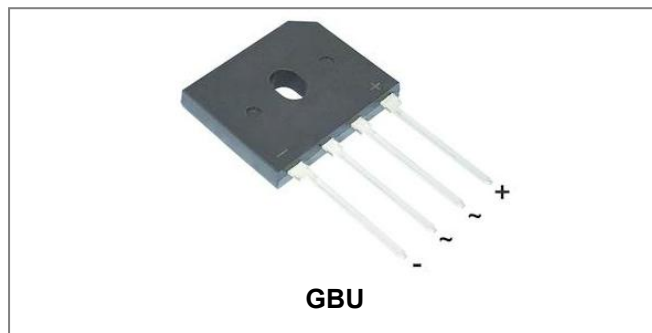


GBU6005 THRU GBU610

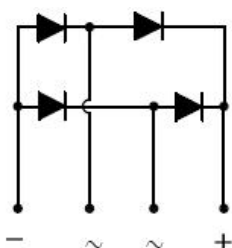
Single-Phase 6.0A Glass Passivated Bridge Rectifier



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: 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 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 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 = 40°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}	120							A

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

Type Number	Symbol	GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 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				μA
Typical Junction Capacitance(per leg) (Note 2)	C_J				65				pF

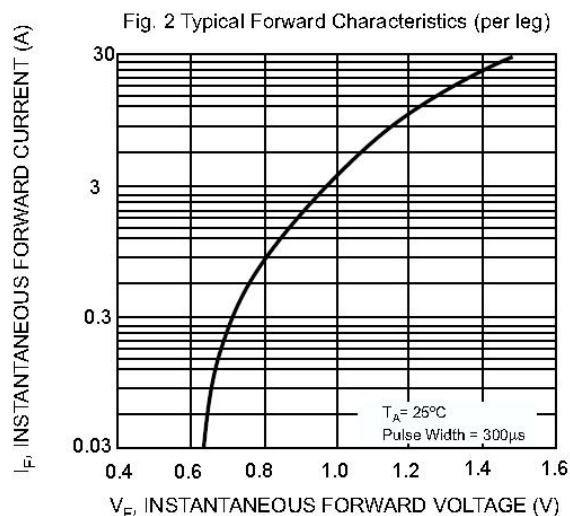
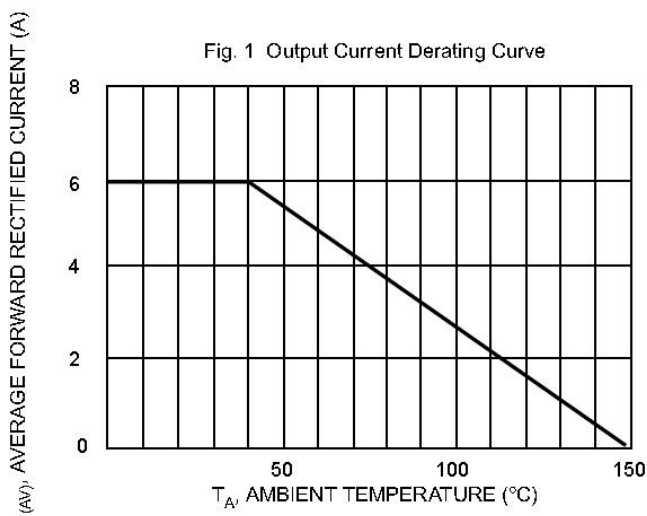
* Pulse width < 300 μs , duty cycle < 2%

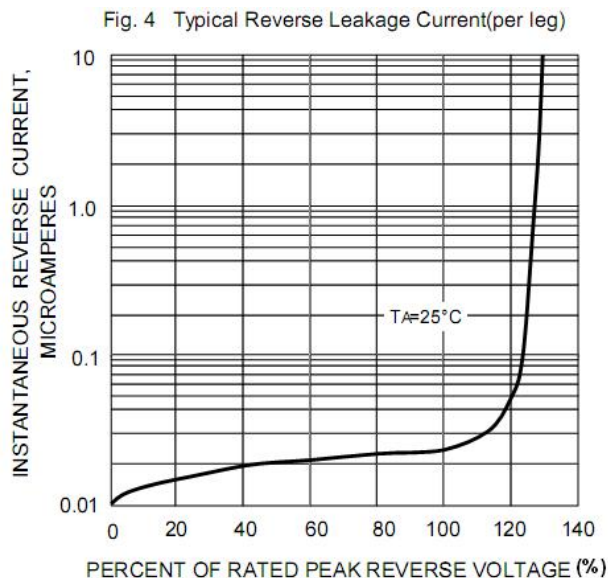
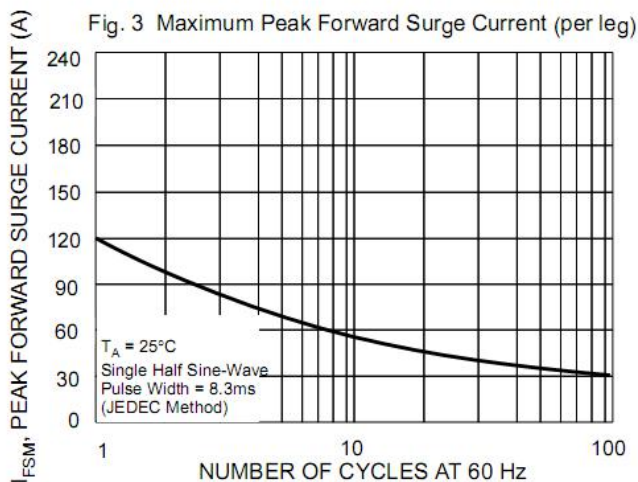
Thermal-Mechanical Specifications: @ $T_A=25^\circ\text{C}$ unless otherwise specified

Type Number	Symbol	GBU 6005	GBU 601	GBU 602	GBU 604	GBU 606	GBU 608	GBU 610	Units
Typical Thermal Resistance (per leg)	$R_{\theta JA}$ $R_{\theta JL}$				20 2.2				$^\circ\text{C/W}$
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 4.0V D.C.

Ratings and Characteristics Curves



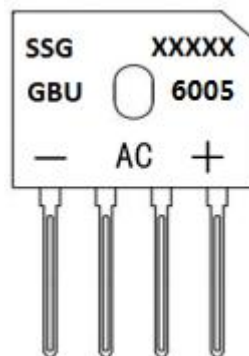


Ordering Information

Device	Package	Plating	Shipping
GBU6005 THRU GBU610	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
GBU6005 = Type Number

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

**Technical Data
Data Sheet N1791, Rev. A**



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