



## 25A GLASS PASSIVATED SINGLE PHASE BRIDGE RECTIFIER

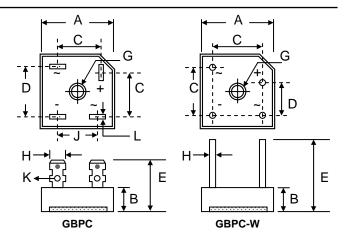


#### **Features**

- Glass Passivated Die Construction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Heatsink Integrated Epoxy Case for Maximum Heat Dissipation
- Low Thermal Resistance
- High Surge Current Capability
- Recognized File # E157705

## **Mechanical Data**

- Case: Epoxy Case with Heatsink, Available in Both Low Profile and Standard Case Height
- 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: 2.0 N.m 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



	GB Low Profile		GBPC-W Low Profile / Standard				
Dim	Min	Max	Min	Max			
Α	28.20	28.80	28.20	28.80			
В	7.50 / 10.77	8.50 / 11.23	7.50 / 10.77	8.50 / 11.23			
C	15.30	17.30	17.10	19.10			
D	17.10	19.10	10.40	12.40			
E	19.00 / 21.50	_	30.50	_			
G	Hole for #10 screw, 5.08Ø Nominal						
Н	6.35 T	6.35 Typical		1.07Ø			
J	13.20	15.20					
K	2.5Ø T	ypical					
Ĺ	0.71	0.91					
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%.

Characteristic	Symbol GBPC25								Unit			
Characteristic	Symbol	00	01	02	04	06	08	10	12	14	16	Oill
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> = 55°C	lo	25							Α			
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	300							А			
Forward Voltage per leg @I <sub>F</sub> = 12.5A	VFM	1.1					V					
Peak Reverse Current $@T_C = 25^{\circ}C$ At Rated DC Blocking Voltage $@T_C = 125^{\circ}C$	lгм	10 500				μΑ						
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l <sup>2</sup> t	375							A <sup>2</sup> s			
Typical Junction Capacitance (Note 1)	Сл	200								pF		
Typical Thermal Resistance (Note 2)	R JC	1.9							°C/W			
RMS Isolation Voltage, t = 1min	Viso	2500							V			
Operating and Storage Temperature Range	ТJ, Tsтg	-55 to +150							°C			

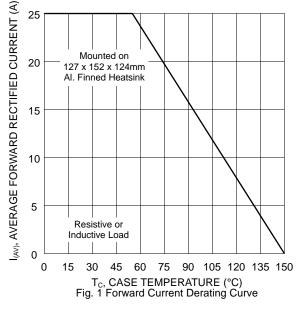
Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

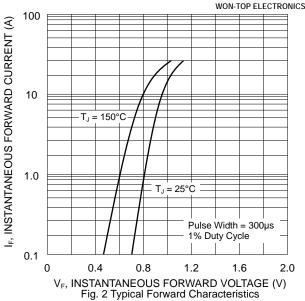
2. Thermal resistance junction to case, mounted on 127 x 152 x 124mm Al. heatsink.

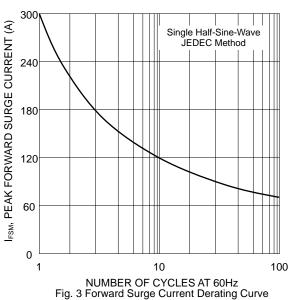
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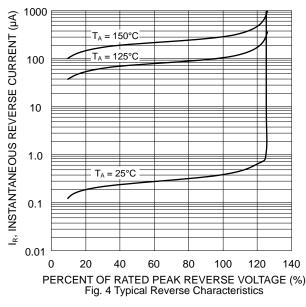
# **GBPC25 SERIES**

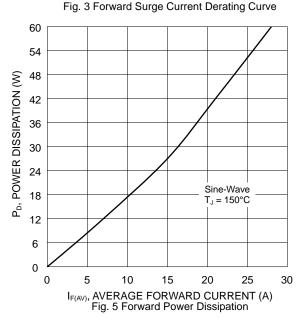


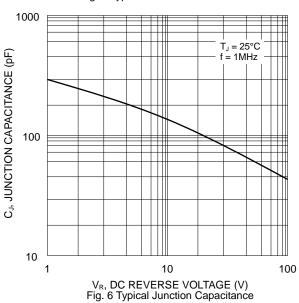














# **MARKING INFORMATION**

# **GBPC**



GBPC25xx = Device Number

xx = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16

Polarity = As Marked on Body

## **GBPC-W**



GBPC25xxW = Device Number

xx = 00, 01, 02, 04, 06, 08, 10, 12, 14 or 16

Polarity = As Marked on Body

#### **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			
GBPC25xx	Square Bridge	50 Units/Box			
GBPC25xxW	Square Bridge	50 Units/Box			

- Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
- order quantity, please consult the Sales Department.

  To order RoHS / Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, GBPC2500-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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