


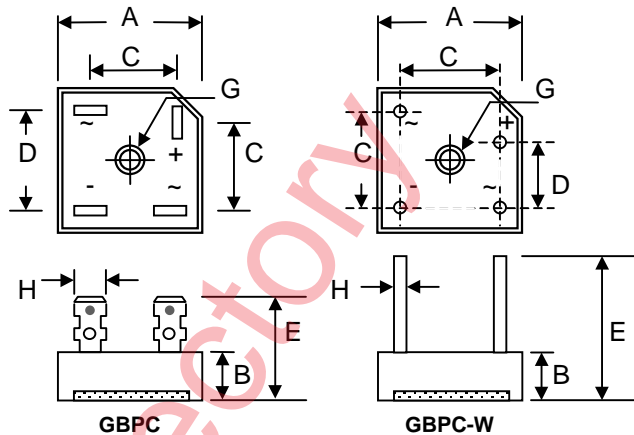
## 35A GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

### 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 Low Profile / Standard		GBPC-W Low Profile / Standard	
	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

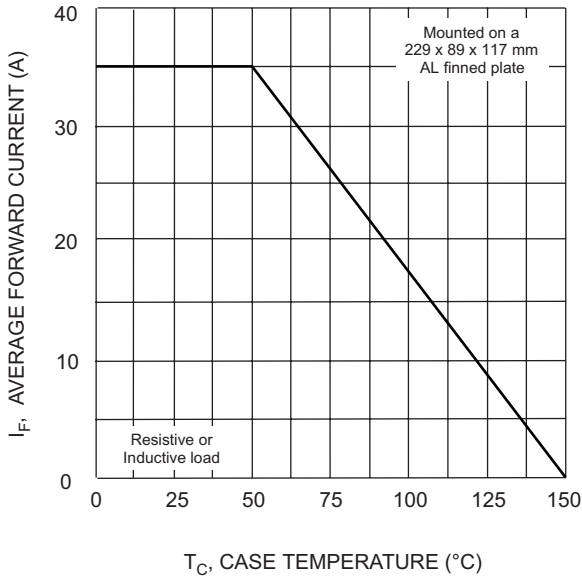
All Dimension in mm

### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

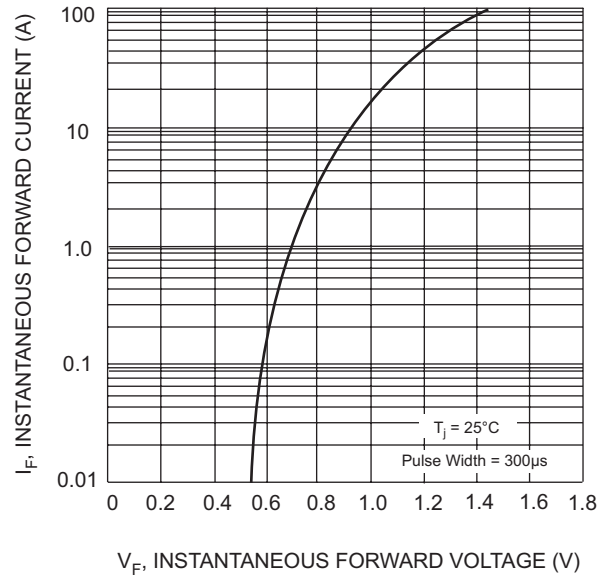
Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	GBPC35										Unit	
		00	01	02	04	06	08	10	12	14	16		
Peak Repetitive Reverse Voltage	$V_{RRM}$												V
Working Peak Reverse Voltage	$V_{RWM}$	50	100	200	400	600	800	1000	1200	1400	1600		V
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 @ $T_C = 50^\circ\text{C}$	$I_O$	35										A	
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	400										A	
Forward Voltage per leg @ $I_F = 17.5\text{A}$	$V_{FM}$	1.1										V	
Peak Reverse Current @ $T_C = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_C = 125^\circ\text{C}$	$I_{RM}$	5.0 500										$\mu\text{A}$	
$I^2t$ Rating for Fusing ( $t < 8.3\text{ms}$ )	$I^2t$	660										$\text{A}^2\text{s}$	
Typical Junction Capacitance (Note 1)	$C_j$	300										pF	
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JC}$	1.4										$^\circ\text{C}/\text{W}$	
RMS Isolation Voltage from Case to Leads	$V_{ISO}$	2500										V	
Operating and Storage Temperature Range	$T_j, T_{STG}$	-65 to +150										$^\circ\text{C}$	

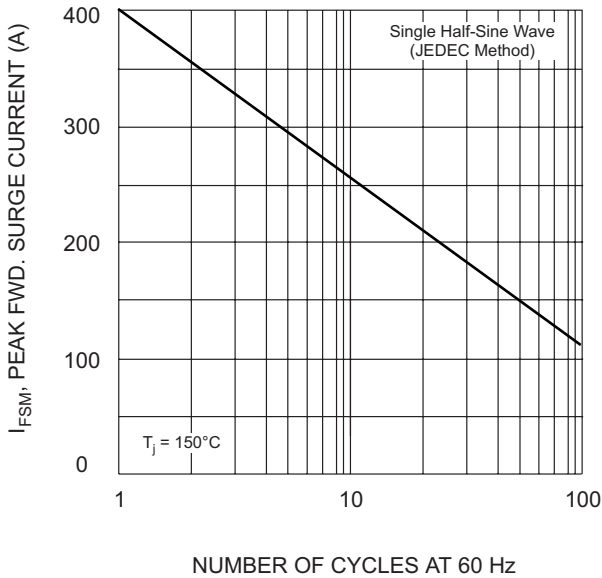
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.  
2. Mounted on 229 x 89 x 117mm Al. finned plate.



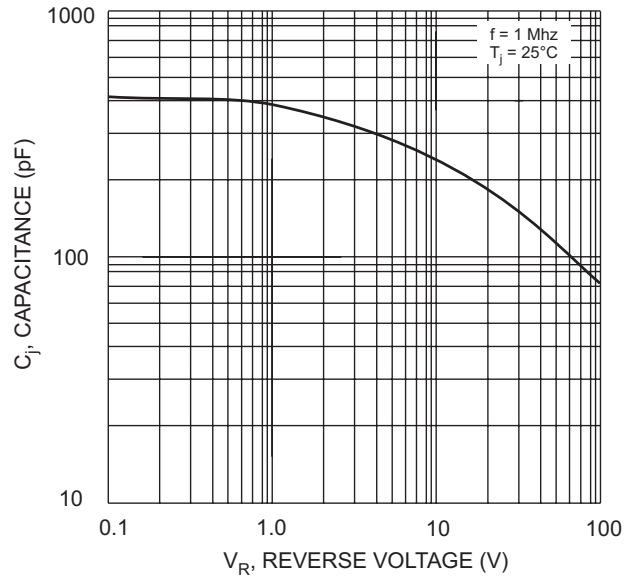
$T_C$ , CASE TEMPERATURE (°C)  
Fig. 1 Forward Current Derating Curve



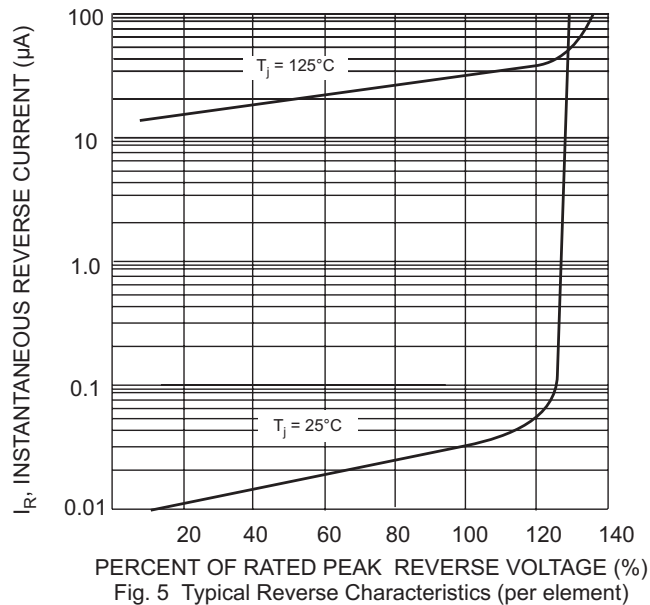
$V_F$ , INSTANTANEOUS FORWARD VOLTAGE (V)  
Fig. 2 Typical Forward Characteristics (per element)



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

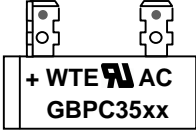



$V_R$ , REVERSE VOLTAGE (V)  
Fig. 4 Typical Junction Capacitance (per element)



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

## MARKING INFORMATION

<p><b>GBPC</b></p>  <p>WTE = Manufacturer's Logo                      GBPC35xx = 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                      GBPC35xxW = 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)
<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

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

## ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
GBPC3500	Square Bridge	50 Units/Box
GBPC3500W	Square Bridge	50 Units/Box
GBPC3501	Square Bridge	50 Units/Box
GBPC3501W	Square Bridge	50 Units/Box
GBPC3502	Square Bridge	50 Units/Box
GBPC3502W	Square Bridge	50 Units/Box
GBPC3504	Square Bridge	50 Units/Box
GBPC3504W	Square Bridge	50 Units/Box
GBPC3506	Square Bridge	50 Units/Box
GBPC3506W	Square Bridge	50 Units/Box
GBPC3508	Square Bridge	50 Units/Box
GBPC3508W	Square Bridge	50 Units/Box
GBPC3510	Square Bridge	50 Units/Box
GBPC3510W	Square Bridge	50 Units/Box
GBPC3512	Square Bridge	50 Units/Box
GBPC3512W	Square Bridge	50 Units/Box
GBPC3514	Square Bridge	50 Units/Box
GBPC3514W	Square Bridge	50 Units/Box
GBPC3516	Square Bridge	50 Units/Box
GBPC3516W	Square Bridge	50 Units/Box

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, GBPC3500-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.*