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With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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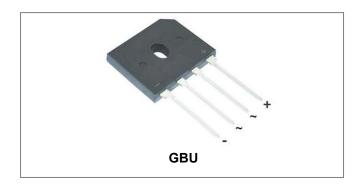








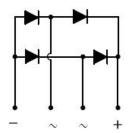
# GBU15005 THRU GBU1510 Single-Phase 15.0A Glass Passivated Bridge Rectifier



#### **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 15005	GBU 1501	GBU 1502	GBU 1504	GBU 1506	GBU 1508	GBU 1510	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)					А				
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	vi 200					А		

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#### Electrical Characteristics:@TA=25°C unless otherwise specified

Type Number	Symbol	GBU 15005	GBU 1501	GBU 1502	GBU 1504	GBU 1506	GBU 1508	GBU 1510	Units
Forward Voltage (per element)	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			μА				
Typical Junction Capacitance(per leg) (Note 2)	CJ	70						pF	

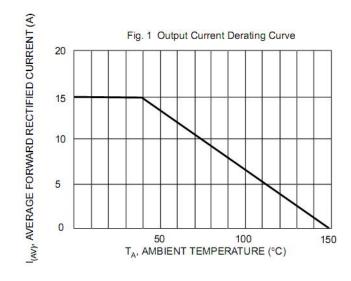
<sup>\*</sup> Pulse width < 300 μs, duty cycle < 2%

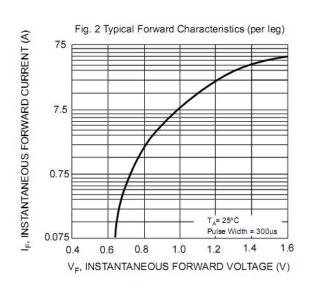
# Thermal-Mechanical Specifications:@T<sub>A</sub>=25°C unless otherwise specified

Type Number	Symbol	GBU 15005	GBU 1501	GBU 1502	GBU 1504	GBU 1506	GBU 1508	GBU 1510	Units
Typical Thermal Resistance (per leg)	R <sub>0JA</sub> 25 R <sub>0JL</sub> 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 1.3mm² solder pad. 2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

## **Ratings and Characteristics Curves**



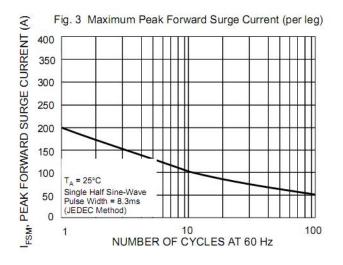


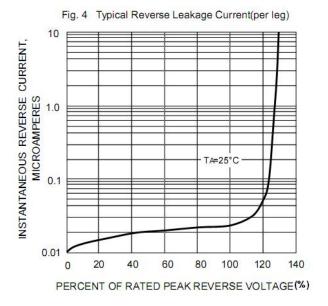
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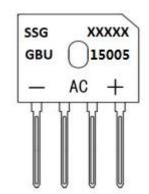


## **Ordering Information**

Device	Package	Plating	Shipping
GBU10005 THRU GBU1010	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

 GBU15005
 = Type Number

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

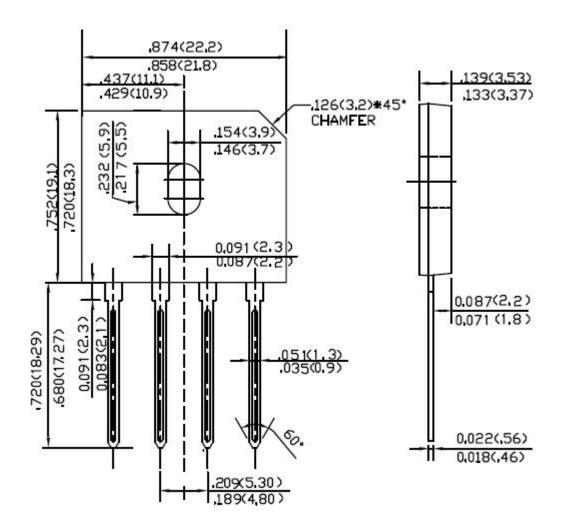
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# **Mechanical Dimensions GBU (Inches/Millimeters)**



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