

# **GBPC40, 50/W SERIES**

## 40, 50A GLASS PASSIVATED BRIDGE RECTIFIER

#### **Features**

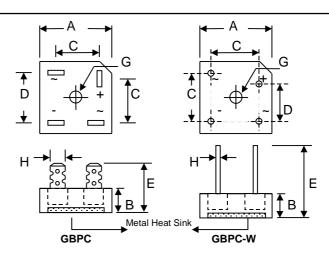
- **Glass Passivated Die Construction**
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Epoxy Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V
- UL Recognized File # E157705

#### **Mechanical Data**

- Case: Epoxy Case with Heat Sink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Mounting: Through Hole for #10 Screw
  - Weight: GBPC 24 grams (approx.) GBPC-W
- Marking: Type Number

21 grams (approx.)

"W" Suffix Designates Wire Leads No Suffix Designates Faston Terminals \*All Models Available on Dim. B=7.9mm Max. Epoxy Case



	GBPC		GBPC-W		
Dim	Min	Max	Min	Max	
Α	28.40	28.70	28.40	28.70	
*B	10.97	11.23	10.97	11.23	
С	15.70	16.70	17.10	19.10	
D	17.50	18.50	10.90	11.90	
E	22.86	25.40	30.50	_	
G Hole for #10 screw, 5.08Ø Nominal					
н	6.35 Typical		0.97Ø	1.07Ø	
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%.

Characteristics	Symbol	-00/W	-01/W	-02/W	-04/W	-06/W	-08/W	-10/W	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	Vrrm Vrwm Vr	50	100	200	400	600	800	1000	v
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	V
Average Rectifier Output CurrentGBPC40 $@T_c = 55^{\circ}C$ GBPC50	10				40 50				А
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave GBPC4 Superimposed on rated load GBPC5 (JEDEC Method)	IESM	400 400					A		
Forward Voltage DropGBPC40 $@l_F = 20$ (per element)GBPC50 $@l_F = 25$	VEM				1.1				V
Peark Reverse Current $@T_c = 25$ At Rated DC Blocking Voltage $@T_c = 125$	IDM				5.0 500				μA

### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Typical Junction Capacitance (per element) (Note 1)	Cj	300	pF
Typical Thermal Resistance JunctionGBPC40to Case (per element) (Note 2)GBPC50	R	1.5	K/W
RMS Isolation Voltage from Case to Lead	Viso	2500	V
Operating and Storage Temperature Range	Тј, Tsтg	-65 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 heatsink.

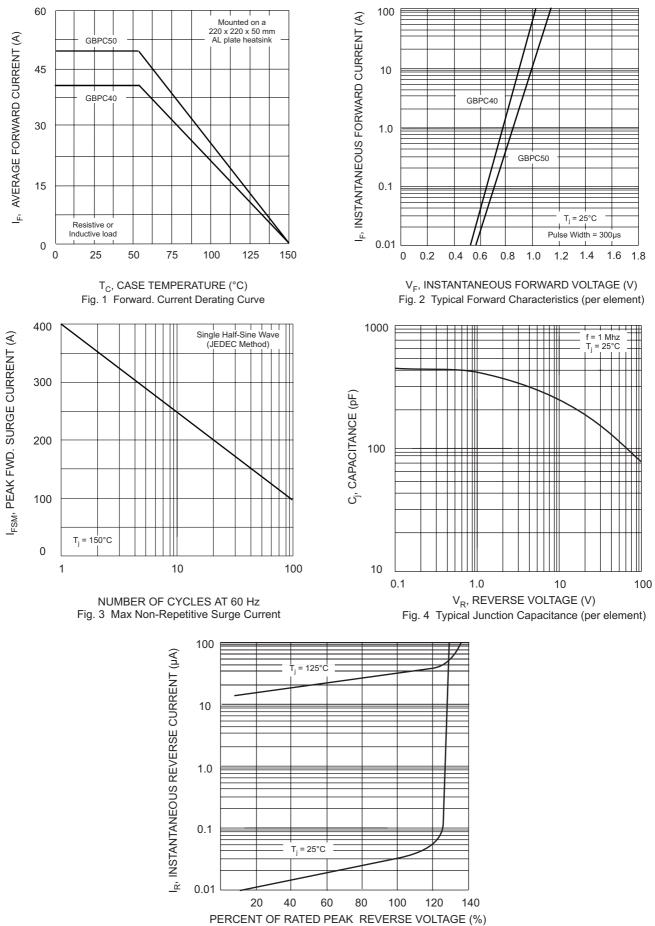


Fig. 5 Typical Reverse Characteristics (per element)

Product No.	Package Type	Shipping Quantity
GBPCxx00	Square Bridge	50 Units/Box
GBPCxx00W	Square Bridge	50 Units/Box
GBPCxx01	Square Bridge	50 Units/Box
GBPCxx01W	Square Bridge	50 Units/Box
GBPCxx02	Square Bridge	50 Units/Box
GBPCxx02W	Square Bridge	50 Units/Box
GBPCxx04	Square Bridge	50 Units/Box
GBPCxx04W	Square Bridge	50 Units/Box
GBPCxx06	Square Bridge	50 Units/Box
GBPCxx06W	Square Bridge	50 Units/Box
GBPCxx08	Square Bridge	50 Units/Box
GBPCxx08W	Square Bridge	50 Units/Box
GBPCxx10	Square Bridge	50 Units/Box
GBPCxx10W	Square Bridge	50 Units/Box

#### ORDERING INFORMATION

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

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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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