

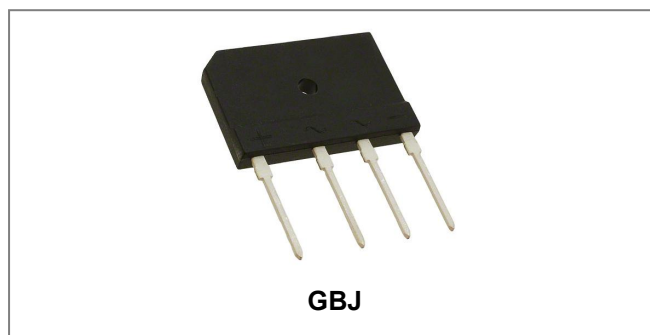


# THE DATASHEET OF GBJ608



## GBJ6005-GBJ610

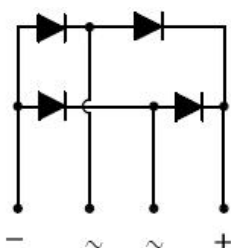
### Single-Phase 6.0A Glass Passivated Bridge Rectifier



#### 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
- Polarity: as marked on case
- Mounting Position: Any
- Lead Free: For RoHS / Lead Free Version

#### Maximum Ratings @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Type Number	Symbol	GBJ 6005	GBJ 601	GBJ 602	GBJ 604	GBJ 606	GBJ 608	GBJ 610	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_{DC}$	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Average forward rectified output current (Note 1) @ $T_A = 100^{\circ}\text{C}$	$I_o$	6.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150							A

**Electrical Characteristics @  $T_A=25^\circ\text{C}$  unless otherwise specified**

Type Number	Symbol	GBJ 6005	GBJ 601	GBJ 602	GBJ 604	GBJ 606	GBJ 608	GBJ 610	Units
Forward Voltage (per element) @ $I_F=3\text{A}$ @ $I_F=6\text{A}$	$V_F$				1.0 1.1				V
Peak Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	$I_{RM}$				5.0 500				$\mu\text{A}$
Typical Junction Capacitance(per leg) (Note 2)	$C_J$				45				pF

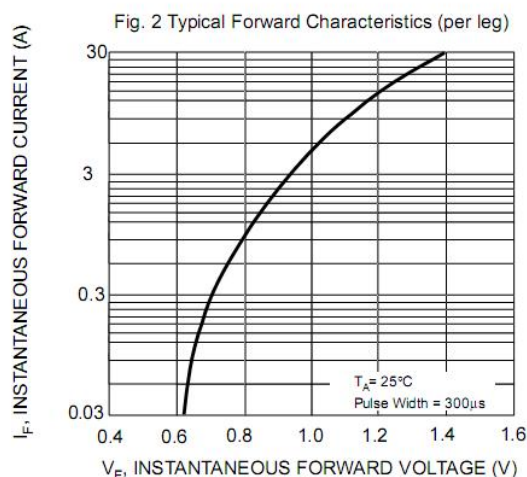
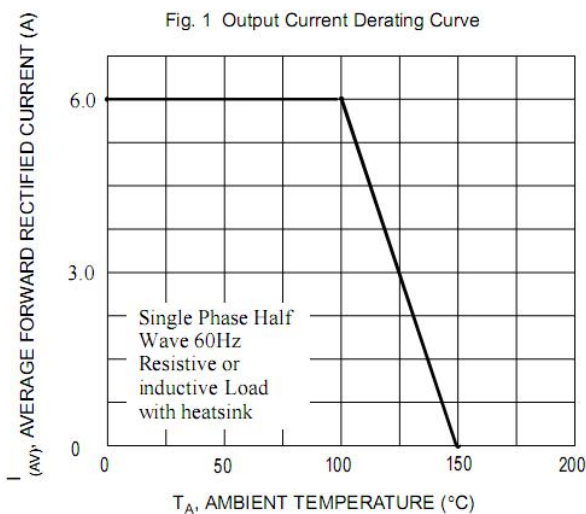
\* Pulse width < 300  $\mu\text{s}$ , duty cycle < 2%

**Thermal-Mechanical Specifications:**

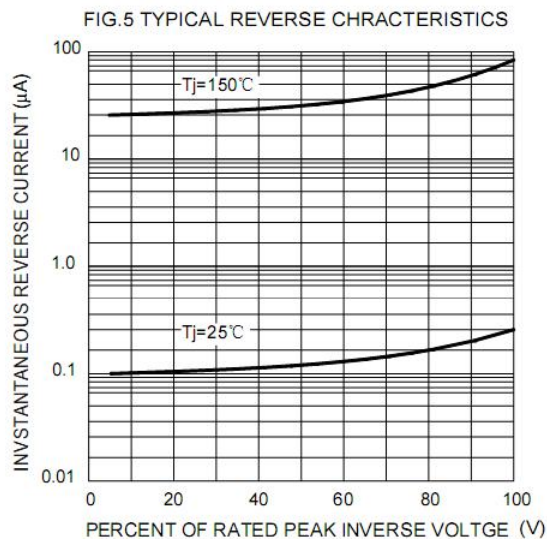
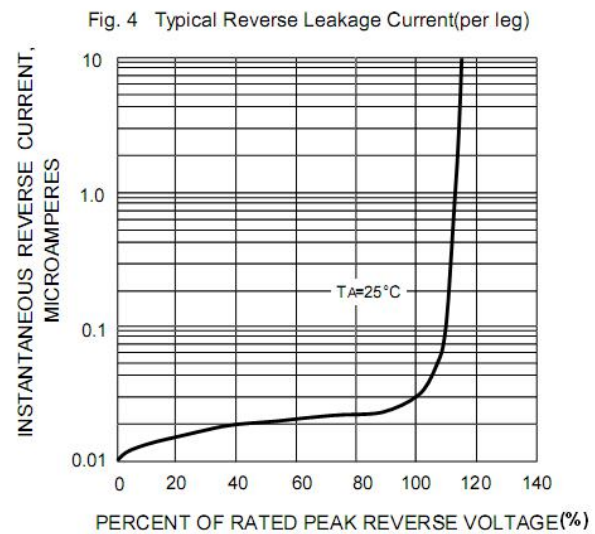
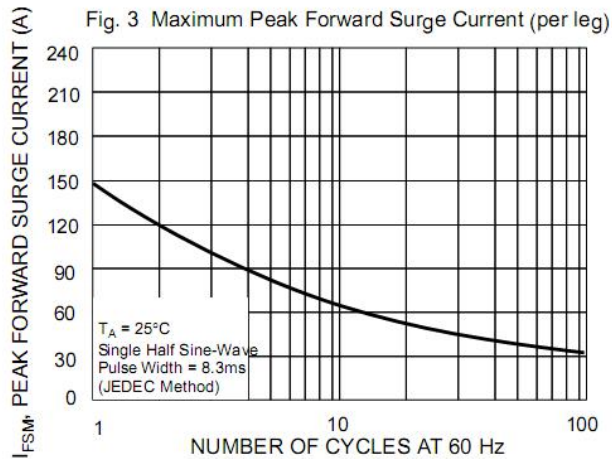
Type Number	Symbol	GBJ 6005	GBJ 601	GBJ 602	GBJ 604	GBJ 606	GBJ 608	GBJ 610	Units
Typical Thermal Resistance (per leg)	$R_{\theta JA}$ $R_{\theta JL}$				26 2.5				$^\circ\text{C/W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$				-55 to +150				$^\circ\text{C}$

Note: 1. Mounted on glass epoxy PC board with 1.3mm<sup>2</sup> solder pad.  
2. Measured at 1.0 MHz and applied reverse voltage of 5.0V D.C.

**Ratings and Characteristics Curves**



**Technical Data  
Data Sheet N1801, Rev. A**

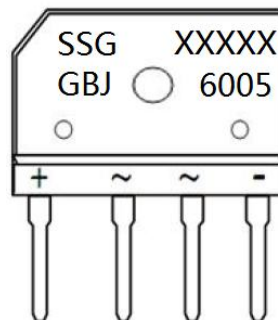


**Ordering Information**

Device	Package	Plating	Shipping
GBJ6005 THRU GBJ610	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**

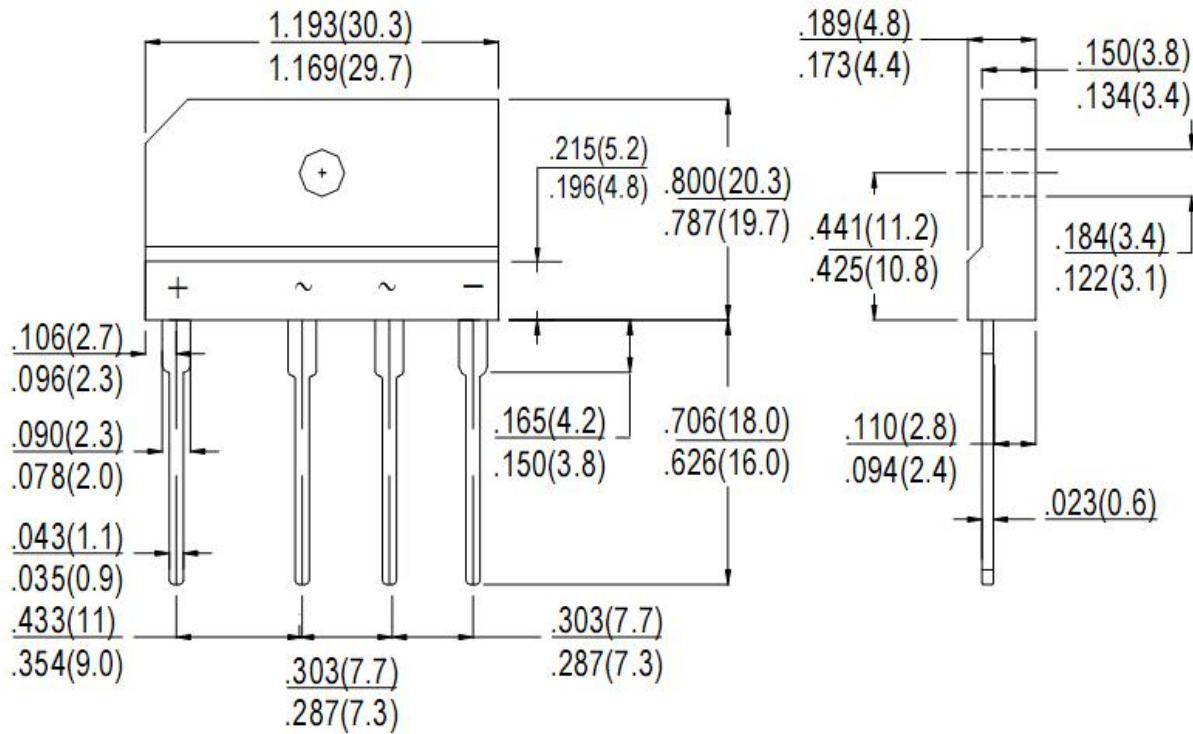


Where XXXXX is YYWWL

SSG = SSG  
YY = Year  
WW = Week  
L = Lot Number  
GBJ6005 = Type Number

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

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





**GBJ6005  
THRU  
GBJ610**

**Technical Data  
Data Sheet N1801, Rev. A**





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