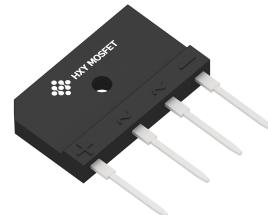




Features

- 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

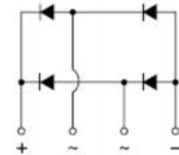


GBJ

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 $T_c = 100^\circ C$ $T_A = 25^\circ C$	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				$\text{A}^2 \text{sec}$
Maximum thermal resistance per leg	RejA RejC				2.6(2) 5 (1)				$^\circ\text{C/W}$
Operating junction and storage temperature range	TJ, TSTG				-55 to + 150				$^\circ\text{C}$

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 $T_A = 25^\circ C$ $T_A = 125^\circ C$	IR				10.0 500				μA

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



Rating and Characteristic Curves (TA=25°C unless otherwise noted)

Fig. 1 Derating Curve for Output Rectified Current

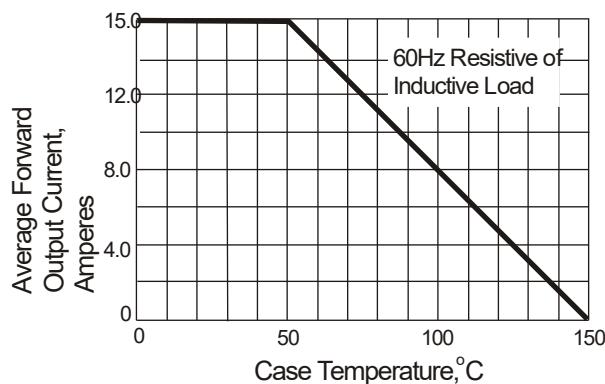


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

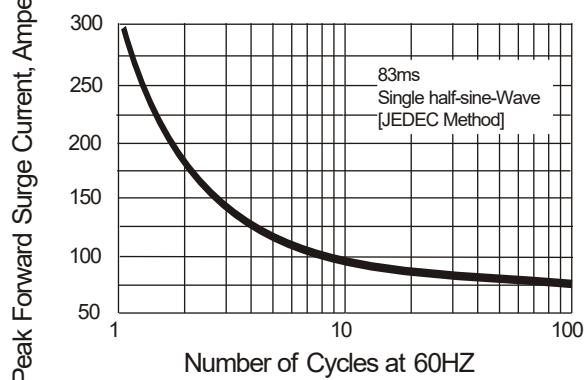


Fig. 3 Typical Instantaneous Forward Characteristics

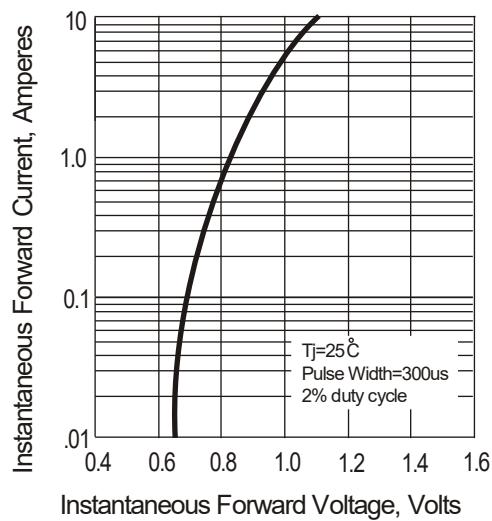


Fig. 4 Typical Reverse Characteristics at T_j=25°C

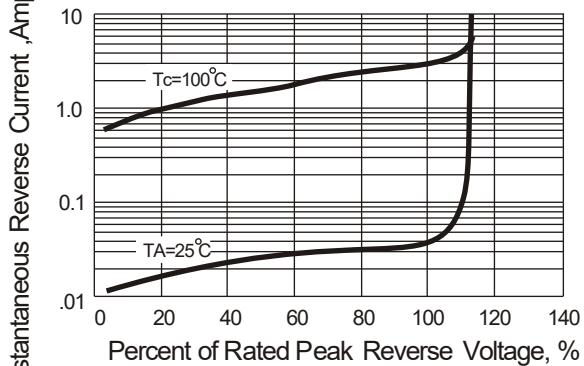
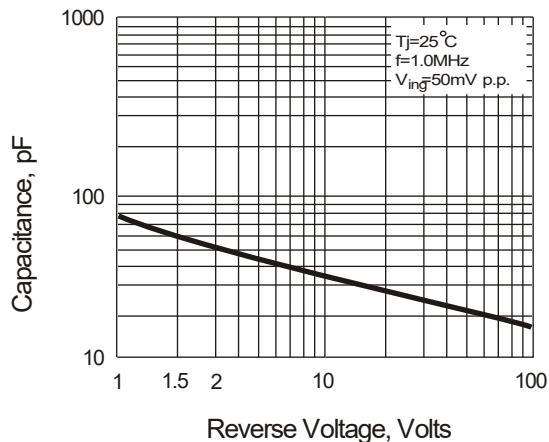


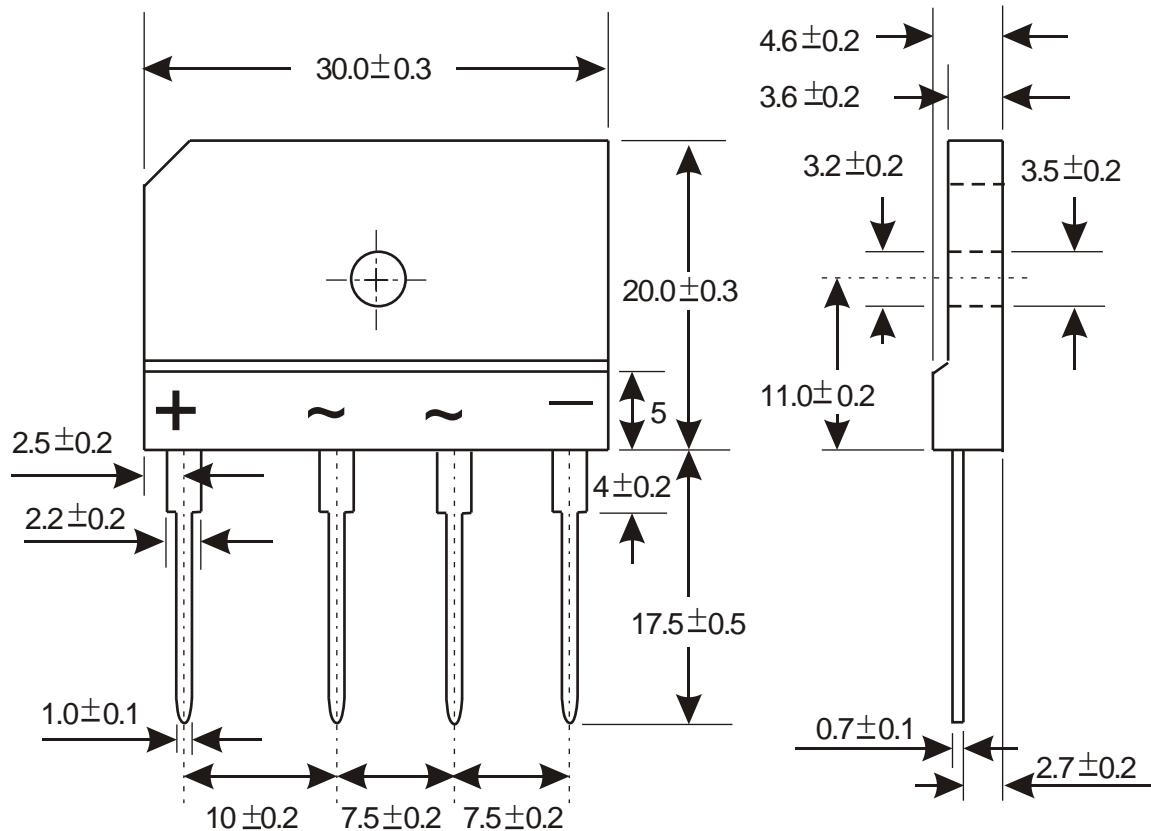
Fig. 5 Typical Junction Capacitance





Package Outline Dimensions

GBJ





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