

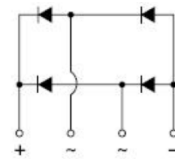


## FEATURES

- 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)
GBJ25005-GBJ2510	GBJ		500

## MAXIMUM RATINGS (Ta=25 unless otherwise noted)

Parameter	Symbol	GBJ 25005	GBJ 2501	GBJ 2502	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	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)	25.0 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

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

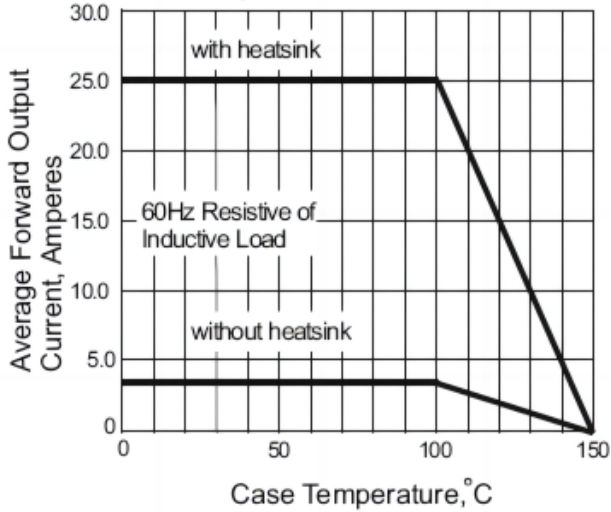
Parameter	Symbol	GBJ 25005	GBJ 2502	GBJ 2503	GBJ 2504	GBJ 2506	GBJ 2508	GBJ 2510	Unit	
Maximum instantaneous forward voltage drop per leg at 12.5 A	VF	1.05								V
Maximum DC reverse current at rated DC blocking voltage per element TA =25°C TA =125°C	IR	10.0 500								μA

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

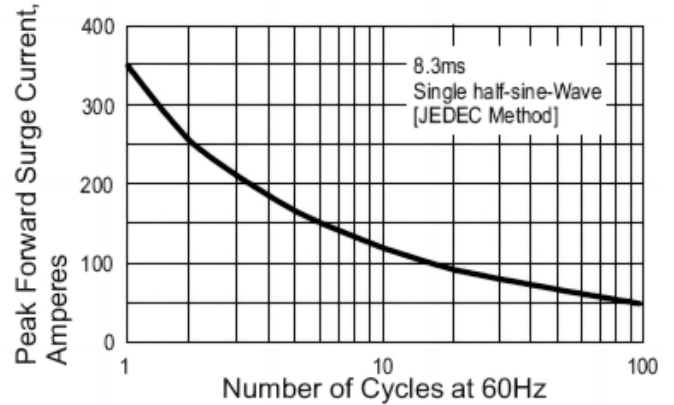


**Rating and Characteristic Curves** (  $T_A=25^{\circ}\text{C}$  Unless otherwise noted )

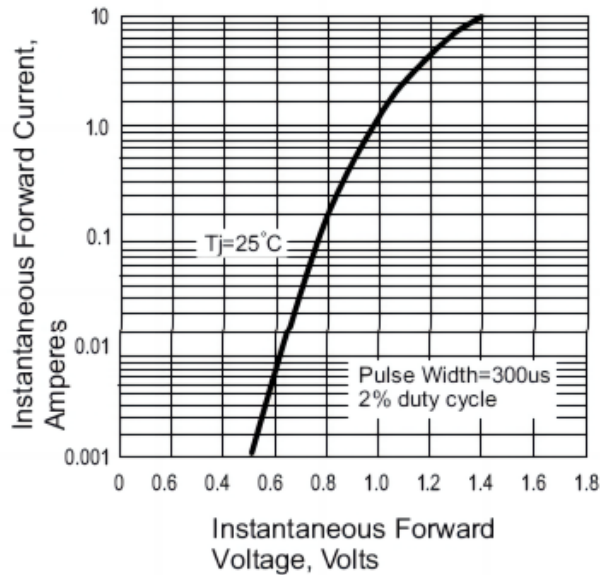
**Fig. 1 Derating Curve for Output Rectified Current**



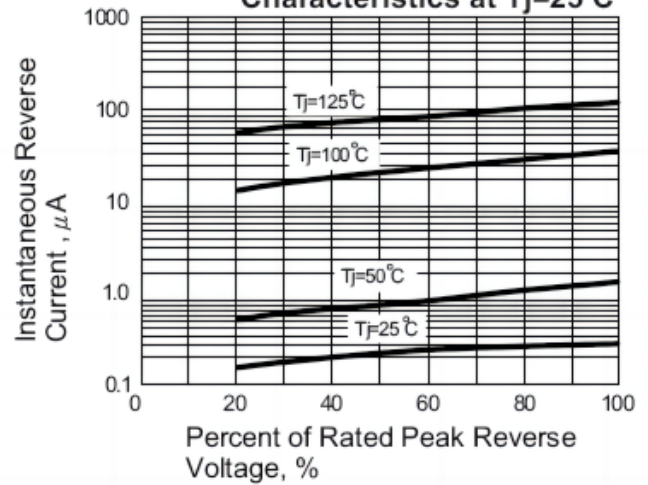
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



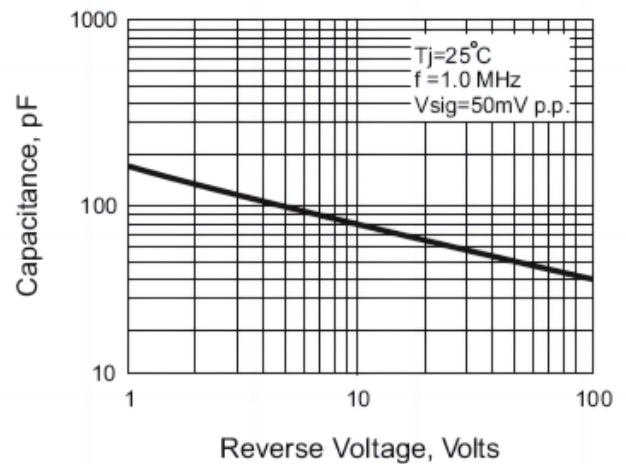
**Fig. 3 Typical Instantaneous Forward Characteristics**



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

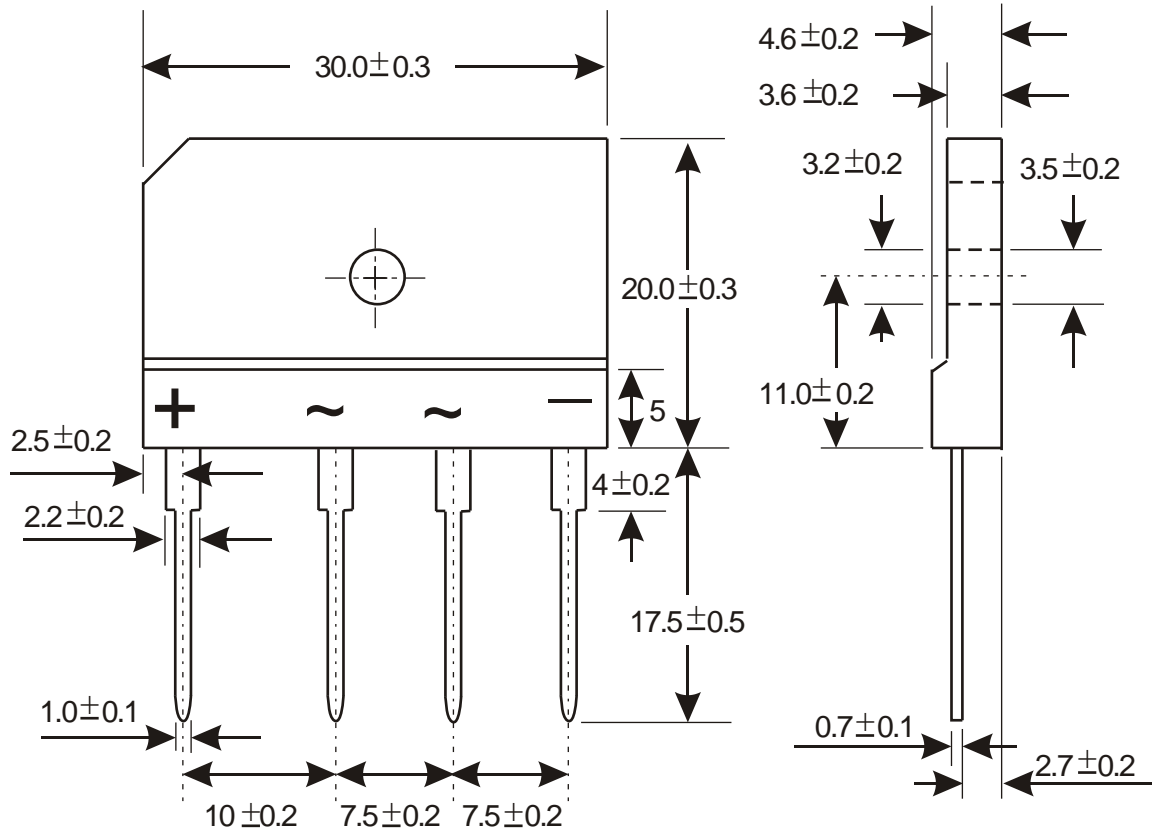


**Fig. 5 Typical Junction Capacitance**





### GBJ Package Outline Dimensions





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