


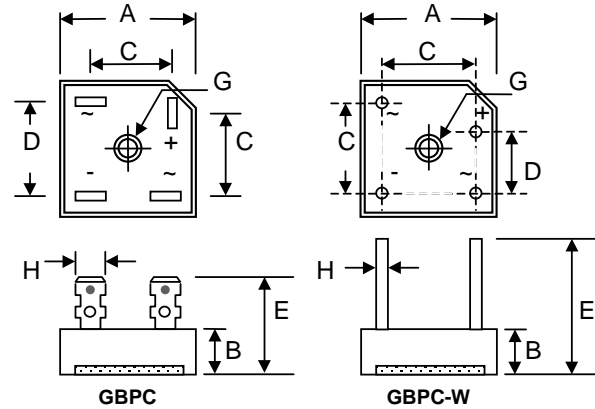
25A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

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**



Dim	GBPC		GBPC-W	
	Low Profile / Standard	Low Profile / Standard	Low Profile / Standard	Low Profile / Standard
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

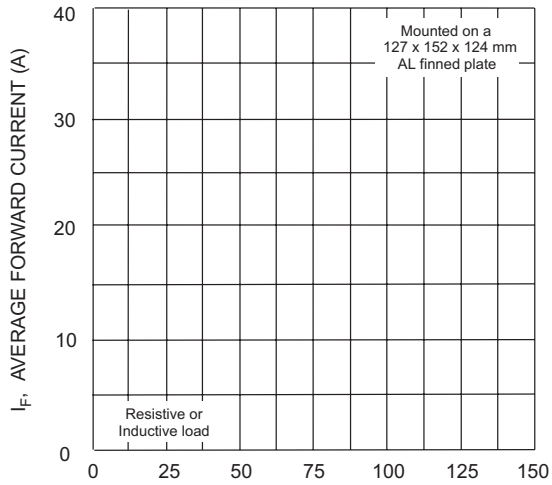
All Dimension in mm

Maximum Ratings and Electrical Characteristics @_{T_A}=25°C unless otherwise specified

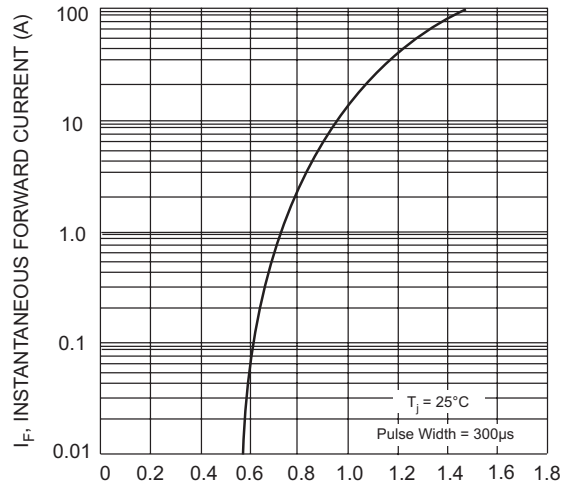
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	GBPC25										Unit
		00	01	02	04	06	08	10	12	14	16	
Peak Repetitive Reverse Voltage	V _{RRM}	50	100	200	400	600	800	1000	1200	1400	1600	V
Working Peak Reverse Voltage	V _{RWM}											
DC Blocking Voltage	V _R											
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	25										A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	300										A
Forward Voltage per leg @ _{I_F} = 12.5A	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	375										A ² s
Typical Junction Capacitance (Note 1)	C _j	300										pF
Typical Thermal Resistance per leg (Note 2)	R _{θJC}	1.9										°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

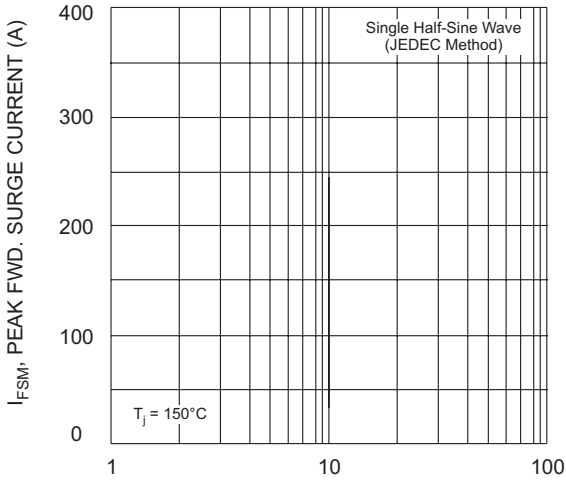
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Mounted on 127 x 152 x 124mm Al. finned plate.



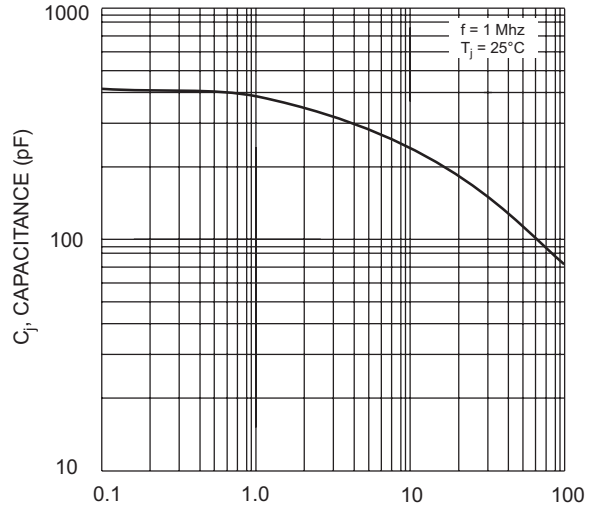
T_C , CASE TEMPERATURE (°C)
Fig. 1 Forward Current Derating Curve



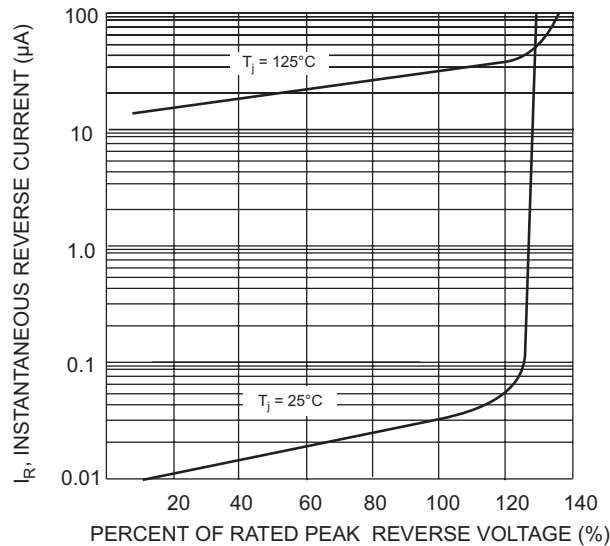
V_F , INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 2 Typical Forward Characteristics (per element)



NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Surge Current

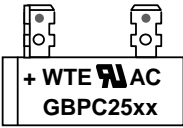



V_R , REVERSE VOLTAGE (V)
Fig. 4 Typical Junction Capacitance (per element)



PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Fig. 5 Typical Reverse Characteristics (per element)

MARKING INFORMATION

GBPC	GBPC-W
 <p data-bbox="274 438 756 546"> WTE = Manufacturer's Logo GBPC25xx = Device Number xx = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16 Polarity = As Marked on Body </p>	 <p data-bbox="875 438 1373 546"> WTE = Manufacturer's Logo GBPC25xxW = Device Number xx = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16 Polarity = As Marked on Body </p>

PACKAGING INFORMATION

BULK					
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

Note: 1. Paper box, white or brown color.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
GBPC2500	Square Bridge	50 Units/Box
GBPC2500W	Square Bridge	50 Units/Box
GBPC2501	Square Bridge	50 Units/Box
GBPC2501W	Square Bridge	50 Units/Box
GBPC2502	Square Bridge	50 Units/Box
GBPC2502W	Square Bridge	50 Units/Box
GBPC2504	Square Bridge	50 Units/Box
GBPC2504W	Square Bridge	50 Units/Box
GBPC2506	Square Bridge	50 Units/Box
GBPC2506W	Square Bridge	50 Units/Box
GBPC2508	Square Bridge	50 Units/Box
GBPC2508W	Square Bridge	50 Units/Box
GBPC2510	Square Bridge	50 Units/Box
GBPC2510W	Square Bridge	50 Units/Box
GBPC2512	Square Bridge	50 Units/Box
GBPC2512W	Square Bridge	50 Units/Box
GBPC2514	Square Bridge	50 Units/Box
GBPC2514W	Square Bridge	50 Units/Box
GBPC2516	Square Bridge	50 Units/Box
GBPC2516W	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, GBPC2500-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.