

Bridge Rectifiers

GBPC Series

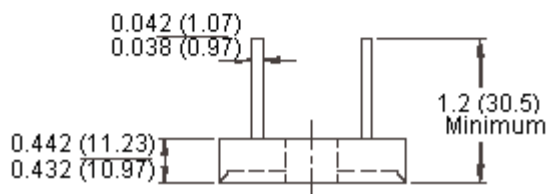
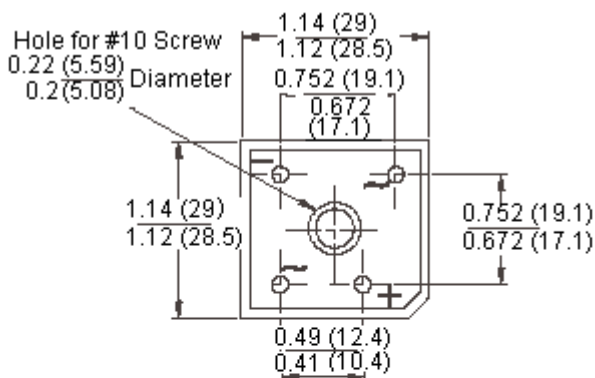


Features:



- Plastic material
- Integrally moulded heatsink provide very low thermal resistance for maximum heat dissipation
- Surge overload ratings from 300 to 400 A
- Terminals solderable per MIL-STD-202, method 208 (for wire type)
- Typical I_R less than 0.2 μ A
- High temperature soldering guaranteed, 260°C / 10 seconds 0.375 inch (9.5 mm) lead lengths (for wire type)
- Isolated voltage from case to lead over 2,500 V

GBPC-W



Dimensions : Inches (Millimetres)

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Maximum Ratings and Electrical Characteristics

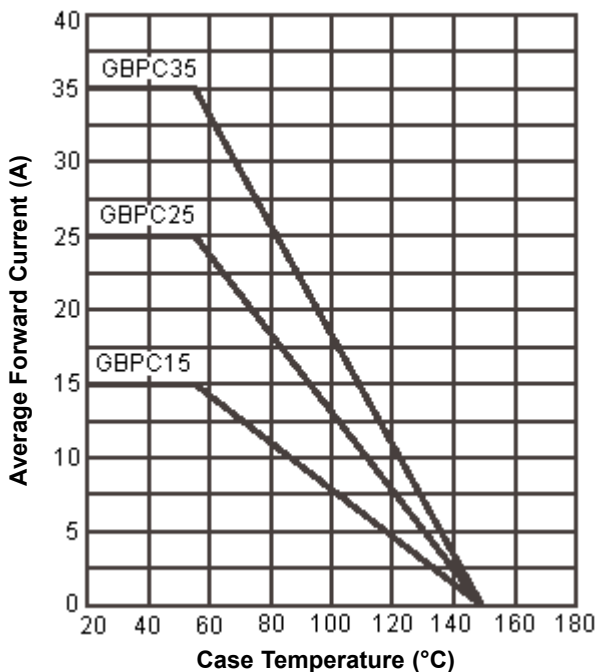
Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

Type Number	Symbol	-005	-01	-02	-04	-06	-08	-10	Unit	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1,000	V	
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700		
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1,000		
Maximum Average Forward Rectified Current at $T_C = 55^\circ\text{C}$	$I_{(AV)}$					15				A
						25				
						35				
Peak Forward Surge Current, Single Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}					300				A
						300				
						400				
Maximum Instantaneous Forward Voltage Drop Per Element at Specified Current	V_F					1.1				V
Maximum DC Reverse Current at Rated DC Blocking Voltage Per Element	I_R					5				mW
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$					1.5				$^\circ\text{C} / \text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}					-50 to +150				$^\circ\text{C}$

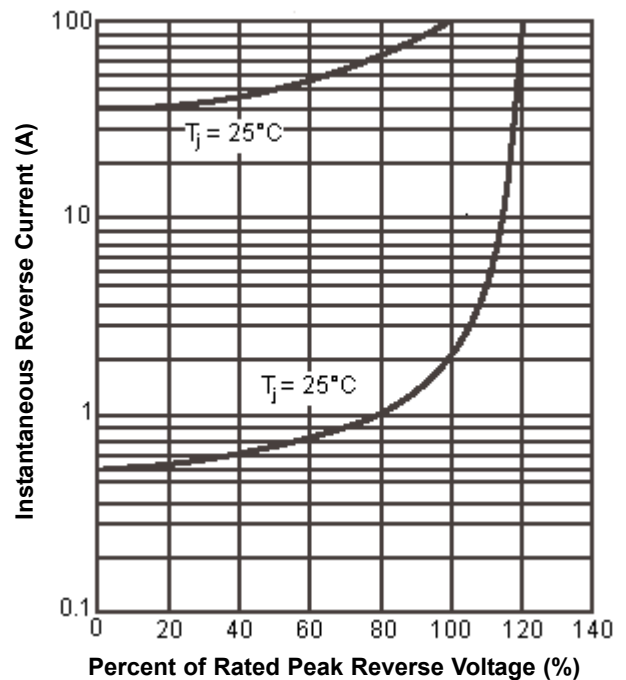
- Notes: 1. Thermal resistance from junction to case
2. Suffix "W" - wire lead structure

Ratings and Characteristic Curves (GBPC15005 thru GBPC1510, GBPC25005 thru GBPC2510, GBPC35005 thru GBPC3510)

Maximum Forward Current Derating Curve



Typical Reverse Characteristics Per Bridge Element

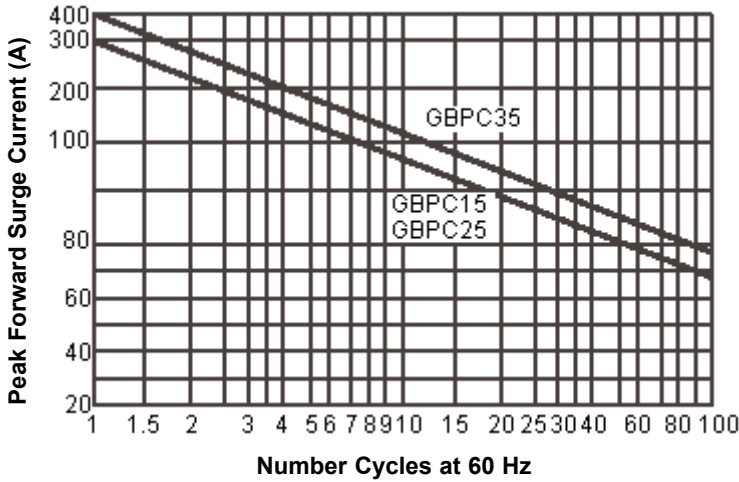


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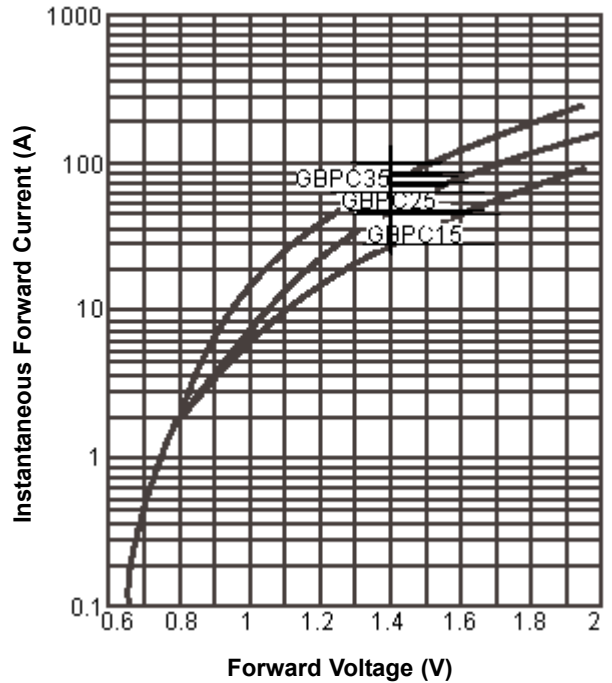


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Maximum Non-Repetitive Forward Surge Current Per Bridge Element



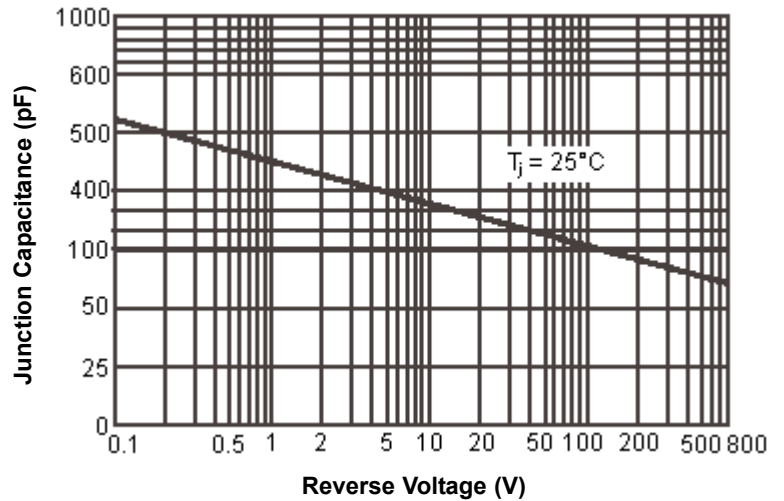
Typical Forward Characteristics Per Bridge Element



Part Number Table

Description	Part Number
Bridge Rectifier, 15 A, 50 V	GBPC15005W
Bridge Rectifier, 15 A, 100 V	GBPC1501W
Bridge Rectifier, 15 A, 200 V	GBPC1502W
Bridge Rectifier, 15 A, 400 V	GBPC1504W
Bridge Rectifier, 15 A, 600 V	GBPC1506W
Bridge Rectifier, 15 A, 800 V	GBPC1508W
Bridge Rectifier, 15 A, 1000 V	GBPC1510W
Bridge Rectifier, 25 A, 100 V	GBPC2501W
Bridge Rectifier, 25 A, 200 V	GBPC2502W
Bridge Rectifier, 25 A, 400 V	GBPC2504W
Bridge Rectifier, 25 A, 600 V	GBPC2506W
Bridge Rectifier, 25 A, 800 V	GBPC2508W
Bridge Rectifier, 25 A, 1,000 V	GBPC2510W
Bridge Rectifier, 35 A, 50 V	GBPC35005W
Bridge Rectifier, 35 A, 100 V	GBPC3501W
Bridge Rectifier, 35 A, 200 V	GBPC3502W
Bridge Rectifier, 35 A, 400 V	GBPC3504W
Bridge Rectifier, 35 A, 600 V	GBPC3506W
Bridge Rectifier, 35 A, 800 V	GBPC3508W
Bridge Rectifier, 35 A, 1,000 V	GBPC3510W

Typical Junction Capacitance



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