

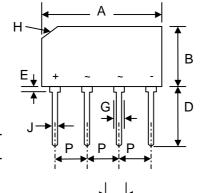
# **GBL00 – GBL10**



# 4.0A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

### **Features**

- Glass Passivated Die Construction
- Low Forward Voltage Drop
- **High Current Capability**
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- Recognized File # E157705



#### GBL Max Min Dim 20.7 20.9 В 10.4 10.7 С 3.25 3.56 D 18.2 17.3 2.03 Ε 1.50 G 2.03 2.41 3.17 x 45° Н J 1.02 1.27 Κ 1.27 1.53 0.46 0.56 L Р 4.8 5.3 All Dimensions in mm

# **Mechanical Data**

- Case: GBL, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 2.0 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4

# Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

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

Characteristic	Symbol	GBL 00	GBL 01	GBL 02	GBL 04	GBL 06	GBL 08	GBL 10	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	V
Average Rectified Output Current @T <sub>C</sub> = 50°C	lo				4.0				Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	150					А		
Forward Voltage per leg @I <sub>F</sub> = 2.0A	VFM	1.1				V			
	lr	5.0 500				μΑ			
Typical Thermal Resistance per leg (Note 1)	RθJA	22						°C/W	
Typical Thermal Resistance per leg (Note 2)	R⊕JL	3.5						°C/W	
Operating and Storage Temperature Range	Тj, Тsтg	-55 to +150						°C	

Note: 1. Mounted on 75 x 75 x 3.0mm Al. plate.

2. Mounted on PCB at 9.5mm lead length with 12mm<sup>2</sup> copper pad.

GBL00 - GBL10 1 of 4 © 2006 Won-Top Electronics Tel: 02-25651052

Fax: 02-25215390 極利企業有限公司

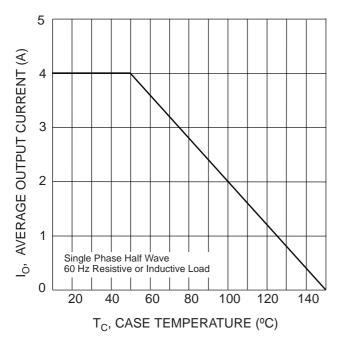
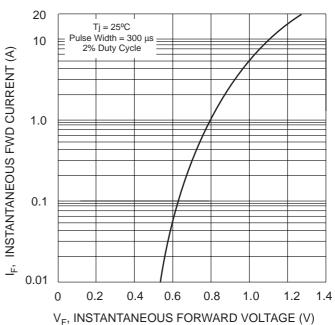


Fig. 1 Forward Current Derating Curve



V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics, per element

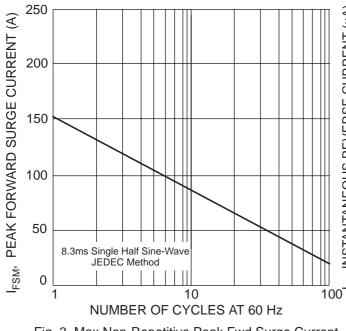


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

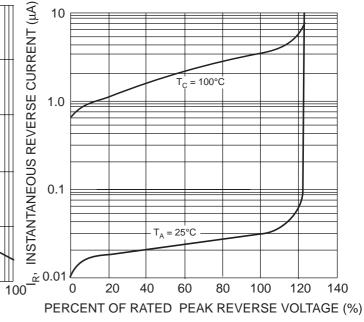
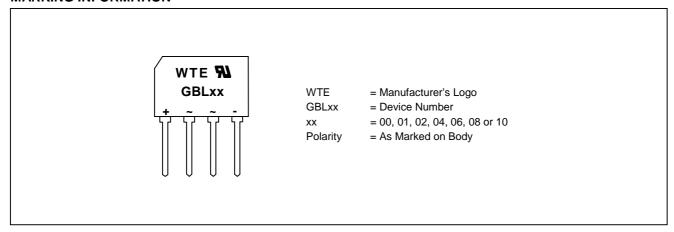


Fig. 4 Typical Reverse Characteristics, per element

GBL00 – GBL10 2 of 4 © 2006 Won-Top Electronics Fax : 02-25215390 極利企業有限公司 Tel : 02-25651052

# MARKING INFORMATION



# **PACKAGING INFORMATION**

### **BULK**

Tube Size	Quantity	Inner Box Size	Quantity	Carton Size	Quantity	Approx. Gross Weight (KG)
L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	L x W x H (mm)	(PCS)	
443 x 31 x 6	20	450 x 136 x 72	800	495 x 245 x 180	2,400	10.0

Note: 1. Anti-static tube, water clear color.

GBL00 – GBL10 3 of 4 © 2006 Won-Top Electronics

Fax: 02-25215390 極利企業有限公司 Tel: 02-25651052

#### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity
GBL00	SIL Bridge	20 Units/Tube
GBL01	SIL Bridge	20 Units/Tube
GBL02	SIL Bridge	20 Units/Tube
GBL04	SIL Bridge	20 Units/Tube
GBL06	SIL Bridge	20 Units/Tube
GBL08	SIL Bridge	20 Units/Tube
GBL10	SIL Bridge	20 Units/Tube

- Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
- To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, GBL00-LF.

Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

**WARNING**: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

Won-Top Electronics Co., Ltd.

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

**Phone:** 886-7-822-5408 or 886-7-822-5410

Fax: 886-7-822-5417 Email: sales@wontop.com Internet: http://www.wontop.com

We power your everyday.

GBL00 – GBL10 4 of 4 © 2006 Won-Top Electronics Fax : 02-25215390 極利企業有限公司 Tel : 02-25651052