

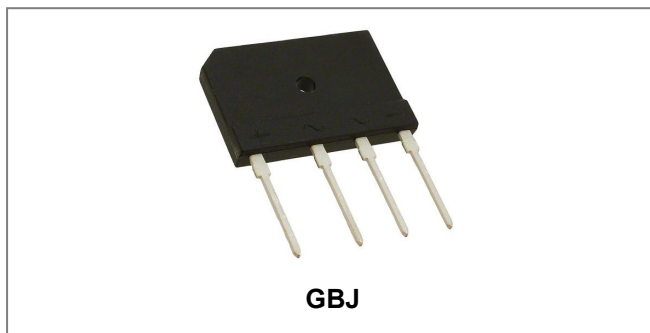


**THE DATASHEET OF
GBJ1008**



GBJ10005-GBJ1010

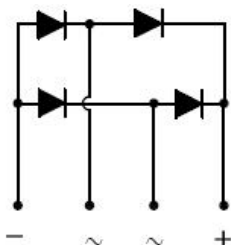
Single-Phase 10.0A Glass Passivated Bridge Rectifier



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 10005	GBJ 1001	GBJ 1002	GBJ 1004	GBJ 1006	GBJ 1008	GBJ 1010	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) @ $T_A=90^{\circ}\text{C}$	I_o	10.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	175							A

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

Type Number	Symbol	GBJ 10005	GBJ 1001	GBJ 1002	GBJ 1004	GBJ 1006	GBJ 1008	GBJ 1010	Units
Forward Voltage (per element) @ $I_F = 5\text{A}$ @ $I_F = 10\text{A}$	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				μA
Typical Junction Capacitance(per leg) (Note 2)	C_J				55				pF

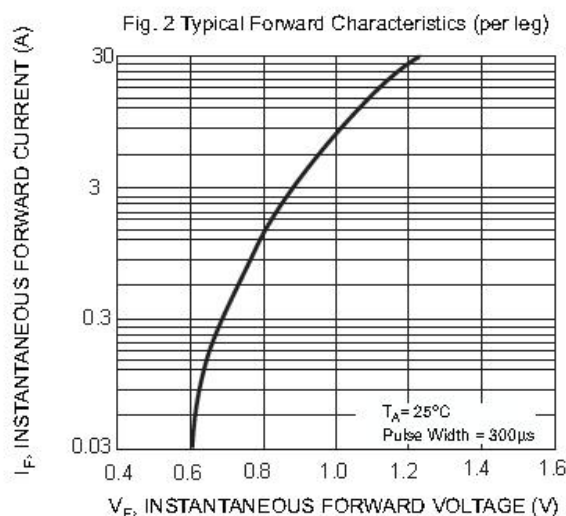
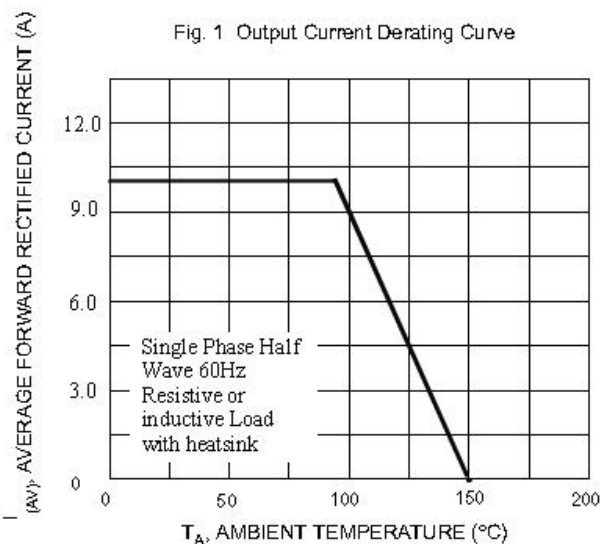
* Pulse width < 300 μs , duty cycle < 2%

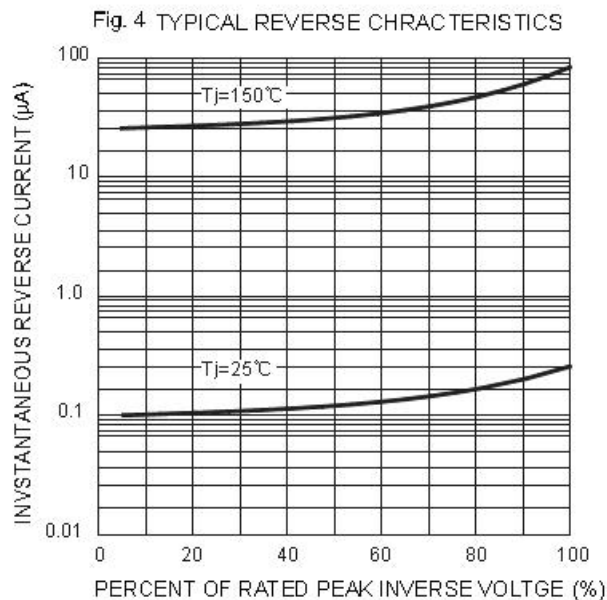
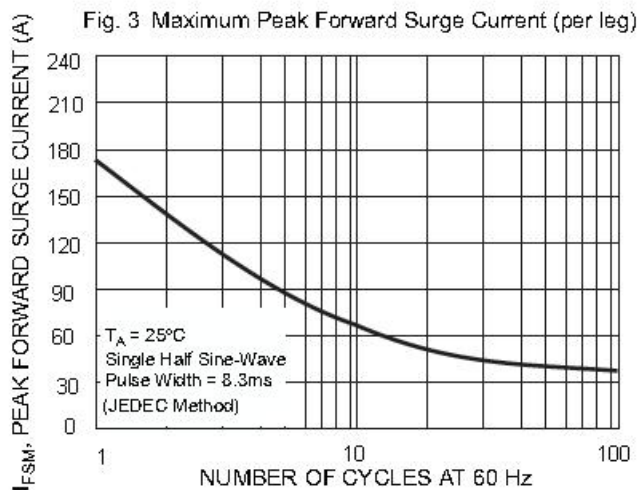
Thermal-Mechanical Specifications:

Type Number	Symbol	GBJ 10005	GBJ 1001	GBJ 1002	GBJ 1004	GBJ 1006	GBJ 1008	GBJ 1010	Units
Typical Thermal Resistance (per leg)	$R_{\theta JA}$ $R_{\theta JL}$				14 2.3				$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}				-55 to +150				$^\circ\text{C}$

Note: 1. Mounted on glass epoxy PC board with 1.3mm² solder pad.
2. Measured at 1.0 MHz and applied reverse voltage of 5.0V D.C.

Ratings and Characteristics Curves



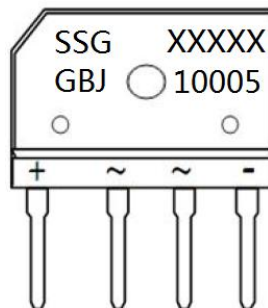


Ordering Information

Device	Package	Plating	Shipping
GBJ10005 THRU GBJ1010	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
GBJ10005 = Type Number

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

**Technical Data
Data Sheet N1793, Rev. A**





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