

CURRENT 35 Ampere  
 VOLTAGE RANG 50 to 1000 Volts

## GBJ35005 THRU GBJ3510

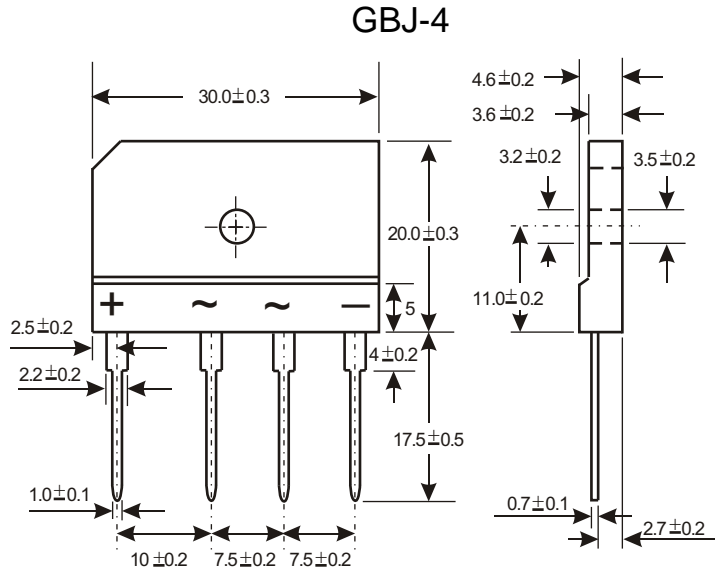


### Features

- This series is SGS listed under the Recognized Component Index, file number SZXEC1902259902
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- High case dielectric strength of 1500VRMS  
Ideal for printed circuit boards
- High surge current capability

### Mechanical Data

Case : Molded plastic body over passivated junctions  
 Terminals : Plated leads solderable per MIL-STD-750, Method 2026  
 Polarity : Polarity symbols molded on body  
 Mounting Position : Any(3)  
 Mounting Torque : 5 in-lbs max.  
 Weight : 0.26 ounce, 7.0 grams (approx)



Dimensions in millimeters(1mm = 0.0394")

### Maximum Ratings & Thermal Characteristics

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

Parameter	Symbol	GBJ 35005	GBJ 3501	GBJ 3502	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)				35.0 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 35005	GBJ 3501	GBJ 3502	GBJ 3504	GBJ 3506	GBJ 3508	GBJ 3510	Unit
Maximum instantaneous forward voltage drop per leg at 17.5 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

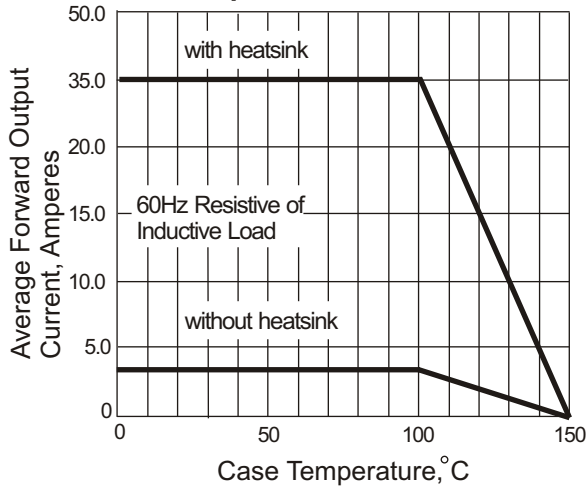
Notes: (1) Device mounted on 250mm x 250mm x 20mm aluminum plate heatsink.

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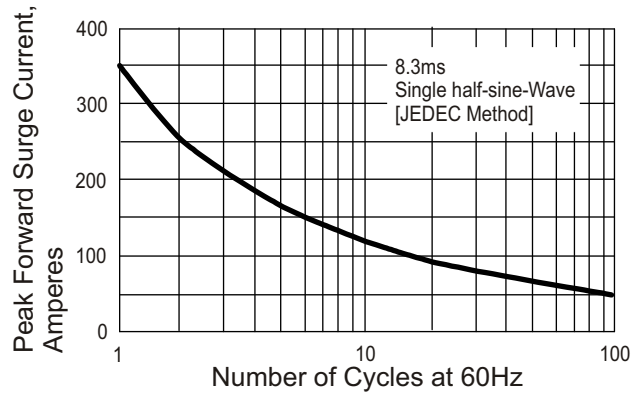
**GBJ35005 THRU GBJ3510**

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

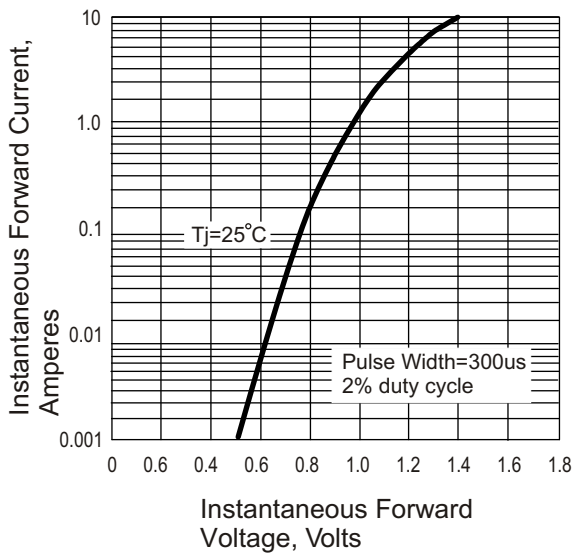
**Fig. 1 Derating Curve for Output Rectified Current**



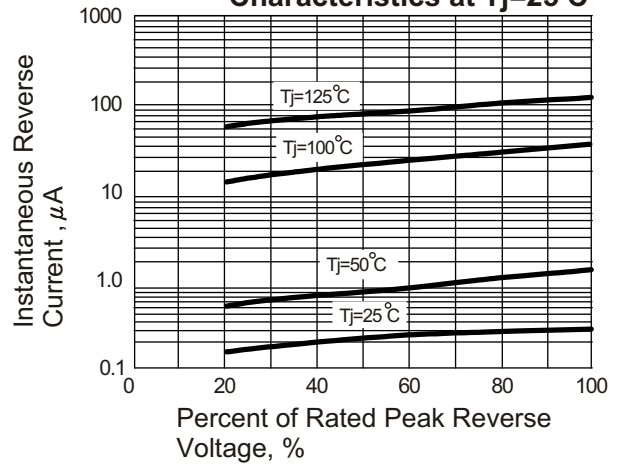
**Fig. 2 Maximum Non-repetitive Peak Forward Surge Current**



**Fig. 3 Typical Instantaneous Forward Characteristics**



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



**Fig. 5 Typical Junction Capacitance**

