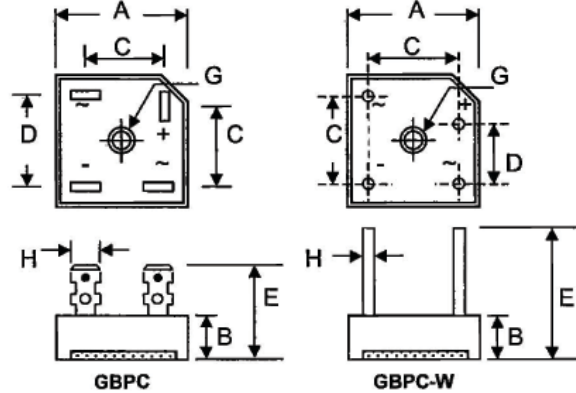


Features

- 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	Standard	Low Profile / Standard	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 @ $T_A=25^\circ\text{C}$ 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	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	$V_R(\text{RMS})$	35	70	140	280	420	560	700	840	980	1120	V
Average Rectified Output Current @ $T_C = 50^\circ\text{C}$	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 @ $I_F = 25\text{A}$	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										μA
I^2t Rating for Fusing ($t < 8.3\text{ms}$)	I^2t	800										A^2s
Typical Junction Capacitance (Note 1)	C_j	400										pF
Typical Thermal Resistance per leg (Note 2)	$R_{\theta JC}$	1.0										$^\circ\text{C}/\text{W}$
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 152 x 127mm Al. finned plate.

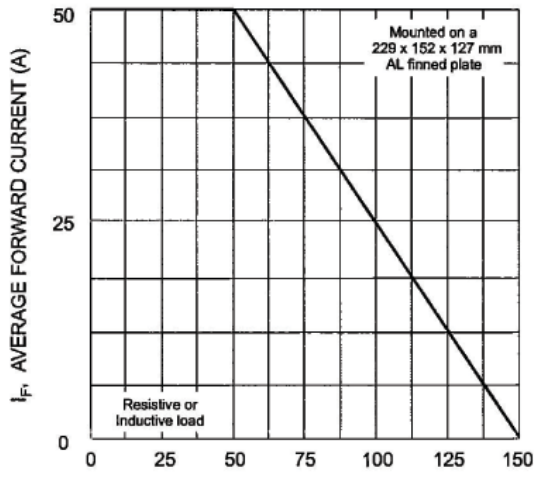


Fig. 1 Forward Current Derating Curve

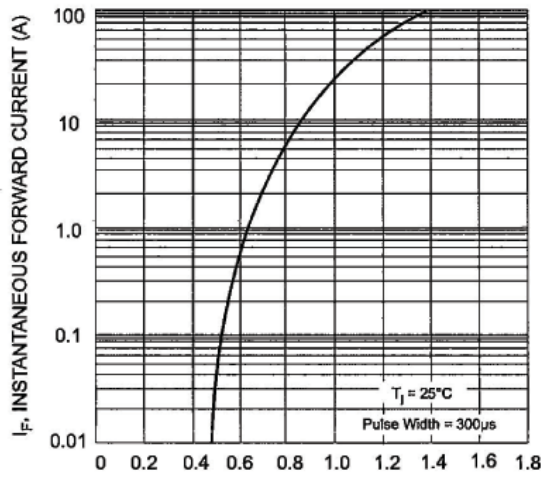


Fig. 2 Typical Forward Characteristics (per element)

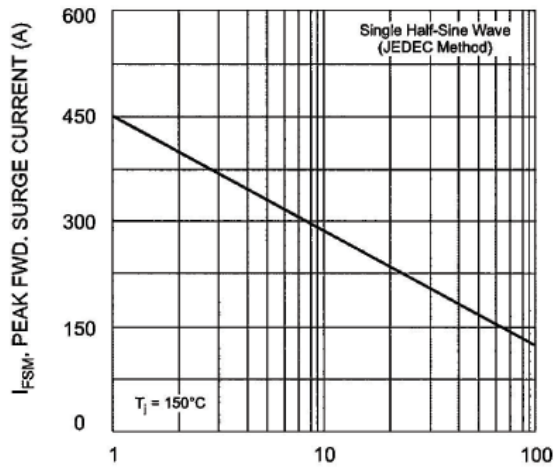


Fig. 3 Max Non-Repetitive Surge Current

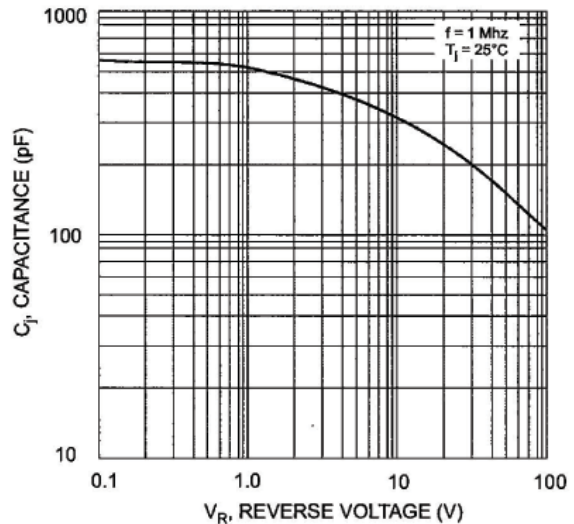


Fig. 4 Typical Junction Capacitance (per element)

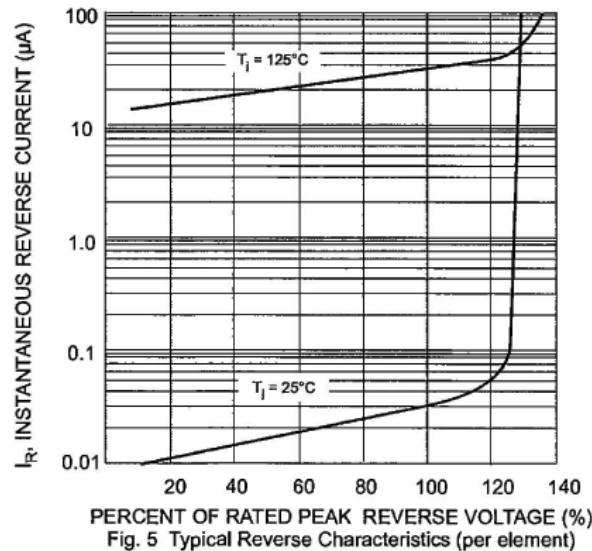


Fig. 5 Typical Reverse Characteristics (per element)

MARKING INFORMATION

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

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, GBPC5000-LF.

Surge Components Inc.
95 East Jeffryn Boulevard
Deer Park, NY 11729
Tel: 631-595-1818
www.surgecomponents.com

We power your everyday.