

# Glass Passivated Bridge Rectifiers

**Comchip**  
SMD Diode Specialist

## GBPC25005-G Thru. GBPC5010-G Series

Reverse Voltage: 50 to 1000V

Forward Current: 25/35/50A

RoHS Device

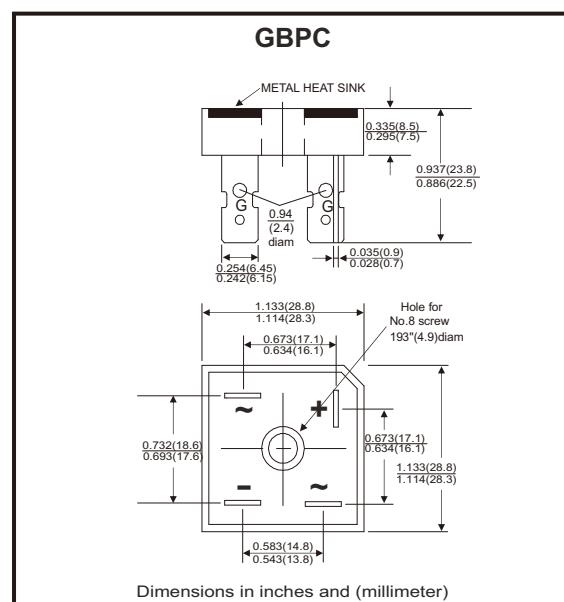


### Features

- Surge overload -350~450 Amperes peak.
- Low forward voltage drop.
- Electrically isolated base -2000 Volts.
- Solderable 0.25" Fast ON terminals.
- UL recognized file # E349301

### Mechanical Data

- Polarity: As marked on body.
- Mounting position: Any.
- Weight: 16.57 grams (approx.).



### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz, resistive or inductive load.  
For capacitive load, derate current by 20%

Parameter	Symbol	GBPC-G	Unit						
		25005	2501	2502	2504	2506	2508	2510	
		35005	3501	3502	3504	3506	3508	3510	
		50005	5001	5002	5004	5006	5008	5010	
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS bridge input voltage	V <sub>RRM</sub>	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V

Parameter	Symbol	GBPC25	GBPC35	GBPC50	Unit
Maximum average forward rectified output current @T <sub>c</sub> =55°C	I <sub>(AV)</sub>	25	35	50	A
Peak forward surge current, 8.3ms single half sine-wave, superimposed on rated load	I <sub>FSM</sub>	350	400	450	A
Maximum forward voltage drop per element at 12.5/17.5/25.0A peak	V <sub>F</sub>		1.1		V
Maximum reverse current at rate DC blocking voltage per element @ T <sub>J</sub> =25°C	I <sub>R</sub>		10.0		μA
Operating temperature range	T <sub>J</sub>		-55 to +150		°C
Storage temperature range	T <sub>STG</sub>		-55 to +150		°C

REV:D

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## Rating and Characteristics Curves (GBPC25005-G Thru. GBPC5010-G Series)

Fig.1 - Derating Curve Output  
Rectified Current

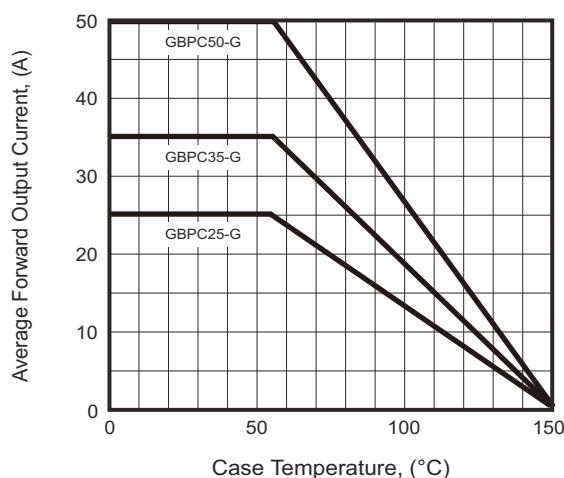


Fig.2 - Typical Forward Characteristics

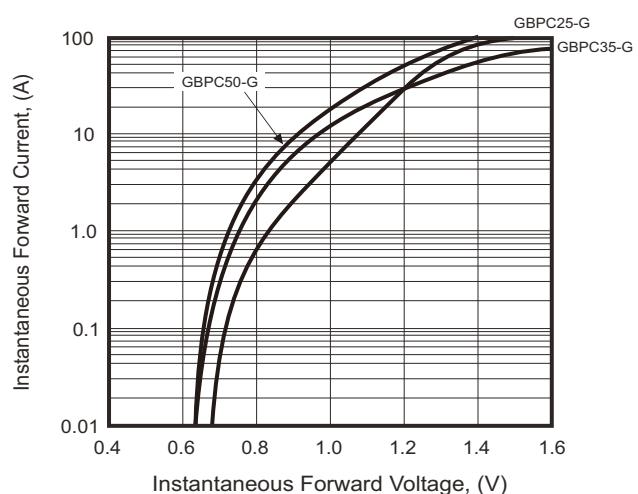


Fig.3 - Maximum Forward Surge Current

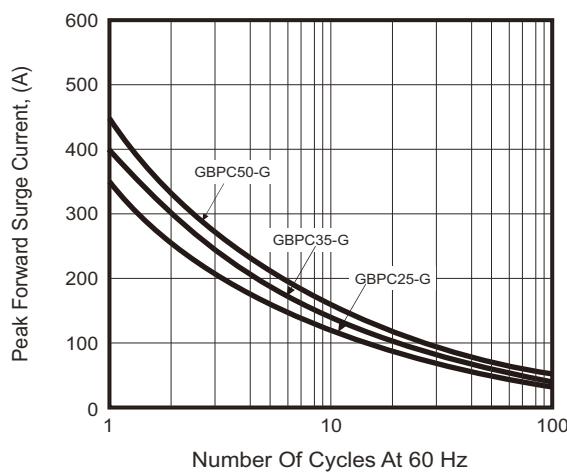
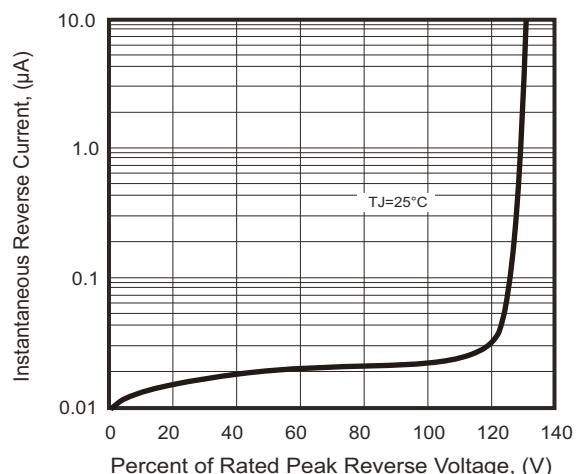
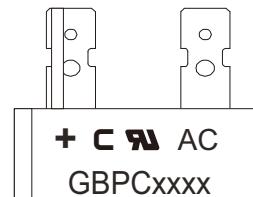


Fig.4 - Typical Reverse Characteristics



## Marking Code

Part Number	Marking code
GBPC25005-G	GBPC25005
GBPC35005-G	GBPC35005
GBPC50005-G	GBPC50005
GBPC2501-G	GBPC2501
GBPC3501-G	GBPC3501
GBPC5001-G	GBPC5001
GBPC2502-G	GBPC2502
GBPC3502-G	GBPC3502
GBPC5002-G	GBPC5002
GBPC2504-G	GBPC2504
GBPC3504-G	GBPC3504
GBPC5004-G	GBPC5004
GBPC2506-G	GBPC2506
GBPC3506-G	GBPC3506
GBPC5006-G	GBPC5006
GBPC2508-G	GBPC2508
GBPC3508-G	GBPC3508
GBPC5008-G	GBPC5008
GBPC2510-G	GBPC2510
GBPC3510-G	GBPC3510
GBPC5010-G	GBPC5010



XXXXX / XXXX = Product type marking code

C = Comchip Logo

## Standard Packaging

Case Type	BULK PACK	
	BOX ( pcs )	CARTON ( pcs )
GBPC	50	500