


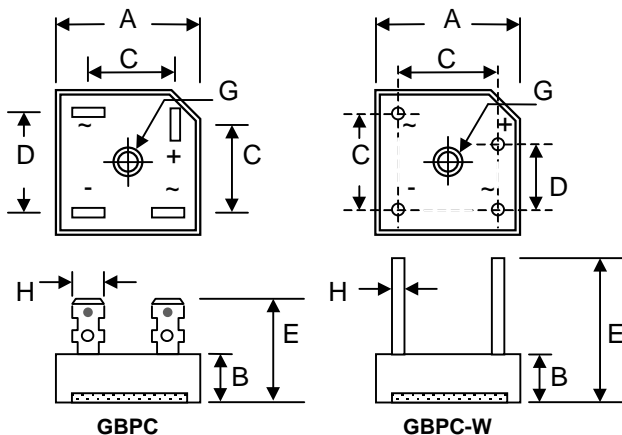
## 15A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

### 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 Low Profile / Standard		GBPC-W Low Profile / Standard	
Dim	Min	Max	Min	Max
A	28.40	28.70	28.40	28.70
B	7.50 / 10.97	8.50 / 11.23	7.50 / 10.97	8.50 / 11.23
C	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			
H	6.35 Typical		0.97Ø	1.07Ø
All Dimension in mm				

### Maximum Ratings and Electrical Characteristics @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%.

Characteristic	Symbol	GBPC15										Unit
		00	01	02	04	06	08	10	12	14	16	
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°C	IO	15										A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	300										A
Forward Voltage per leg @IF = 7.5A	VFM	1.1										V
Peak Reverse Current @T <sub>C</sub> = 25°C At Rated DC Blocking Voltage @T <sub>C</sub> = 125°C	IRM	5.0 500										μA
I²t Rating for Fusing (t < 8.3ms)	I²t	375										A²s
Typical Junction Capacitance (Note 1)	Cj	300										pF
Typical Thermal Resistance per leg (Note 2)	RθJC	1.9										°C/W
RMS Isolation Voltage from Case to Leads	VISO	2500										V
Operating and Storage Temperature Range	Tj, TSTG	-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.

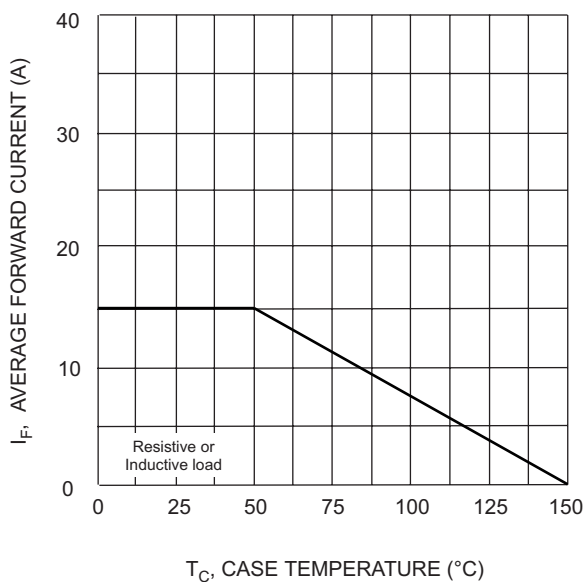


Fig. 1 Forward Current Derating Curve

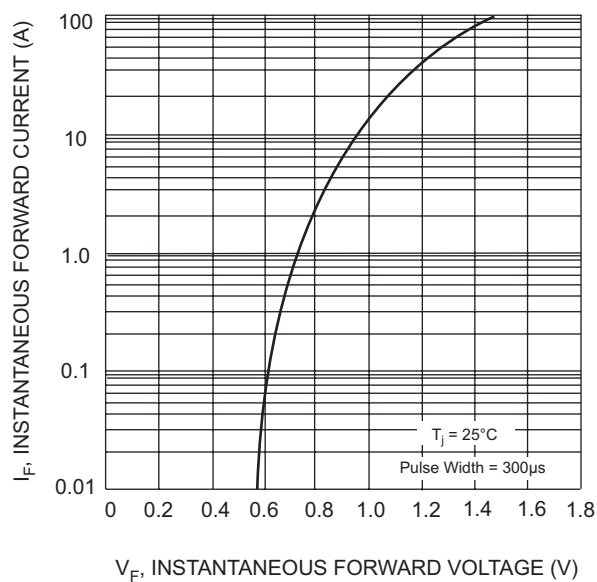


Fig. 2 Typical Forward Characteristics (per element)

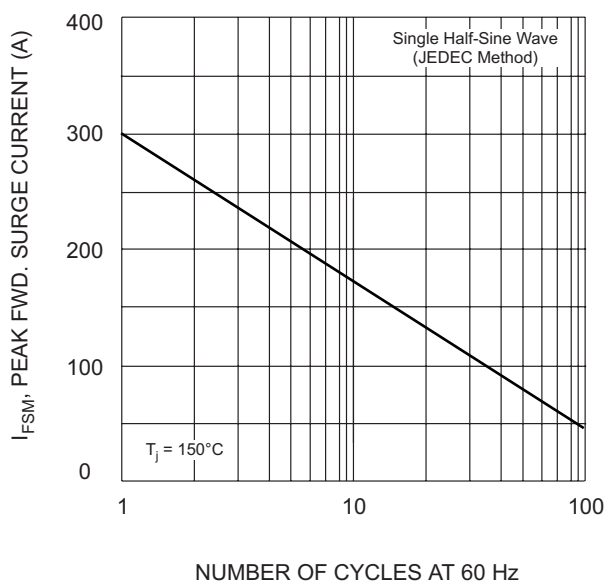


Fig. 3 Max Non-Repetitive Surge Current

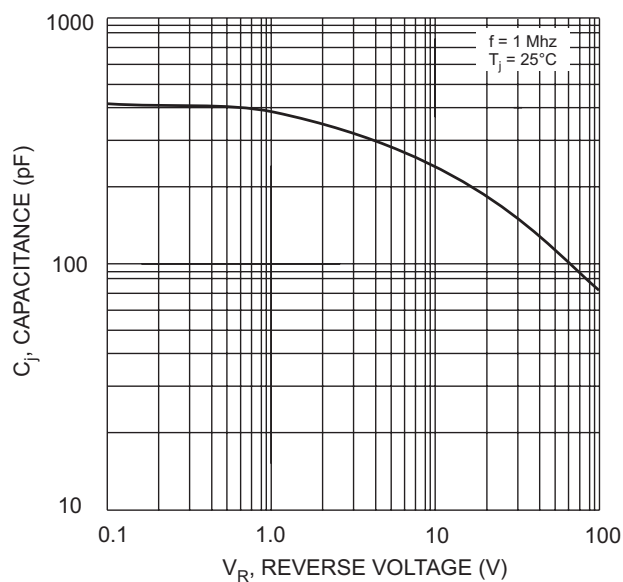


Fig. 4 Typical Junction Capacitance (per element)

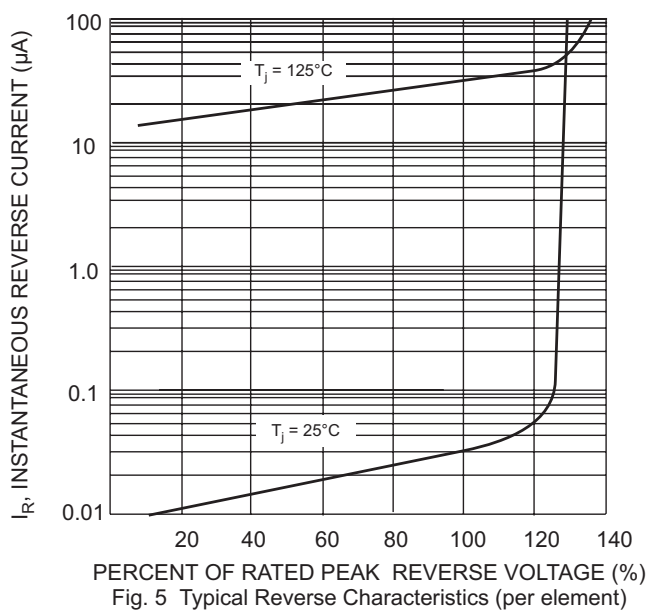
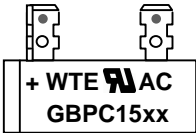
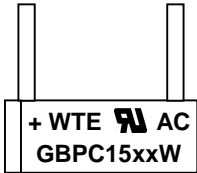


Fig. 5 Typical Reverse Characteristics (per element)

## MARKING INFORMATION

<p><b>GBPC</b></p>  <p>WTE = Manufacturer's Logo  GBPC15xx = Device Number  xx = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16  Polarity = As Marked on Body</p>	<p><b>GBPC-W</b></p>  <p>WTE = Manufacturer's Logo  GBPC15xxW = Device Number  xx = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16  Polarity = As Marked on Body</p>
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## PACKAGING INFORMATION

<b>BULK</b>					
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)
<b>GBPC</b>	195 x 195 x 40	50	405 x 205 x 240	500	12.0
<b>GBPC-W</b>	195 x 195 x 40	50	405 x 205 x 240	500	11.0
<p><b>Note:</b> 1. Paper box, white or brown color.</p>					

## ORDERING INFORMATION

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

- 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.**

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**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.

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