

GBPC15 SERIES ARIES

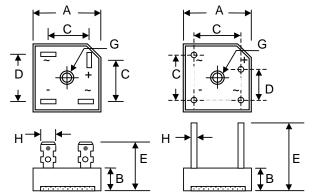
# 15A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

#### Features

- Glass Passivated Die Construction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Epoxy Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V
- Recognized File # E157705

### **Mechanical Data**

- Case: Molded Plastic with Heatsink, Available in Both Low Profile and Standard Case
- Terminals: Plated Faston Lugs or Wire Leads, Add "W" Suffix to Indicate Wire Leads
- Polarity: As Marked on Case
- Mounting: Through Hole with #10 Screw
- Mounting Torque: 23 cm-kg (20 in-lbs) Max.
- Weight: 21 grams (GBPC); 18 grams (GBPC-W)
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4



GBPC

GBPC-W

	GB Low Profile		GBPC-W Low Profile / Standard			
Dim	Min	Max	Min	Max		
Α	28.40	28.70	28.40	28.70		
В	7.50 / 10.97	8.50 / 11.23	7.50 / 10.97	8.50 / 11.23		
С	15.70	16.70	17.10	19.10		
D	17.50	18.50	10.90	11.90		
E	19.08 / 22.86	21.58 / 25.40	30.50	—		
G	Hole for #10 screw, 5.08Ø Nominal					
н	6.35 T	ypical	0.97Ø	1.07Ø		
All Dimension in mm						

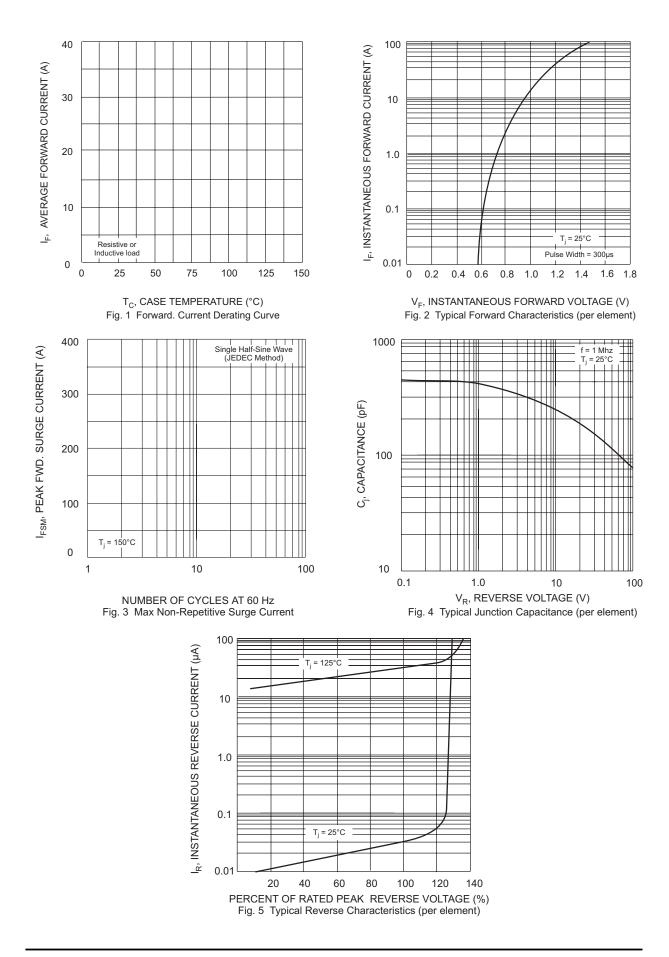
# Maximum Ratings and Electrical Characteristics @TA=25°C unless otherwise specified

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

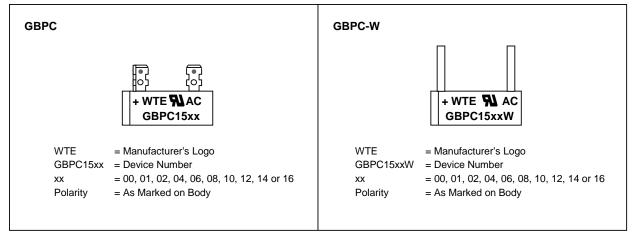
		GBPC15										
Characteristic	Symbol	00	01	02	04	06	08	10	12	14	16	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	200	400	600	800	1000	1200	1400	1600	V
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	840	980	1120	V
Average Rectified Output Current @T <sub>c</sub> = $50^{\circ}$ C	ю	15							А			
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	<b> </b> FSM	300							A			
Forward Voltage per leg $@I_F = 7.5A$	Vfm	1.1							V			
Peak Reverse Current $@T_c = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_c = 125^{\circ}C$	<b>I</b> RM	5.0 500								μΑ		
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l <sup>2</sup> t	375							A²s			
Typical Junction Capacitance (Note 1)	Cj	300								pF		
Typical Thermal Resistance per leg (Note 2)	R	1.9							°C/W			
RMS Isolation Voltage from Case to Leads	Viso	2500							V			
Operating and Storage Temperature Range	Тj, Tsтg	-65 to +150							°C			

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Mounted on 127 x 102 x 76mm Al. finned plate.



### MARKING INFORMATION



### PACKAGING INFORMATION

ULK					
Case Style	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
GBPC	195 x 195 x 40	50	405 x 205 x 240	500	12.0
GBPC-W	195 x 195 x 40	50	405 x 205 x 240	500	11.0

**GBPC15 SERIES** 

Product No.	Package Type	Shipping Quantity
GBPC1500	Square Bridge	50 Units/Box
GBPC1500W	Square Bridge	50 Units/Box
GBPC1501	Square Bridge	50 Units/Box
GBPC1501W	Square Bridge	50 Units/Box
GBPC1502	Square Bridge	50 Units/Box
GBPC1502W	Square Bridge	50 Units/Box
GBPC1504	Square Bridge	50 Units/Box
GBPC1504W	Square Bridge	50 Units/Box
GBPC1506	Square Bridge	50 Units/Box
GBPC1506W	Square Bridge	50 Units/Box
GBPC1508	Square Bridge	50 Units/Box
GBPC1508W	Square Bridge	50 Units/Box
GBPC1510	Square Bridge	50 Units/Box
GBPC1510W	Square Bridge	50 Units/Box
GBPC1512	Square Bridge	50 Units/Box
GBPC1512W	Square Bridge	50 Units/Box
GBPC1514	Square Bridge	50 Units/Box
GBPC1514W	Square Bridge	50 Units/Box
GBPC1516	Square Bridge	50 Units/Box
GBPC1516W	Square Bridge	50 Units/Box

## **ORDERING INFORMATION**

1.

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, GBPC1500-LF. 2.

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.