
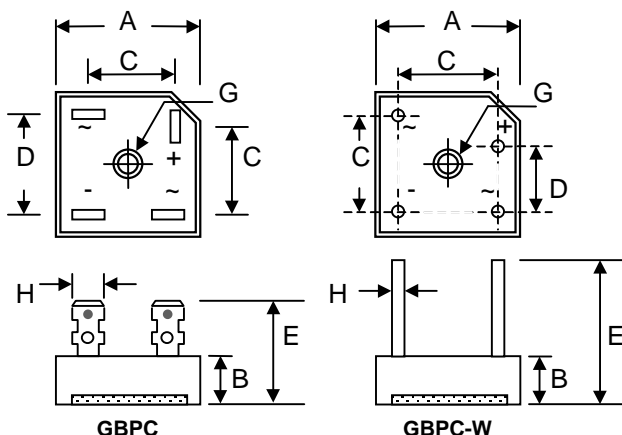


Features

- 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_A=25°C unless otherwise specified

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

Characteristic	Symbol	GBPC50										Unit
		00	01	02	04	06	08	10	12	14	16	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	50	100	200	400	600	800	1000	1200	1400	1600	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	840	980	1120	V
Average Rectified Output Current @T _C = 50°C	I _O	50										A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	450										A
Forward Voltage per leg @I _F = 25A	V _{FM}	1.1										V
Peak Reverse Current @T _C = 25°C At Rated DC Blocking Voltage @T _C = 125°C	I _{RM}	5.0 500										μA
I ² t Rating for Fusing (t < 8.3ms)	I ² t	800										A ² s
Typical Junction Capacitance (Note 1)	C _j	400										pF
Typical Thermal Resistance per leg (Note 2)	R _{θJC}	1.0										°C/W
RMS Isolation Voltage from Case to Leads	V _{ISO}	2500										V
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150										°C

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

2. Mounted on 229 x 152 x 127mm Al. finned plate.

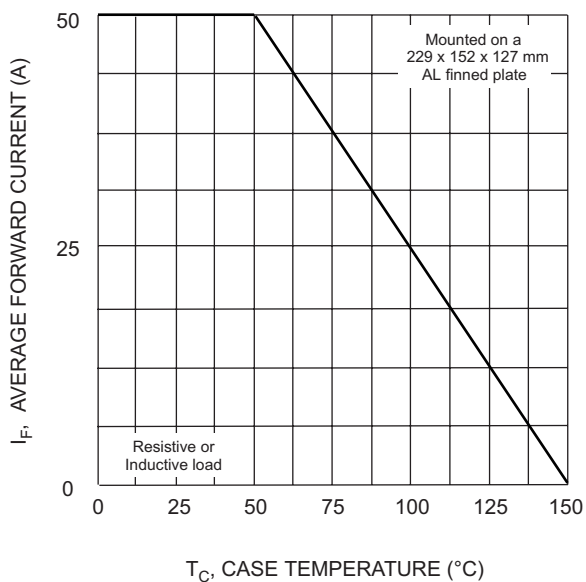


Fig. 1 Forward Current Derating Curve

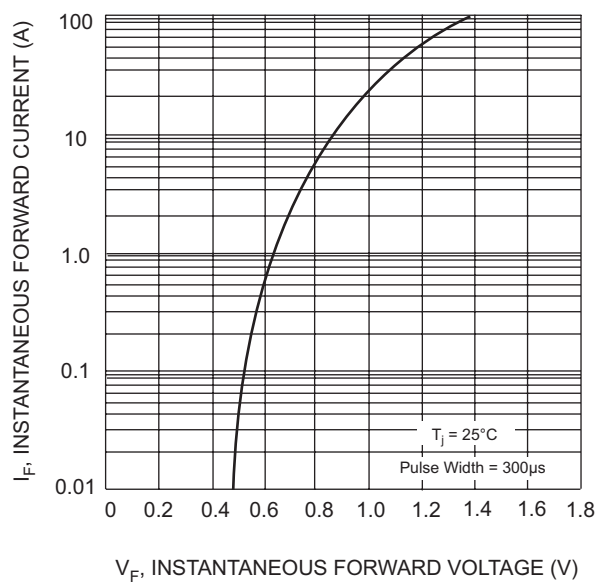


Fig. 2 Typical Forward Characteristics (per element)

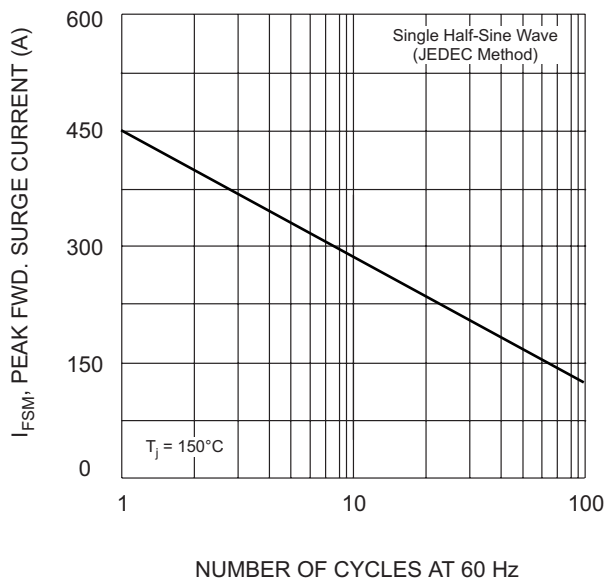


Fig. 3 Max Non-Repetitive Surge Current

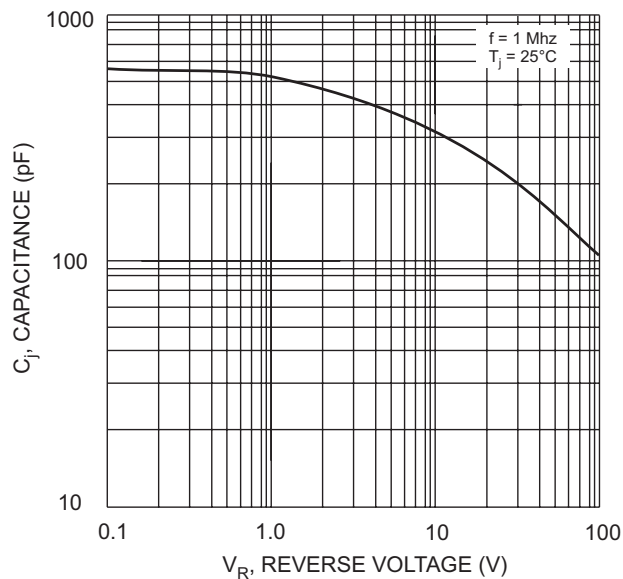


Fig. 4 Typical Junction Capacitance (per element)

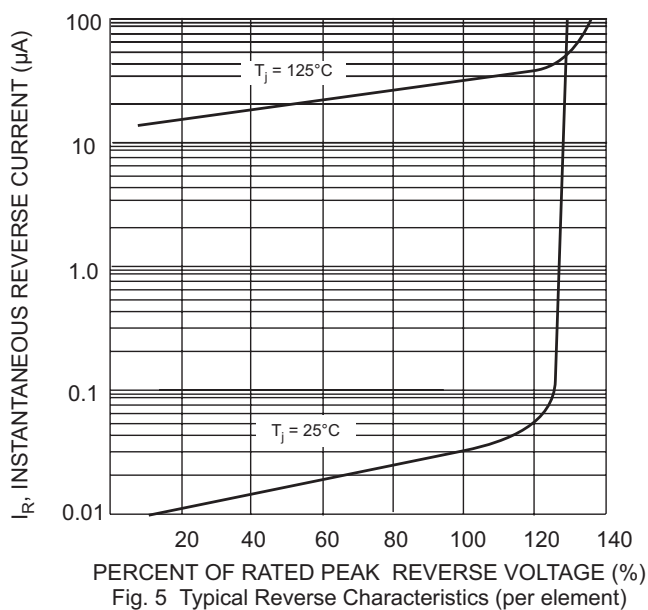
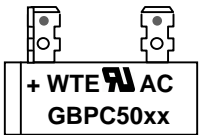
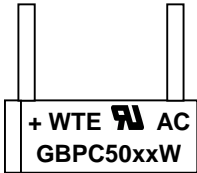


Fig. 5 Typical Reverse Characteristics (per element)

MARKING INFORMATION

<p>GBPC</p>  <p>WTE = Manufacturer's Logo GBPC50xx = Device Number xx = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16 Polarity = As Marked on Body</p>	<p>GBPC-W</p>  <p>WTE = Manufacturer's Logo GBPC50xxW = Device Number xx = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16 Polarity = As Marked on Body</p>
--	---

PACKAGING INFORMATION

<p>BULK</p> <table border="1"> <thead> <tr> <th>Case Style</th><th>Inner Box Size L x W x H (mm)</th><th>Quantity (PCS)</th><th>Carton Size L x W x H (mm)</th><th>Quantity (PCS)</th><th>Approx. Gross Weight (KG)</th></tr> </thead> <tbody> <tr> <td>GBPC</td><td>195 x 195 x 40</td><td>50</td><td>405 x 205 x 240</td><td>500</td><td>12.0</td></tr> <tr> <td>GBPC-W</td><td>195 x 195 x 40</td><td>50</td><td>405 x 205 x 240</td><td>500</td><td>11.0</td></tr> </tbody> </table> <p>Note: 1. Paper box, white or brown color.</p>						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
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																		

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
GBPC5000	Square Bridge	50 Units/Box
GBPC5000W	Square Bridge	50 Units/Box
GBPC5001	Square Bridge	50 Units/Box
GBPC5001W	Square Bridge	50 Units/Box
GBPC5002	Square Bridge	50 Units/Box
GBPC5002W	Square Bridge	50 Units/Box
GBPC5004	Square Bridge	50 Units/Box
GBPC5004W	Square Bridge	50 Units/Box
GBPC5006	Square Bridge	50 Units/Box
GBPC5006W	Square Bridge	50 Units/Box
GBPC5008	Square Bridge	50 Units/Box
GBPC5008W	Square Bridge	50 Units/Box
GBPC5010	Square Bridge	50 Units/Box
GBPC5010W	Square Bridge	50 Units/Box
GBPC5012	Square Bridge	50 Units/Box
GBPC5012W	Square Bridge	50 Units/Box
GBPC5014	Square Bridge	50 Units/Box
GBPC5014W	Square Bridge	50 Units/Box
GBPC5016	Square Bridge	50 Units/Box
GBPC5016W	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, GBPC5000-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.