

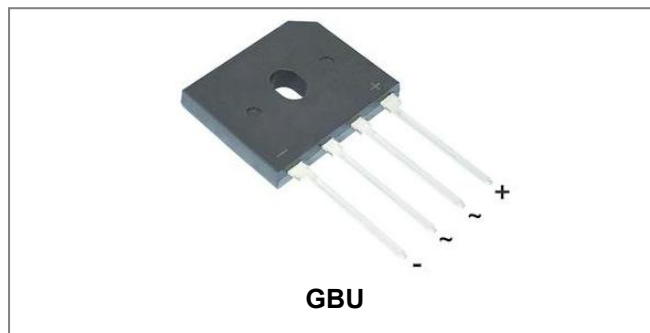


THE DATASHEET OF GBU2010



GBU20005 THRU GBU2010

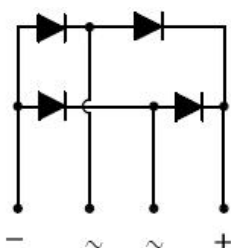
Single-Phase 20.0A Glass Passivated Bridge Rectifier



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: GBU, 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

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbol	GBU 20005	GBU 2001	GBU 2002	GBU 2004	GBU 2006	GBU 2008	GBU 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 (with heatsink) @T _C =90°C (without heatsink)	I _O	20 3.4							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	320							A
I ² t Rating for fusing (t < 8.3ms)	I ² t	424.96							A ² s

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

Type Number	Symbol	GBU 20005	GBU 2001	GBU 2002	GBU 2004	GBU 2006	GBU 2008	GBU 2010	Units	
Forward Voltage (per element) @ $I_F=10\text{A}$	V_F					1.0				V
Peak Reverse Current @ $T_A=25^{\circ}\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^{\circ}\text{C}$	I_{RM}					5.0 200				μA
Typical Junction Capacitance(per leg) (Note 1)	C_J					90				pF
The proposed installation torque Max torque	Tor					5.0 8.0				Kgf.cm

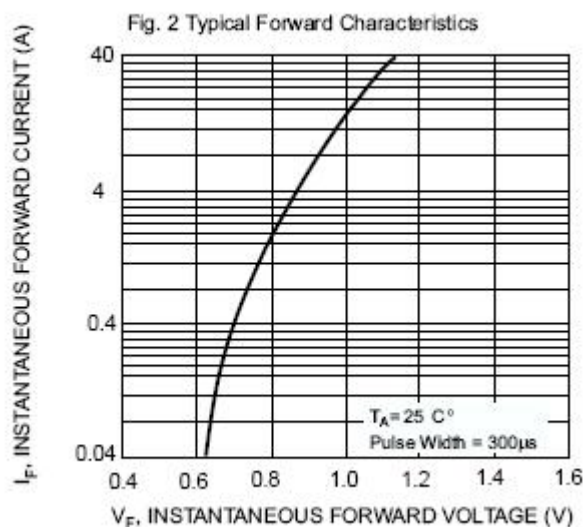
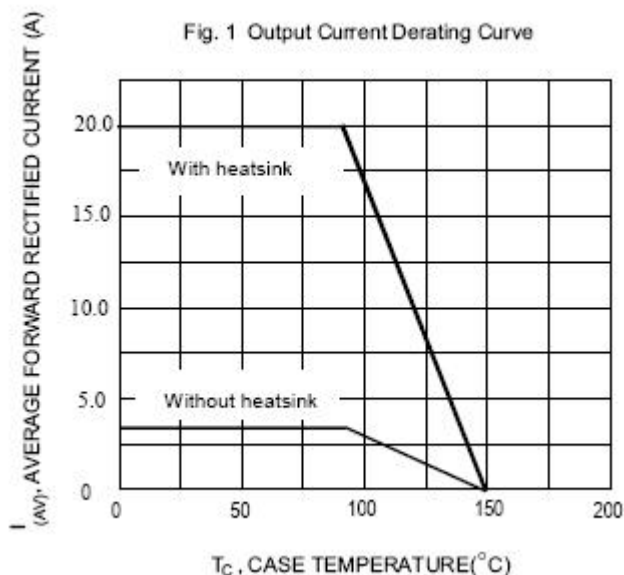
* Pulse width < 300 μs , duty cycle < 2%

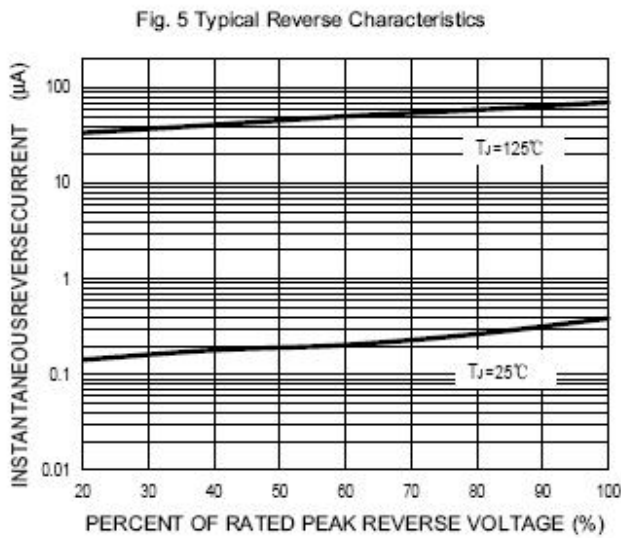
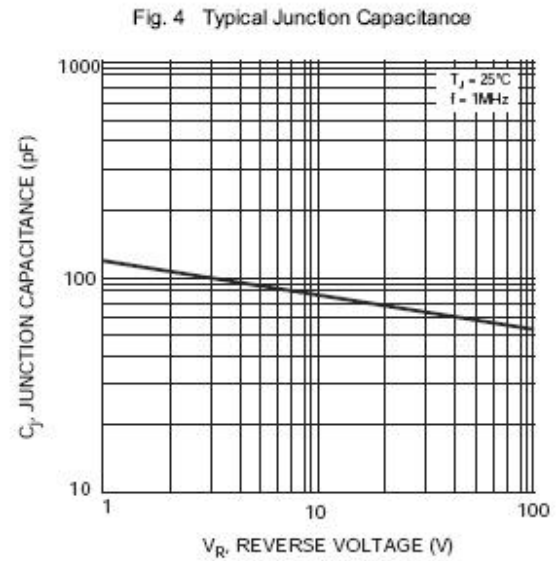
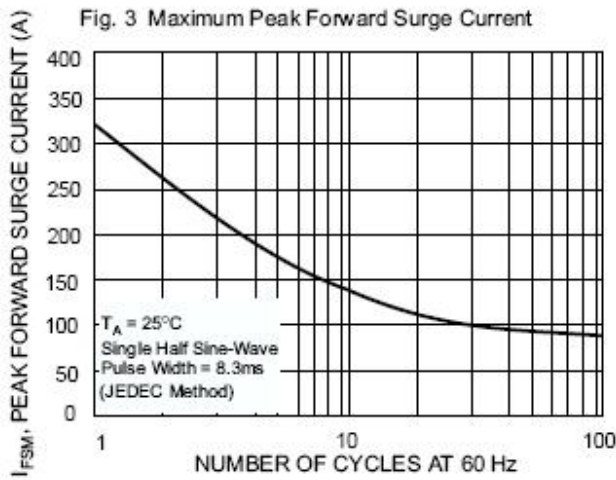
Thermal-Mechanical Specifications: @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Type Number	Symbol	GBU 20005	GBU 2001	GBU 2002	GBU 2004	GBU 2006	GBU 2008	GBU 2010	Units	
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JC}$ $R_{\theta JL}$					28 8.7 5.3				$^{\circ}\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}					-55 to +150				$^{\circ}\text{C}$

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

Ratings and Characteristics Curves



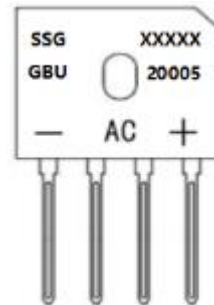


Ordering Information

Device	Package	Plating	Shipping
GBU20005 THRU GBU2010	GBU (Pb-Free)	Pure Sn	20pcs / 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

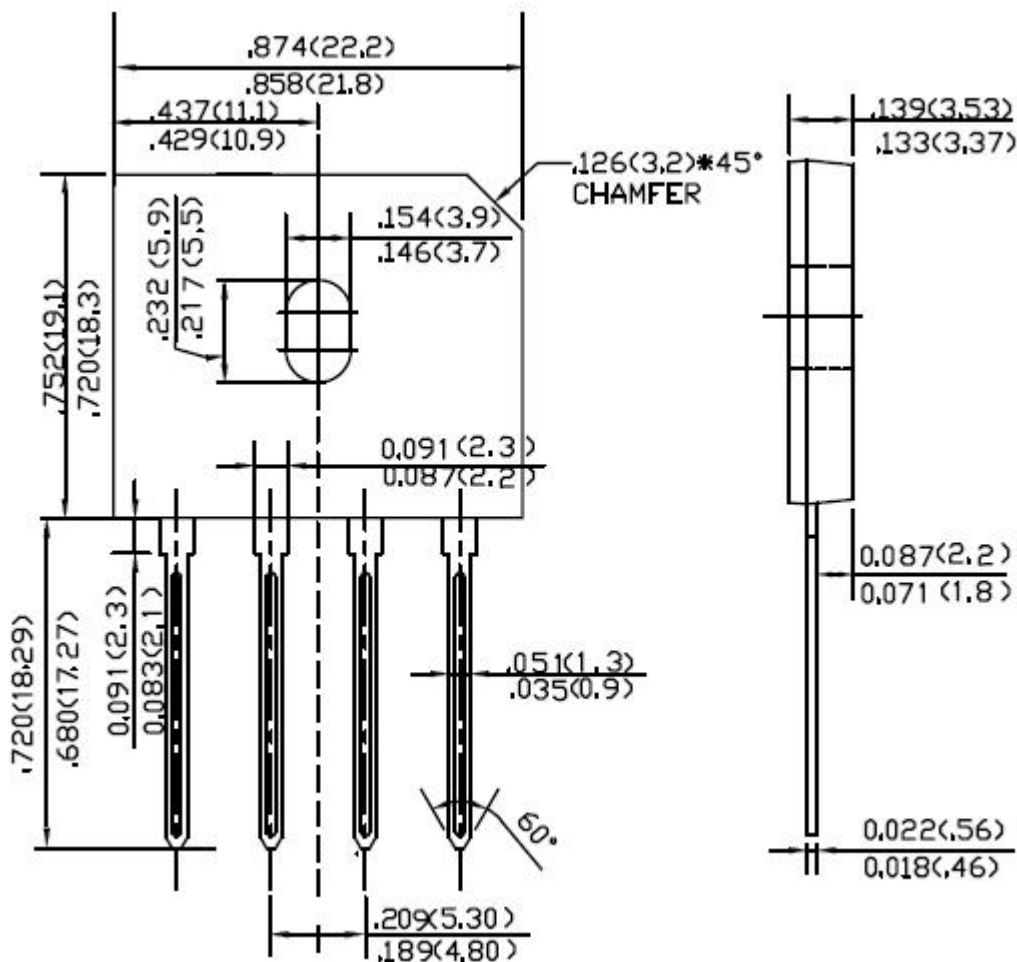


Where XXXXX is YYWWL

SSG = SSG
YY = Year
WW = Week
L = Lot Number
GBU20005 = Type Number

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

Mechanical Dimensions GBU (Inches/Millimeters)



**Technical Data
Data Sheet N2282, Rev. -**



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