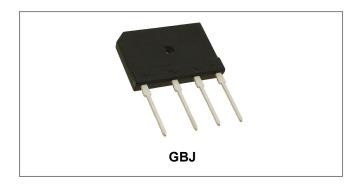






# GBJ35005-GBJ3510

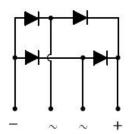
# Single-Phase 35.0A Glass Passivated Bridge Rectifier



### **Features**

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0
- This is a Pb Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

# **Circuit Diagram**



### **Mechanical Data**

- Case: GBJ, Molded plastic
- Terminals: Plated leads solderable per MIL-STD-202, Method 208
  - Delevitor 200
- Polarity: as marked on caseMounting Position: Any
- Lead Free: For RoHS / Lead Free Version

### Maximum Ratings @TA=25°C unless otherwise specified

Type Number	Symbol	GBJ 35005	GBJ 3501	GBJ 3502	GBJ 3504	GBJ 3506	GBJ 3508	GBJ 3510	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>DC</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Average forward rectified output current @T <sub>A</sub> =100°C	I <sub>(AV)</sub>	35.0						A	
Peak Forward Surge Current,8.3ms single half- sine-wave superimposed on rated load (JEDEC method)  I <sub>FSM</sub> 320					А				

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### Electrical Characteristics@TA=25°C unless otherwise specified

Type Number	Symbol	GBJ 35005	GBJ 3501	GBJ 3502	GBJ 3504	GBJ 3506	GBJ 3508	GBJ 3510	Units
Forward Voltage (per element) @I <sub>F</sub> =17.5A @I <sub>F</sub> =35A	V <sub>F</sub>	V <sub>F</sub> 1.0 1.1			V				
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 125°C	I <sub>RM</sub>	5 500					μA		
Typical Junction Capacitance(per leg) (Note 1)	CJ	75						pF	

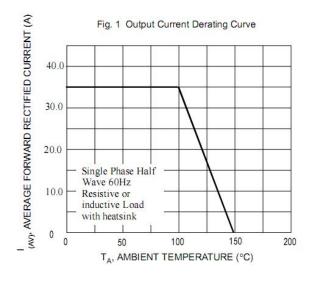
<sup>\*</sup> Pulse width < 300 µs, duty cycle < 2%

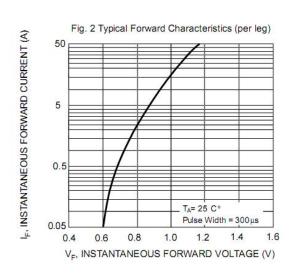
## **Thermal-Mechanical Specifications:**

Type Number	Symbol	GBJ 35005	GBJ 3501	GBJ 3502	GBJ 3504	GBJ 3506	GBJ 3508	GBJ 3510	Units
Between Junction and Ambient, Without heatsink Between Junction and Case, Without heatsink	$R_{ heta JA} \ R_{ heta Jc}$	22 0.8					°C/W		
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150			°C				

Note: 1- Measured at 1 MHZ and applied reverse voltage of 4.0 VDC.

# **Ratings and Characteristics Curves**



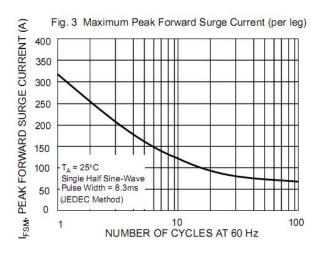


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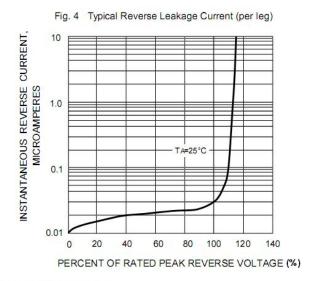


FIG.5 TYPICAL REVERSE CHRACTERISTICS

100

Tj=150°C

Tj=150°C

Tj=25°C

0.01

0 20 40 60 80 100

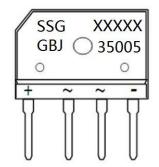
PERCENT OF RATED PEAK INVERSE VOLTGE (V)

## **Ordering Information**

Device	Package	Plating	Shipping
GBJ35005 THRU GBJ3510	GBJ(Pb-Free)	Pure Sn	15pcs / tube

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

### **Marking Diagram**



Where XXXXX is YYWWL

 SSG
 = SSG

 YY
 = Year

 WW
 = Week

 L
 = Lot Number

 GBJ35005
 = Type Number

Cautions: Molding resin Epoxy resin UL:94V-0

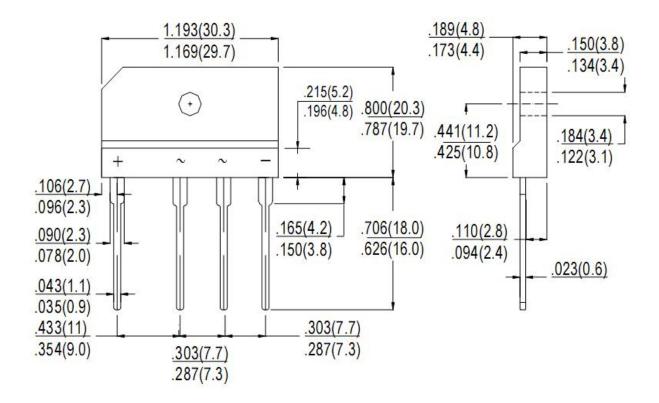
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# **Mechanical Dimensions GBJ (Inches/Millimeters)**









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