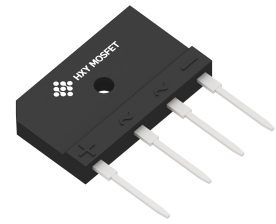




## Features

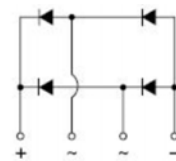
- This series is UL listed under the Recognized Component Index, file number E142814
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500VRMS  
Ideal for printed circuit boards
- High surge current capability



GBJ

## Ordering Information

Product ID	Pack	Qty(PCS)
GBJ30M	GBJ	500



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

Parameter	Symbol	GBJ30M	Unit
Maximum repetitive peak reverse voltage	VRRM	1000	V
Maximum RMS bridge input voltage	VRMS	700	V
Maximum DC blocking voltage	VDC	1000	V
Maximum average forward (with heatsink note1 ) rectified current at Tc=100°C (without heatsink)	IF(AV)	30 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	GBJ30M	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 (TA=25°C Unless otherwise noted)

Fig. 1 Derating Curve for Output Rectified Current

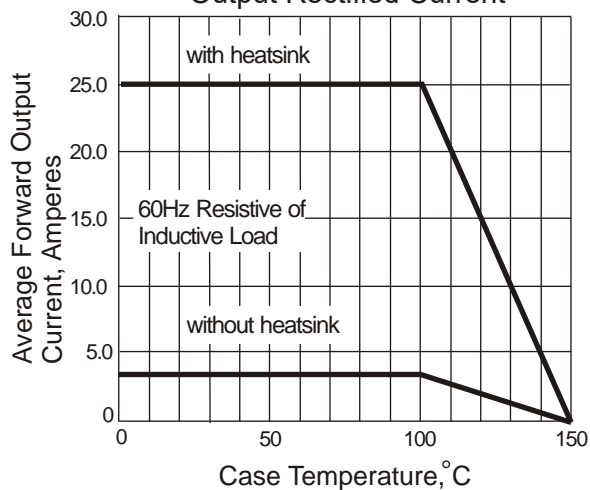


Fig. 2 Maximum Non-repetitive Peak Forward Surge Current

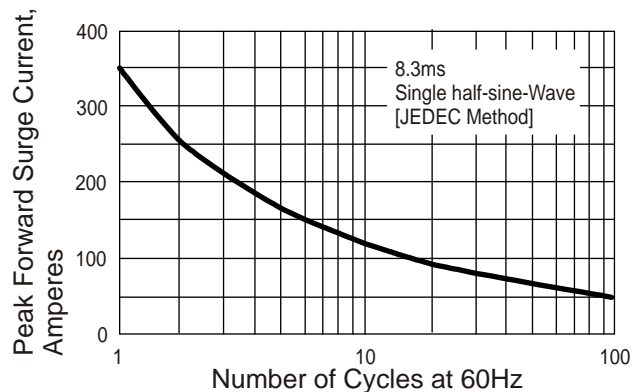


Fig. 3 Typical Instantaneous Forward Characteristics

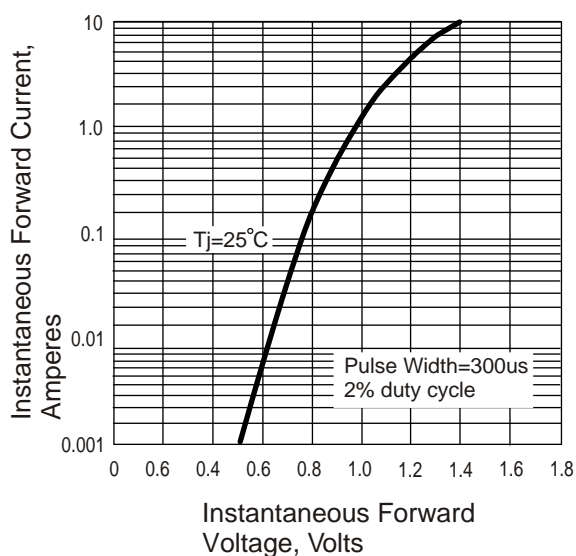


Fig. 4 Typical Reverse Characteristics at Tj=25°C

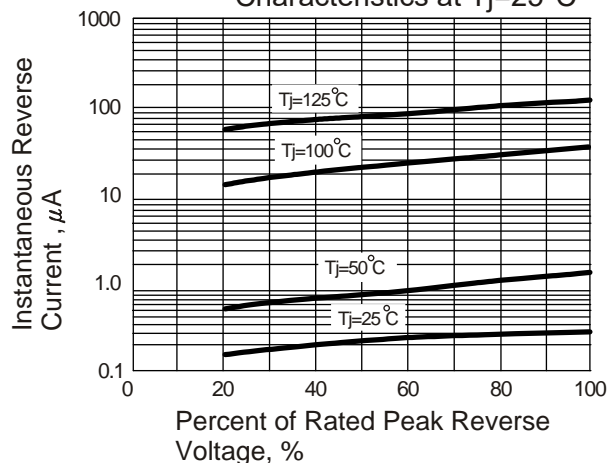
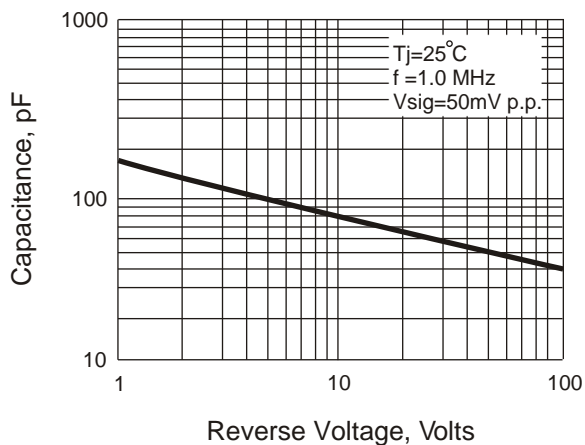
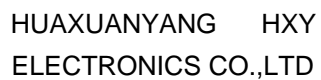
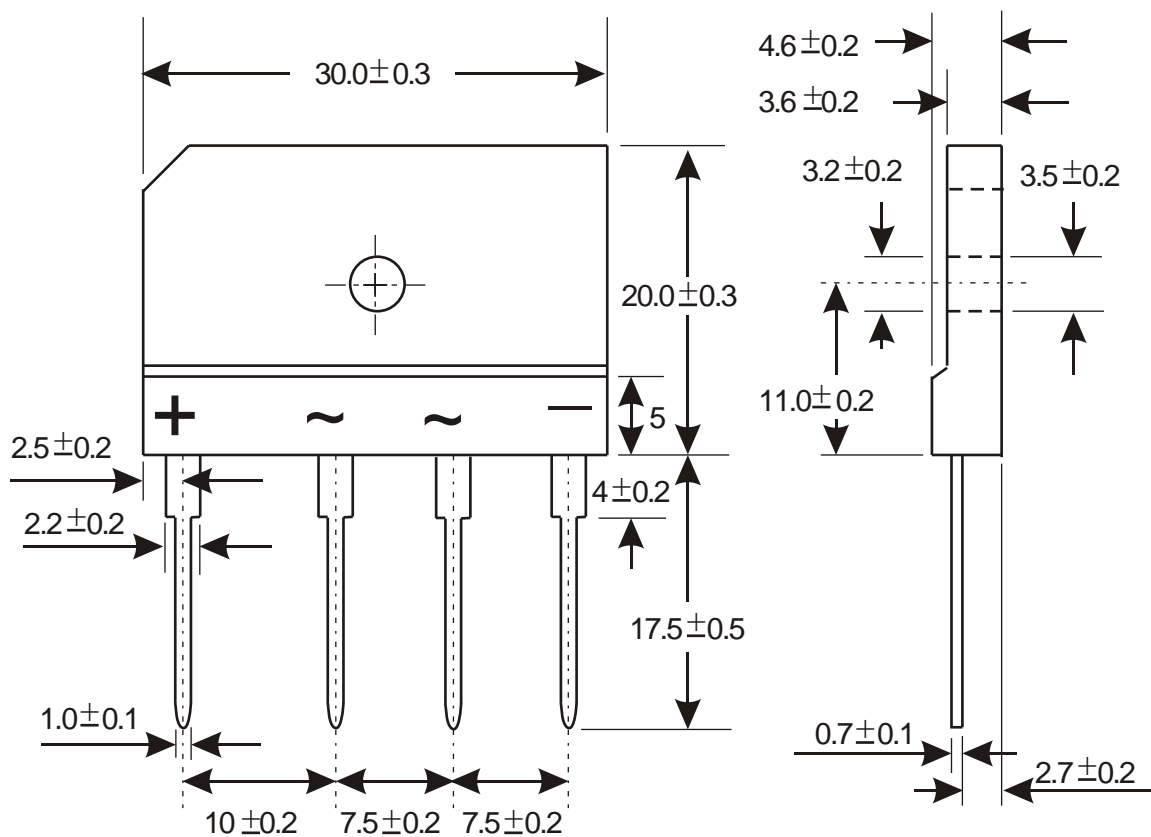


Fig. 5 Typical Junction Capacitance





## GBJ Package Outline Dimensions





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