

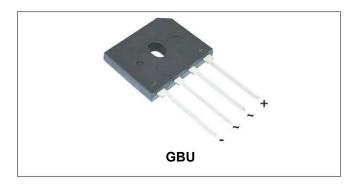
GBU4005G THRU GBU410G

Technical Data Data Sheet N1751, Rev. A

RoHS

GBU4005G THRU GBU410G

Single-Phase 4.0A Glass Passivated Bridge Rectifier

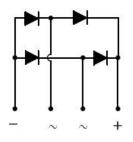


Glass passivated die construction

Features

- 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 4005G	GBU 401G	GBU 402G	GBU 404G	GBU 406G	GBU 408G	GBU 410G	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) $@T_A = 40^{\circ}C$	lo				4.0				А
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}				120				A



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Electrical Characteristics:@T_A=25°C unless otherwise specified

Type Number	Symbol	GBU 4005G	GBU 401G	GBU 402G	GBU 404G	GBU 406G	GBU 408G	GBU 410G	Units
Forward Voltage (per element) @I _F =2A @I _F =4A	VF				1.0 1.1				v
Peak Reverse Current $@T_A = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_A = 125^{\circ}C$	I _{RM}				5.0 500				μA
Typical Junction Capacitance(per leg) (Note 2)	CJ				65				pF

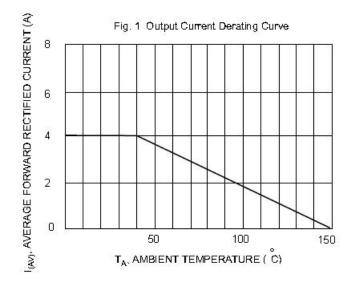
* Pulse width < 300 μ s, duty cycle < 2%

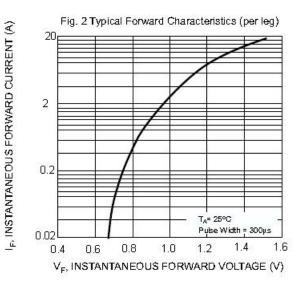
Thermal-Mechanical Specifications:@T_A=25°C unless otherwise specified

Type Number	Symbol	GBU 4005G	GBU 401G	GBU 402G	GBU 404G	GBU 406G	GBU 408G	GBU 410G	Units
Typical Thermal Resistance (per leg)	R _{θJA} R _{θJL}				20 2.2				°C/W
Operating and Storage Temperature Range	T _J , T _{STG}			-55	5 to +150	I			°C

Note: 1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad. 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

Ratings and Characteristics Curves



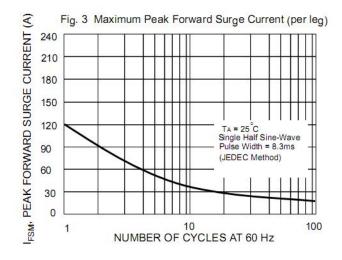


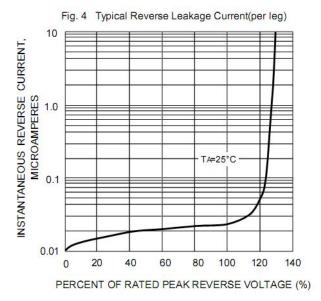


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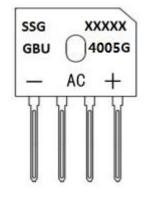


Ordering Information

Device	Package	Plating	Shipping
GBU4005G THRU GBU410G	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
GBU4005G	= Type Number

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

• China - Germany - Korea - Singapore - United States •

http://www.smc-diodes.com - sales@ smc-diodes.com •

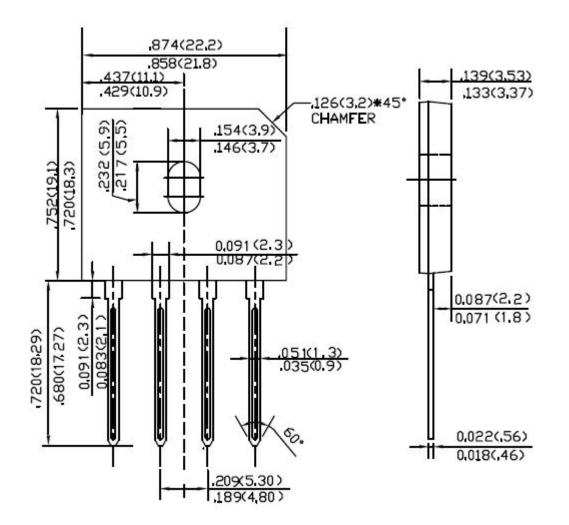


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THRU

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Mechanical Dimensions GBU (Inches/Millimeters)





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