

Glass Passivated Bridge Rectifiers



SMD Diodes Specialist

GBPC15005W-G Thru. GBPC5010W-G Series

Reverse Voltage: 50 to 1000V

Forward Current: 15/25/35/50A

RoHS Device

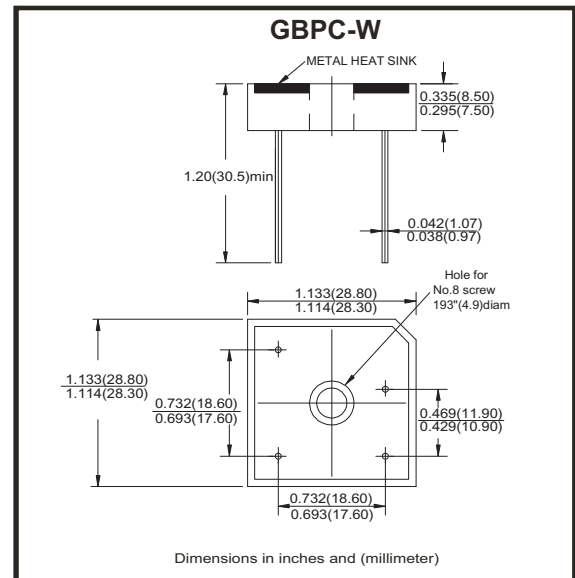


Features

- Surge overload-300~450 Amperes peak
- Low forward voltage drop
- Electrically isolated base -2000 Volts
- Materials used carries U/L recognition

Mechanical Data

- Polarit:As marked on Body
- Mounting position:Any
- Weight: 16.57grams



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_W-G	GBPC_W-G	GBPC_W-G	GBPC_W-G	GBPC_W-G	GBPC_W-G	GBPC_W-G	Unit
		15005	1501	1502	1504	1506	1508	1510	
		25005	2501	2502	2504	2506	2508	2510	
		35005	3501	3502	3504	3506	3508	3510	
		50005	5001	5002	5004	5006	5008	5010	
Maximum Reverse Peak Repetitive Voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Bridge Input Voltage	V _{RRM}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	800	1000	V

Parameter	Symbol	GBPC15W	GBPC25W	GBPC35W	GBPC50W	Unit
Maximum Average Forward Rectified Output Current @Tc=55°C	I _{AV}	15	25	35	50	A
Peak Forward Surge Current , 8.3ms Single Half Sine-Wave Super Imposed On Rated Load	I _{FSM}	300	350	400	450	A
Maximum Forward Voltage Drop Per Element at 7.5/12.5/17.5/25.0A Peak	V _F	1.1				V
Maximum Reverse Current at rate DC Blocking Voltage Per Element @ T _J =25°C	I _R	10.0				μA
Operating Temperature Range	T _J	-55 to +150				°C
Storage Temperature Range	T _{STG}	-55 to +150				°C

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Rating and Characteristics Curves (GBPC10005W-G Thru. GBPC5010W-G Series)

Fig. 1- Maximum Forward Surge Current

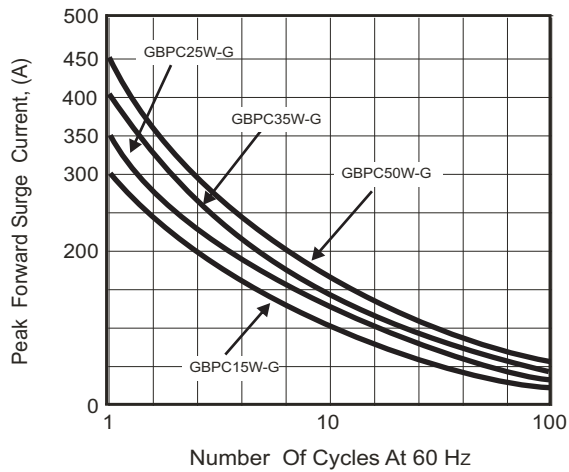


Fig. 2- De-rating Current Output Rectified Current

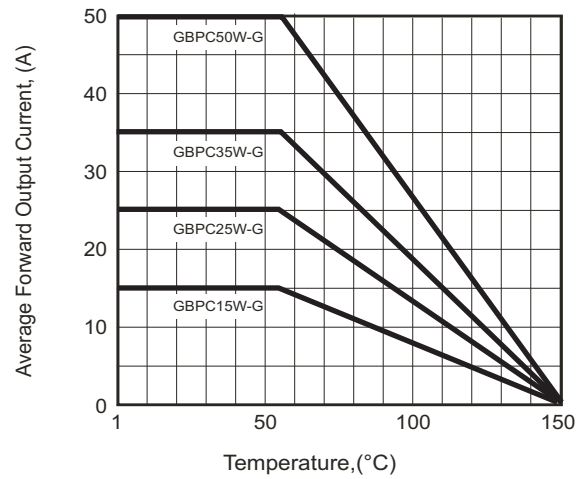


Fig.3- Typical Forward Characteristics

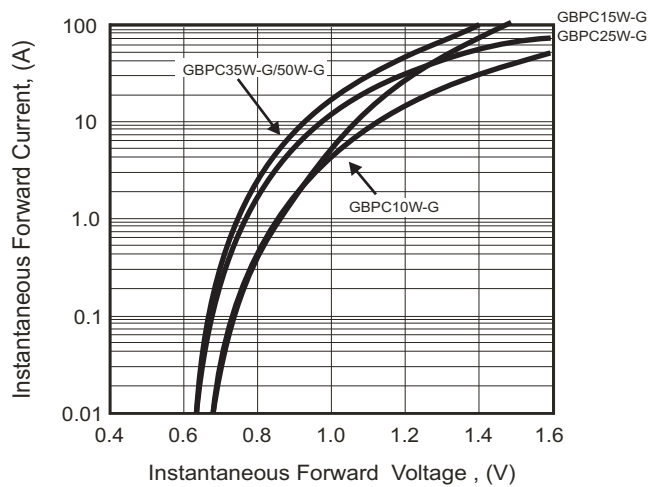
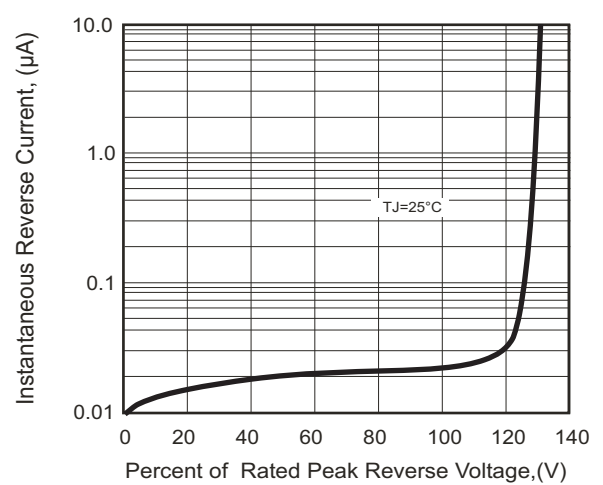


Fig.4- Typical Reverse Characteristics



Marking Code

Part Number	Marking code
GBPC15005W-G	GBPC15005W
GBPC25005W-G	GBPC25005W
GBPC35005W-G	GBPC35005W
GBPC50005W-G	GBPC50005W
GBPC1501W-G	GBPC1501W
GBPC2501W-G	GBPC2501W
GBPC3501W-G	GBPC3501W
GBPC5001W-G	GBPC5001W
GBPC1502W-G	GBPC1502W
GBPC2502W-G	GBPC2502W
GBPC3502W-G	GBPC3502W
GBPC5002W-G	GBPC5002W
GBPC1504W-G	GBPC1504W
GBPC2504W-G	GBPC2504W
GBPC3504W-G	GBPC3504W
GBPC5004W-G	GBPC5004W
GBPC1506W-G	GBPC1506W
GBPC2506W-G	GBPC2506W
GBPC3506W-G	GBPC3506W
GBPC5006W-G	GBPC5006W
GBPC1508W-G	GBPC1508W
GBPC2508W-G	GBPC2508W
GBPC3508W-G	GBPC3508W
GBPC5008W-G	GBPC5008W
GBPC1510W-G	GBPC1510W
GBPC2510W-G	GBPC2510W
GBPC3510W-G	GBPC3510W
GBPC5010W-G	GBPC5010W



XXXXXX / XXXX = Product type marking code

Standard Package

Case Type	BULK PACK		
	Box (EA)	Box / Carton (EA)	CARTON (EA)
GBPC	50	10	500