

Vishay General Semiconductor

ELECTRICAL CHAR	ACTERIS	TICS (T _A = 25 °C	C unless o	therwi	se not	ed)										
PARAMETER		TEST	SYMBOL	GBPC12, 15, 25, 35												
PARAMETER	ARAMETER		STMDUL	005	01	02	04	06	08	10	UNIT					
	GBPC12	I _F = 6.0 A	- V _F													
Maximum instantaneous	GBPC15	I _F = 7.5 A					1.1				v					
forward drop per diode	GBPC25	I _F = 12.5 A		1.1						v						
	GBPC35	I _F = 17.5 A														
Maximum reverse DC curre	nt at rated	T _A = 25 °C 5.0														
DC blocking voltage per diode		T _A = 125 °C	IR	500						μA						
Typical junction capacitance	n capacitance per diode 4 V, 1 MHz C _J 300			pF												

THERMAL CHARACTERIS	STICS (T _A = 25 °C ur	nless othe	rwise r	noted)						
PABAMETER		SYMBOL	GBPC12, 15, 25, 35						UNIT	
PARAMETER		STINIDUL	005 01 02 0		04	06	08	10		
Typical thermal resistance	GBPC12 to GBPC25	R _{eJC} ⁽¹⁾				1.9				°C/W
Typical thermal resistance	GBPC35	LIBIC ()	1.4							0/11

Notes

(1) With heatsink

⁽²⁾ Bolt down on heatsink with silicone thermal compound between bridge and mounting surface for maximum heat transfer with #10 screw

ORDERING INFORMATION (Example)							
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE			
GBPC1206-E4/51	15.79	51	100	Paper box			
GBPC1506-E4/51	15.79	51	100	Paper box			
GBPC2506-E4/51	15.79	51	100	Paper box			
GBPC3506-E4/51	15.79	51	100	Paper box			
GBPC1206W-E4/51	13.8	51	100	Paper box			
GBPC1506W-E4/51	13.8	51	100	Paper box			
GBPC2506W-E4/51	13.8	51	100	Paper box			
GBPC3506W-E4/51	13.8	51	100	Paper box			



GBPC12, GBPC15, GBPC25, GBPC35

Vishay General Semiconductor

RATINGS AND CHARACTERISTICS CURVES (T_A = 25 °C unless otherwise noted)

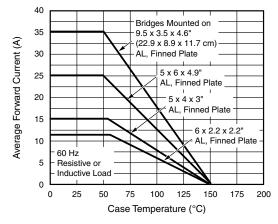


Fig. 1 - Maximum Output Rectified Current

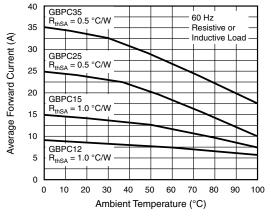


Fig. 2 - Maximum Output Rectified Current

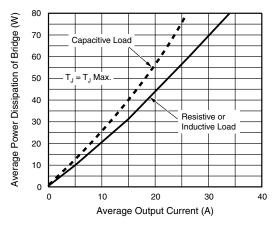


Fig. 3 - Maximum Power Dissipation

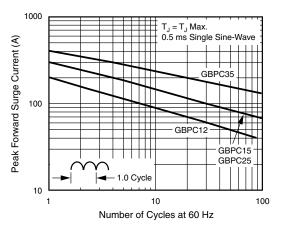


Fig. 4 - Maximum Non-Repetitive Peak Forward Surge Current Per Diode

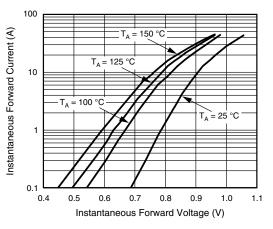


Fig. 5 - Typical Instantaneous Forward Characteristics Per Diode

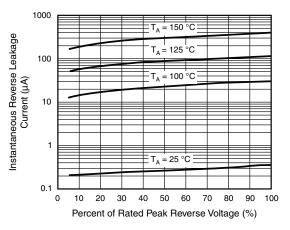


Fig. 6 - Typical Reverse Leakage Characteristics Per Diode

Revision: 07-Aug-2020

3

For technical questions within your region: <u>DiodesAmericas@vishay.com</u>, <u>DiodesAsia@vishay.com</u>, <u>DiodesEurope@vishay.com</u> THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT <u>www.vishay.com/doc?91000</u>



GBPC12, GBPC15, GBPC25, GBPC35

Vishay General Semiconductor

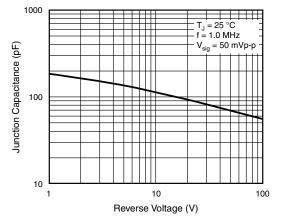


Fig. 7 - Typical Junction Capacitance Per Diode

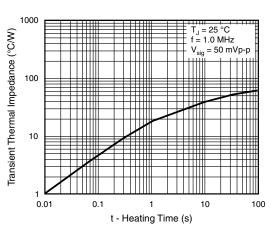
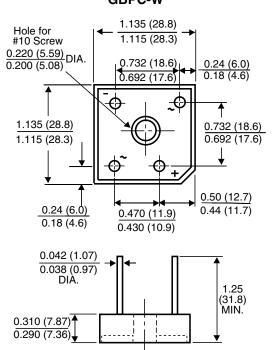
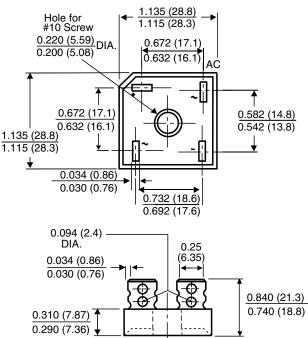


Fig. 8 - Typical Transient Thermal Impedance Per Diode







Revision: 07-Aug-2020 4 Document Number: 88612 For technical questions within your region: <u>DiodesAmericas@vishay.com</u>, <u>DiodesAsia@vishay.com</u>, <u>DiodesEurope@vishay.com</u> THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT www.vishay.com/doc?91000

GBPC-W

GBPC



Vishay

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Vishay:

<u>GBPC1206-E4/51</u> <u>GBPC1206W-E4/51</u> <u>GBPC1506-E4/51</u> <u>GBPC1506W-E4/51</u> <u>GBPC2506-E4/51</u> <u>GBPC2506W-E4/51</u> <u>GBPC3506-E4/51</u> <u>GBPC3506W-E4/51</u>