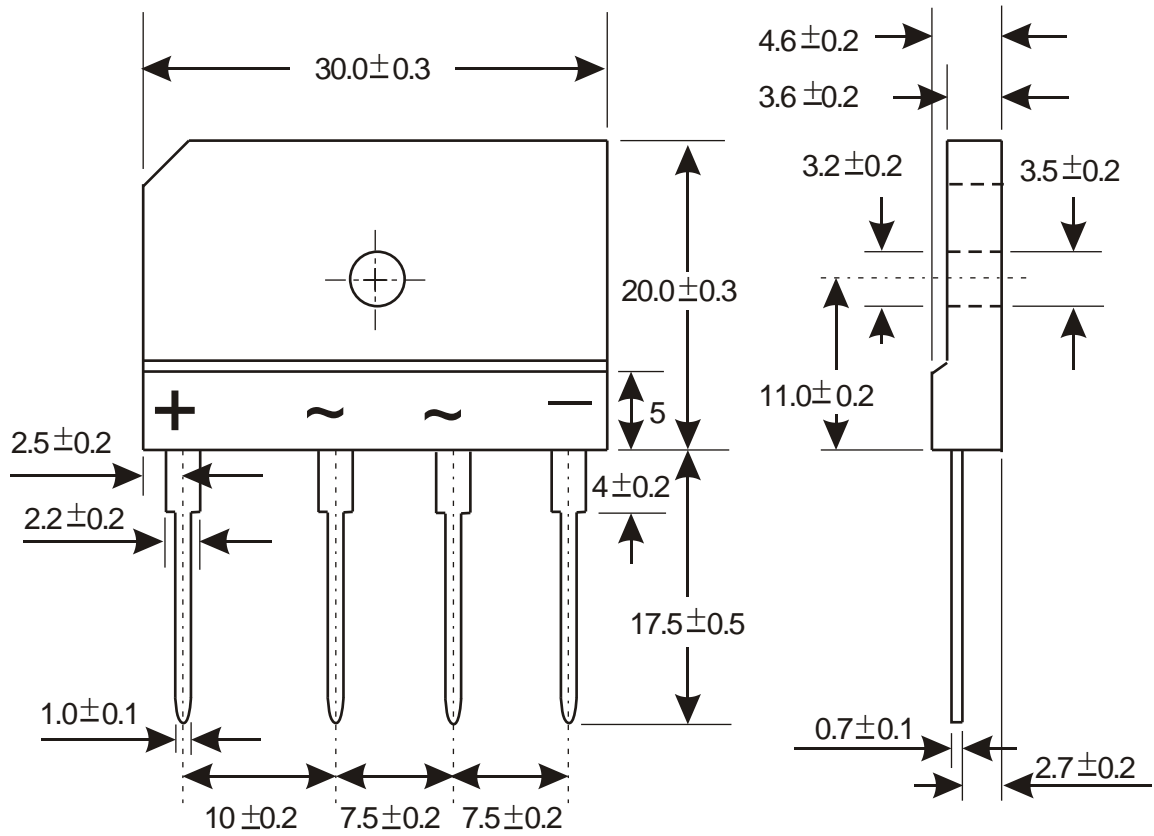


**Fig. 5 Typical Junction Capacitance**





## GBJ Package Outline Dimensions





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