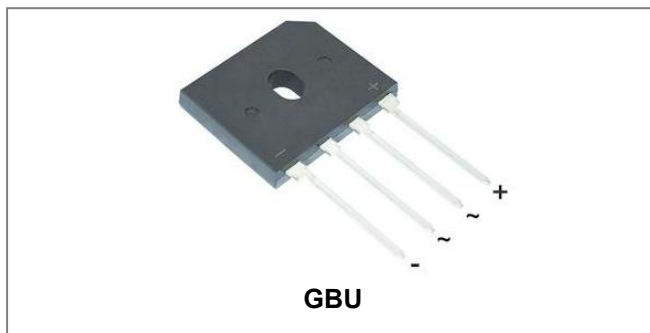


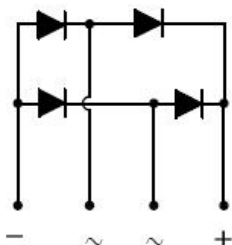
## GBU6005G THRU GBU610G Single-Phase 6.0A Glass Passivated Bridge Rectifier



### 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<sub>A</sub>=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 6005G	GBU 601G	GBU 602G	GBU 604G	GBU 606G	GBU 608G	GBU 610G	Units
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>DC</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Average forward rectified output current (Note 1) @T <sub>A</sub> = 40°C	I <sub>O</sub>	6.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	150							A

**Electrical Characteristics: @T<sub>A</sub>=25°C unless otherwise specified**

Type Number	Symbol	GBU 6005G	GBU 601G	GBU 602G	GBU 604G	GBU 606G	GBU 608G	GBU 610G	Units
Forward Voltage (per element) @I <sub>F</sub> =3A @I <sub>F</sub> =6A	V <sub>F</sub>				1.0 1.1				V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 125°C	I <sub>RM</sub>				5.0 500				μA
Typical Junction Capacitance(per leg) (Note 2)	C <sub>J</sub>				65				pF

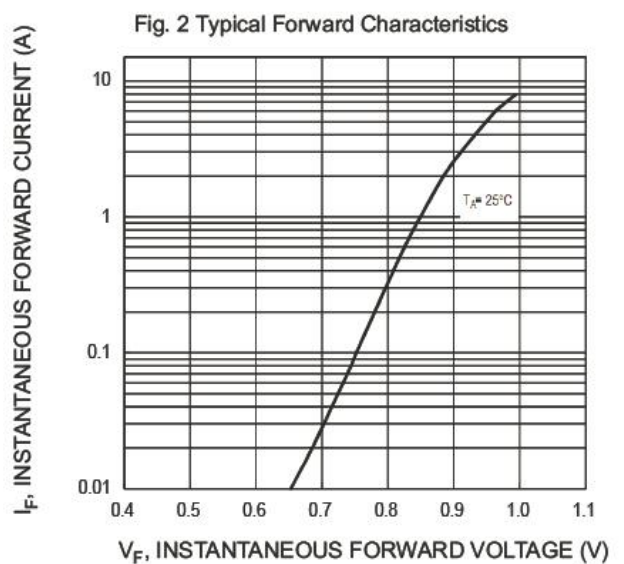
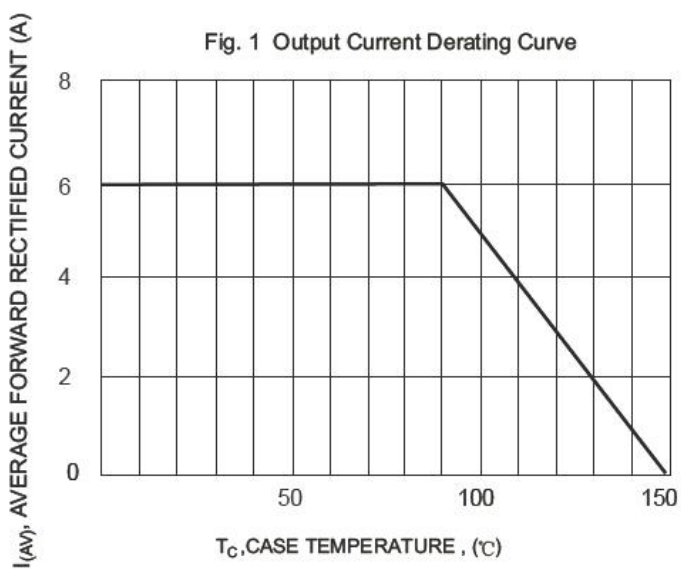
\* Pulse width < 300 μs, duty cycle < 2%

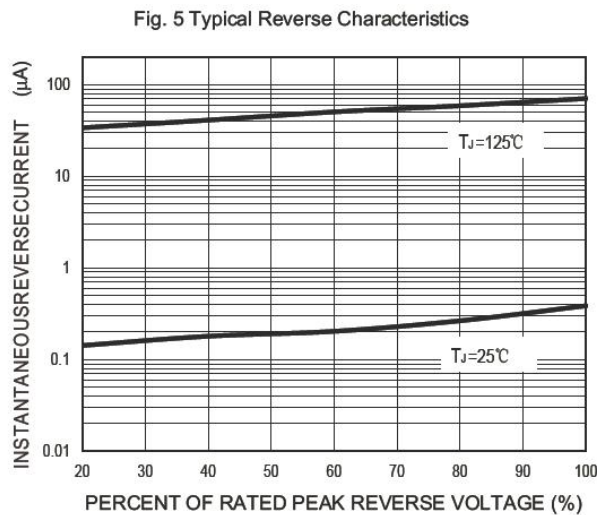
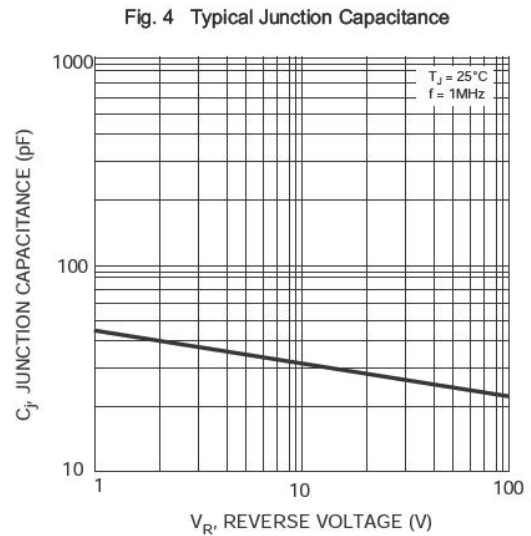
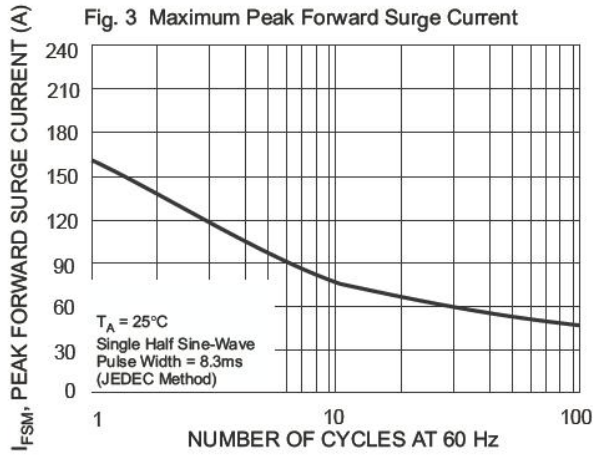
**Thermal-Mechanical Specifications: @T<sub>A</sub>=25°C unless otherwise specified**

Type Number	Symbol	GBU 6005G	GBU 601G	GBU 602G	GBU 604G	GBU 606G	GBU 608G	GBU 610G	Units
Typical Thermal Resistance (per leg)	R <sub>θJA</sub> R <sub>θJL</sub>				17 2.2				°C/W
Operating and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>				-55 to +150				°C

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

**Ratings and Characteristics Curves**



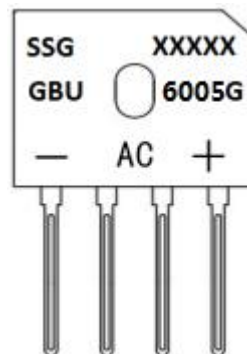


### Ordering Information

Device	Package	Plating	Shipping
GBU6005G THRU GBU610G	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

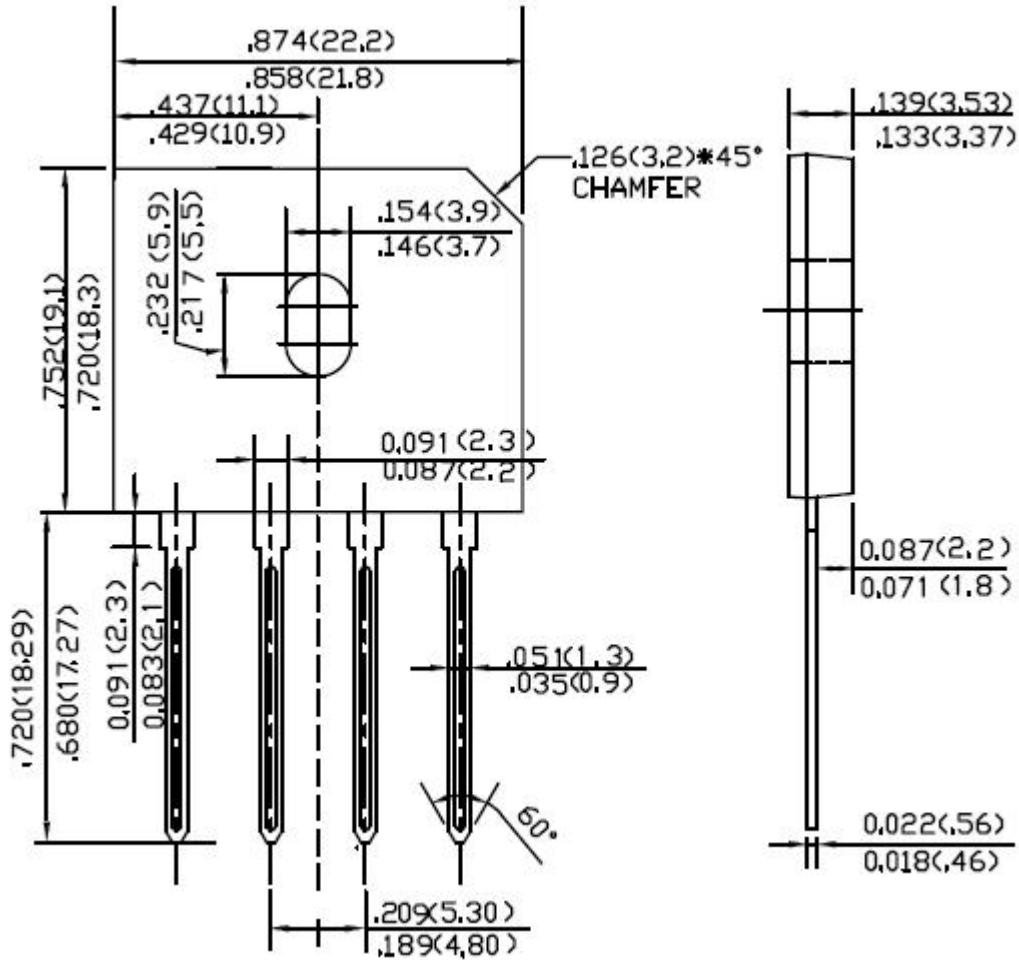


Where XXXXX is YYWWL

SSG = SSG  
YY = Year  
WW = Week  
L = Lot Number  
GBU6005G = Type Number

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

**Mechanical Dimensions GBU (Inches/Millimeters)**



**Technical Data  
Data Sheet N1799, Rev. A**



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