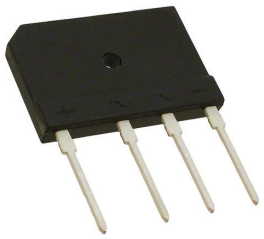
Technical Data
Data Sheet N1795, Rev. A

GBJ20005-GBJ2010

Single-Phase 20.0A Glass Passivated Bridge Rectifier

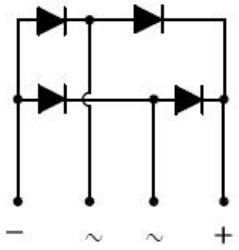


GBJ

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°C unless otherwise specified

Type Number	Symbol	GBJ 20005	GBJ 2001	GBJ 2002	GBJ 2004	GBJ 2006	GBJ 2008	GBJ 2010	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_A =100°C	$I_{(AV)}$	20.0							A
Peak Forward Surge Current,8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	240							A

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Electrical Characteristics@T_A=25°C unless otherwise specified

Type Number	Symbol	GBJ 20005	GBJ 2001	GBJ 2002	GBJ 2004	GBJ 2006	GBJ 2008	GBJ 2010	Units
Forward Voltage (per element) @I_F =10A @I_F =20A	V_F	1.0 1.1							V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_{RM}	10.0 500							μA
Typical Junction Capacitance(per leg) (Note 1)	C_J	65							pF

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

Thermal-Mechanical Specifications:

Type Number	Symbol	GBJ 20005	GBJ 2001	GBJ 2002	GBJ 2004	GBJ 2006	GBJ 2008	GBJ 2010	Units
Between Junction and Ambient, Without heatsink Between Junction and Case, Without heatsink	$R_{\theta JA}$ $R_{\theta Jc}$	22 1.5							°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							°C

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

Ratings and Characteristics Curves

Fig. 1 Output Current Derating Curve

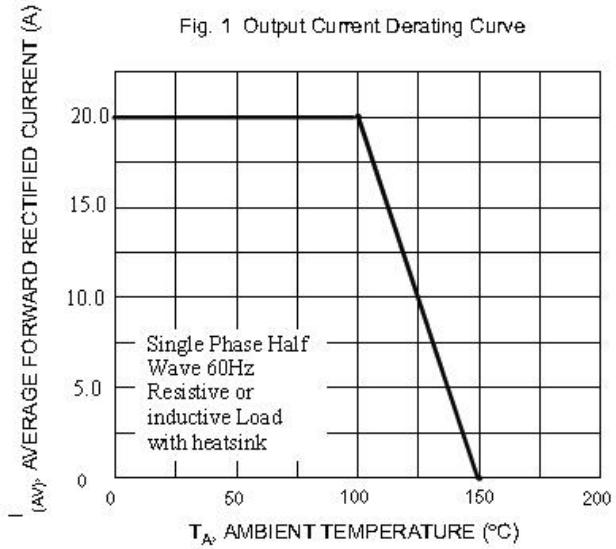
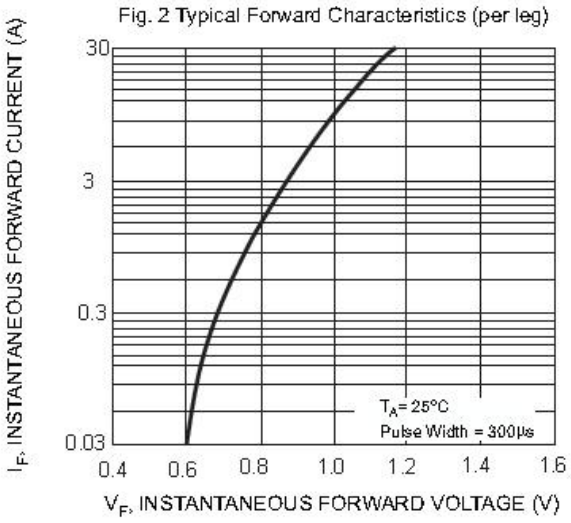


Fig. 2 Typical Forward Characteristics (per leg)



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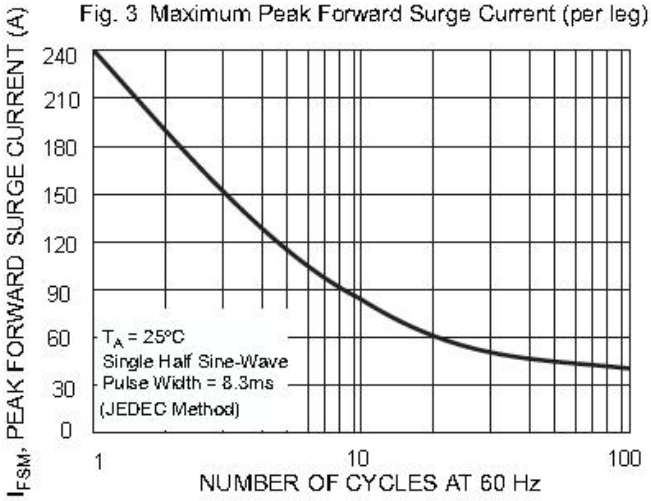
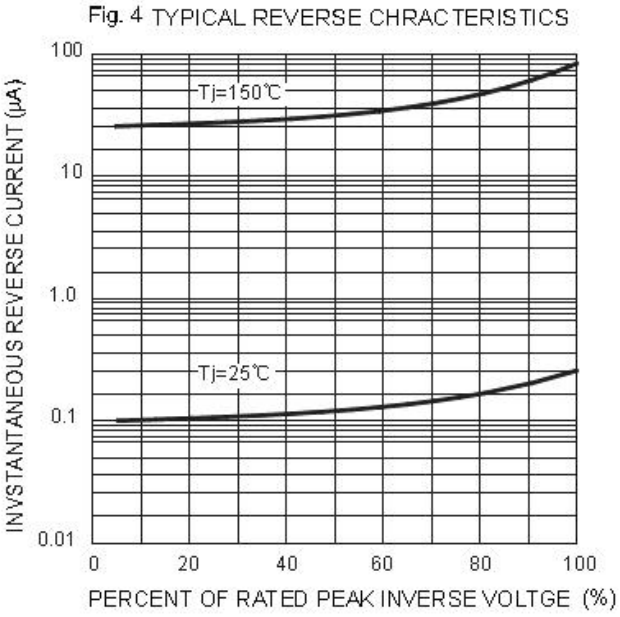


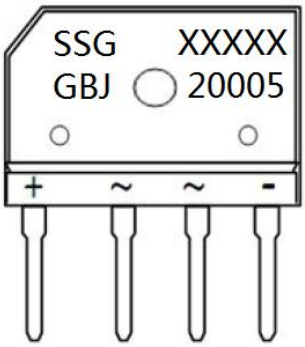


Ordering Information

Device	Package	Plating	Shipping
GBJ20005 THRU GBJ2010	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
GBJ20005	= Type Number

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

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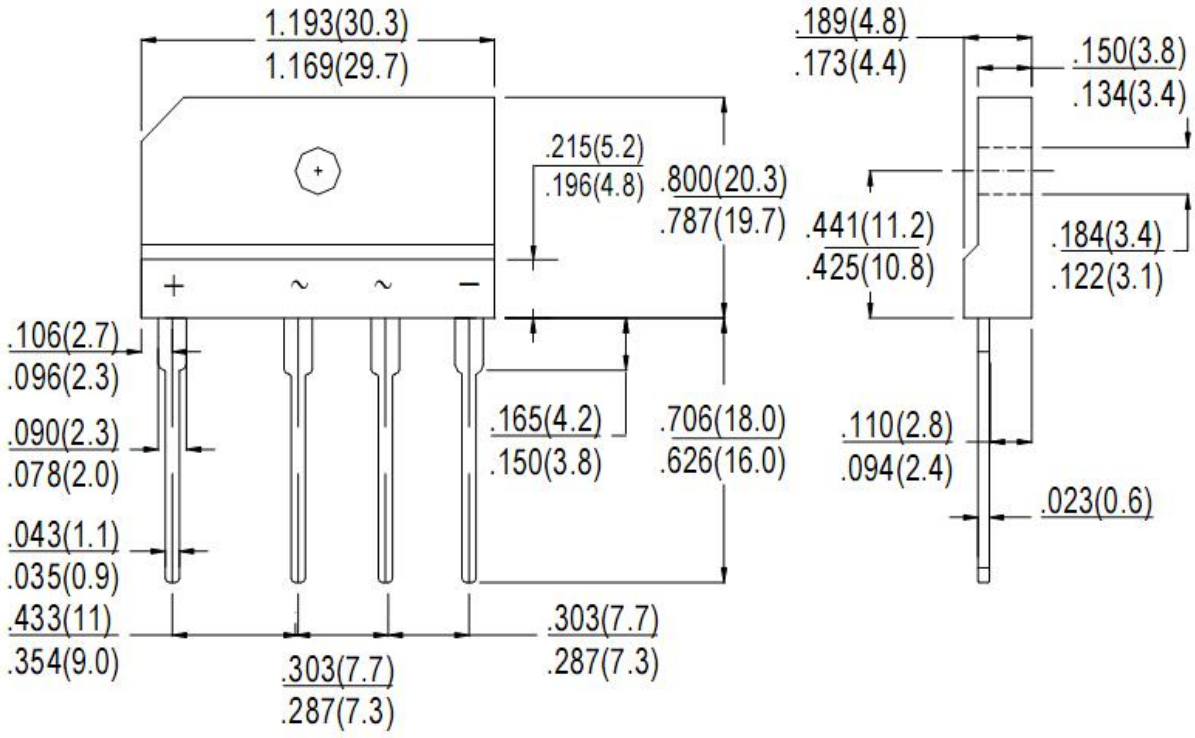
Mechanical Dimensions GBJ (Inches/Millimeters)



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