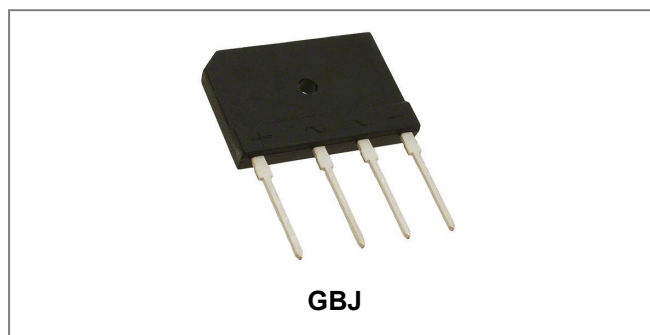


GBJ15005-GBJ1510

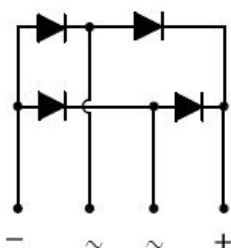
Single-Phase 15.0A Glass Passivated Bridge Rectifier



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 15005	GBJ 1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 1510	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 @ $T_C=100^{\circ}\text{C}$ (Note 1)	$I_{F(AV)}$	15.0							A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	200							A

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

Type Number	Symbol	GBJ 15005	GBJ 1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 1510	Units
Forward Voltage (per element) @ $I_F = 7.5\text{A}$ @ $I_F = 15\text{A}$	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}				10.0 500				μA
Typical Junction Capacitance(per leg) (Note 2)	C_J				60				pF

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

Thermal-Mechanical Specifications:

Type Number	Symbol	GBJ 15005	GBJ 1501	GBJ 1502	GBJ 1504	GBJ 1506	GBJ 1508	GBJ 1510	Units
Typical Thermal Resistance Junction to Ambient, Without heatsink Typical Thermal Resistance Junction to Case, With heatsink (Note 1)	$R_{\theta JA}$ $R_{\theta JC}$				22 2				$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}				-55 to +150				$^\circ\text{C}$

Note: 1- The heatsink are dimensioned as 25*17*4cm and the material is aluminum.
2- Measured at 1 MHz and applied reverse voltage of 4.0 VDC.

Ratings and Characteristics Curves

Fig. 1 Output Current Derating Curve

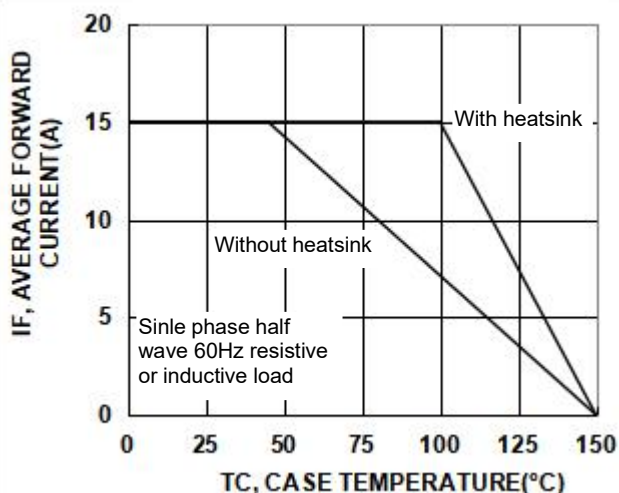
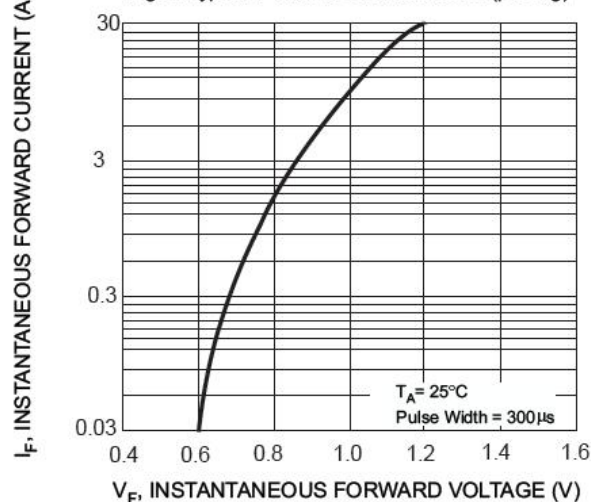
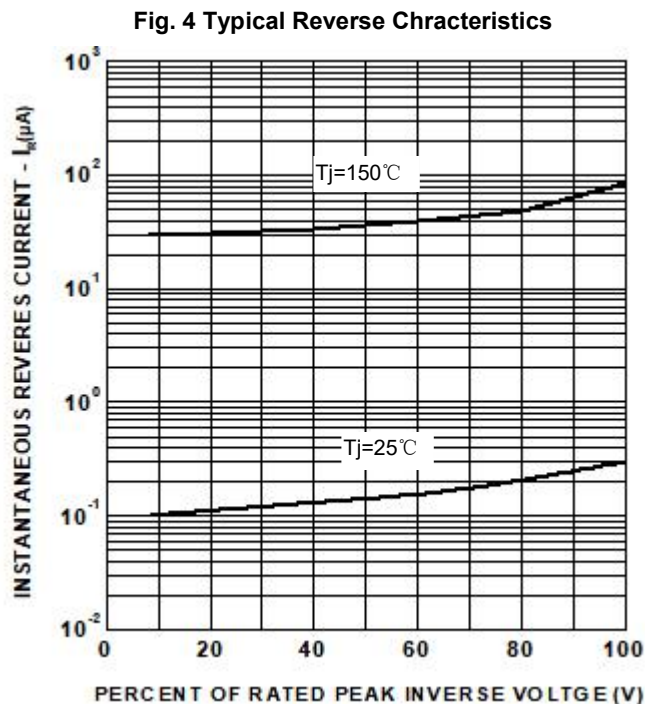
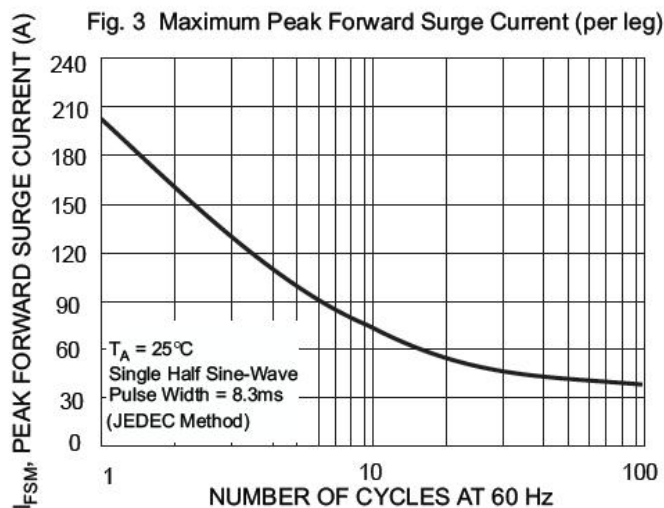


Fig. 2 Typical Forward Characteristics (per leg)



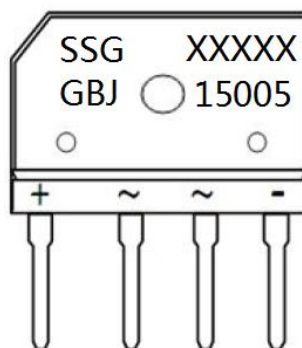


Ordering Information

Device	Package	Plating	Shipping
GBJ15005 THRU GBJ1510	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
GBJ15005 = Type Number

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

DISCLAIMER:

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