

APPROVAL DRAWING

Surge's product name
GBPC25xx/W series (RoHS compliant)

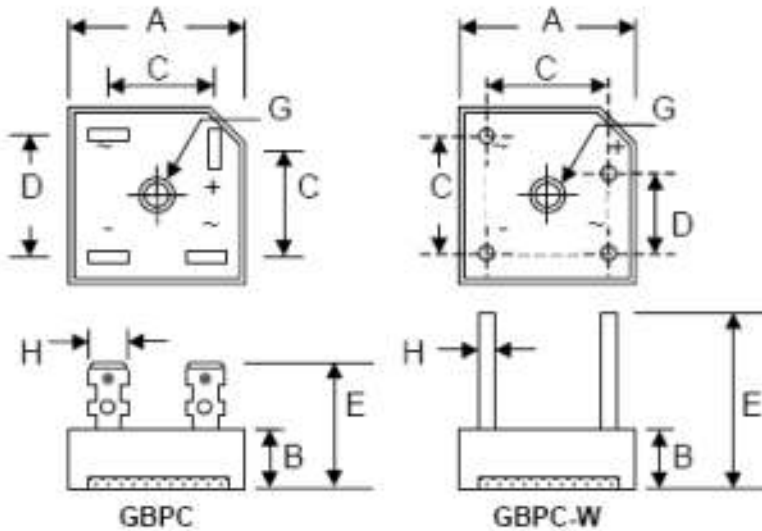
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Customer Acknowledgement

2010-06-09

1. CASE DIMENSION



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

2. MARKING

MARKING INFORMATION

GBPC	GBPC-W
<p>GBPC25xx = Device Number xx = 005, 01, 02, 04, 06, 08, 10 Polarity = As Marked on Body</p>	<p>GBPC25xxW = Device Number xx = 005, 01, 02, 04, 06, 08, 10 Polarity = As Marked on Body</p>

3. ABSOLUTE MAXIMUM RATING and ELECTRICAL CHARACTERISTIC

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

Characteristic	Symbol	GBPC25 005/W	GBPC25 01/W	GBPC25 02/W	GBPC25 04/W	GBPC25 06/W	GBPC25 08/W	GBPC25 10/W	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @ $T_C = 60^\circ\text{C}$	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 element) @ $I_F = 12.5\text{A}$	V_{FM}	1.1							V
Peak Reverse Current at Rated DC Blocking Voltage @ $T_C = 25^\circ\text{C}$ @ $T_C = 125^\circ\text{C}$	I_R	5.0 500							μA
I^2t Rating for Fusing (Note 1)	I^2t	374							A^2s
Typical Junction Capacitance (Note 2)	C_j	300							pF
Typical Thermal Resistance per leg (Note 3)	$R_{\theta JC}$	1.3							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +150							$^\circ\text{C}$

- Notes:
1. Non-repetitive, for $t > 1.0\text{ms}$ and $t < 8.3\text{ms}$.
 2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
 3. Thermal resistance junction to case mounted on heatsink.

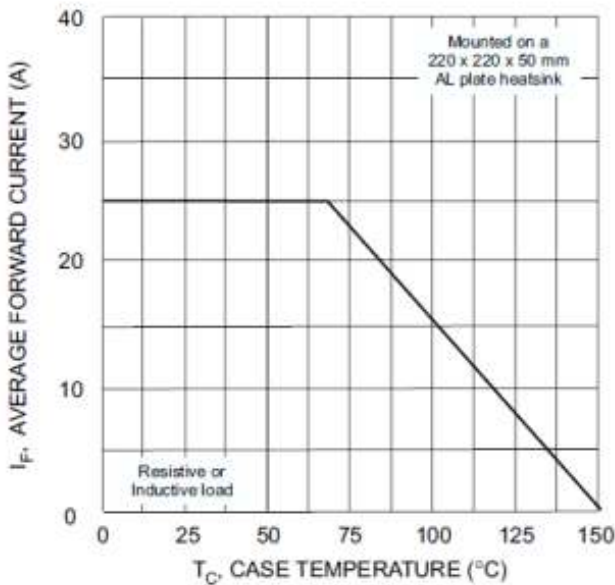


Fig. 1 Forward Current Derating Curve

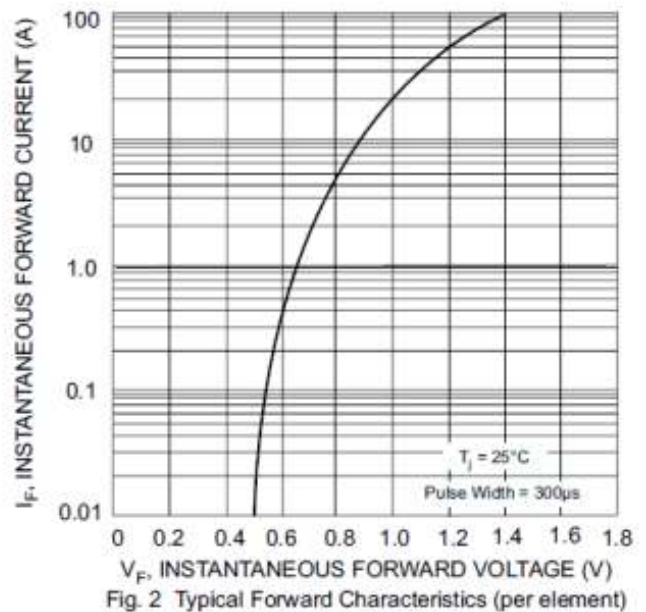


Fig. 2 Typical Forward Characteristics (per element)

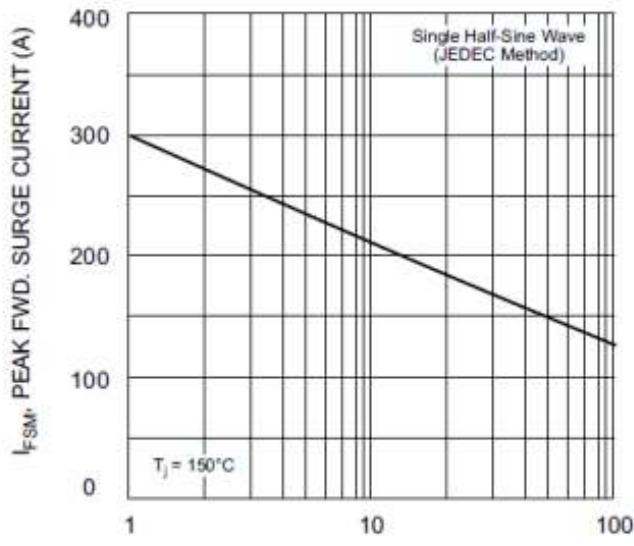


Fig. 3 Max Non-Repetitive Surge Current

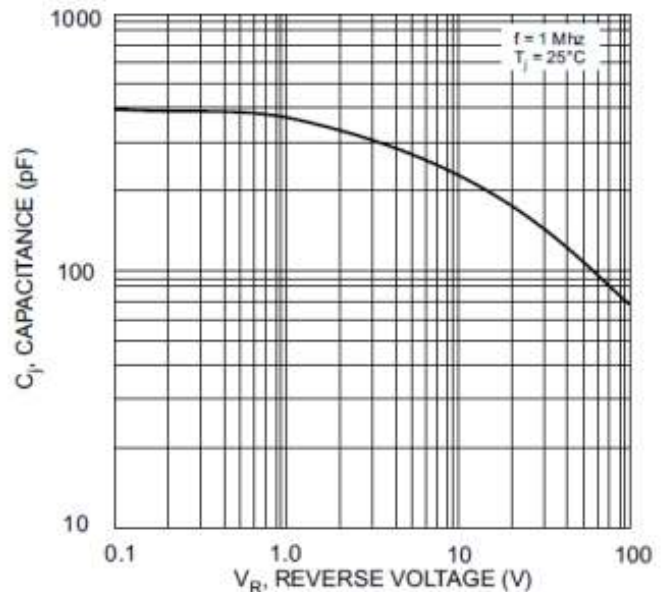


Fig. 4 Typical Junction Capacitance (per element)

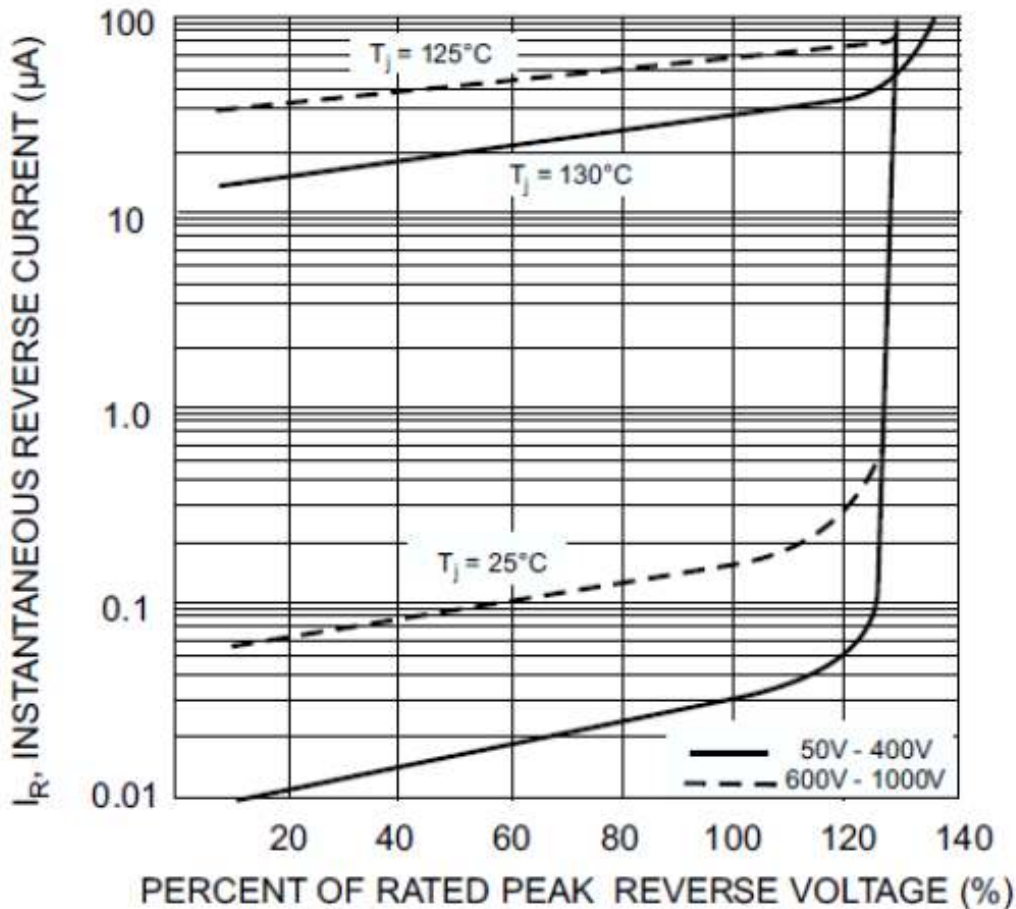


Fig. 5 Typical Reverse Characteristics (per element)



4. PACKAGING SPECIFICATION

1) 52mm Ammo Packaging

(1) Primary Packaging

Quantity 50pcs/box

(2) Secondary Packaging

Quantity 500pcs/Carton

5. DESCRIPTION of BOX LABEL

1) Box Packaging

(1) Part No.

(2) Quantity

(3) Lot No.

2) Carton Packaging

(1) Customer Name

(2) Type

(3) Quantity

(4) Carton No

(5) Lot No.

(6) Net Weight

(7) Gross Weight

(8) Q.A.

6. NONE-USE OF OZONE DEPLETING SUBSTANCE

Substance under control: CFCs, Halon, Carbontetracloride
and Trichloroethane (Methylchloroform)

It is confirmed that:

- 1) This product does not contain any controlled substances above cited.
- 2) The manufacturing process of this product does not use any controlled substance above cited