

Bridge Rectifier



Features:

- Glass passivated junction
- Plastic material
- Integrally moulded heatsink provide very low thermal resistance for maximum heat dissipation
- Universal 4-way terminals; snap-on, wrap-around, solder or PC board mounting
- Surge overload ratings 400A
- Terminals solderable per MIL-STD-202, Method 208
- Typical IR less than 0.2 μ A
- High temperature soldering guaranteed: 260°C/10 seconds/0.375 inch, (9.5mm) lead lengths
- Isolated voltage from case to lead over 2,500V



Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

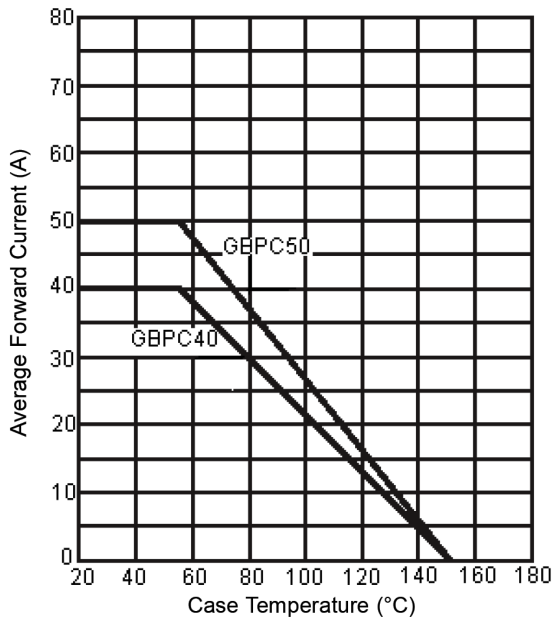
For capacitive load, derate current by 20%.

Type Number	Symbol	-01	-04	-08	-10	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	400	800	1,000	V
Maximum RMS Voltage	V_{RMS}	70	280	560	700	
Maximum DC Blocking Voltage	V_{DC}	100	400	800	1,000	
Maximum Average Forward Rectified Current at $T_c = 55^\circ\text{C}$	$I_{(AV)}$		40 50			A
Peak Forward Surge Current, Single Sine-wave Superimposed on Rated Load (JEDEC method)	I_{FSM}		400 400			
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		10			mW
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$		1.5			°C/W
Operating and Storage Temperature Range	T_J, T_{STG}		-50 to +150			°C

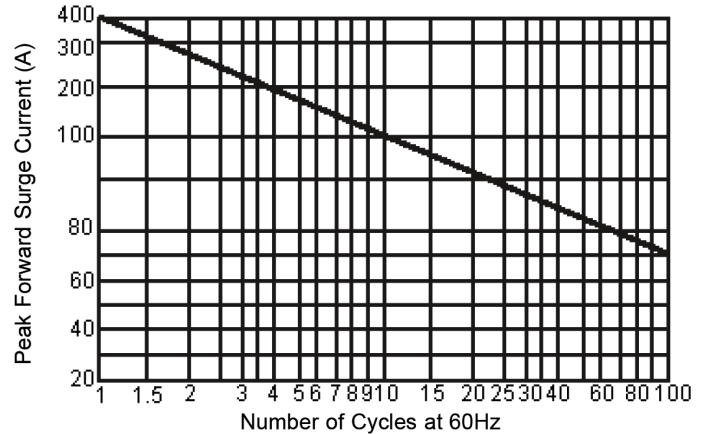
Notes: 1. Thermal Resistance from Junction to Case.

Ratings and Characteristic Curves (GBPC5001, GBPC5004, GBPC5008, GBPC5010)

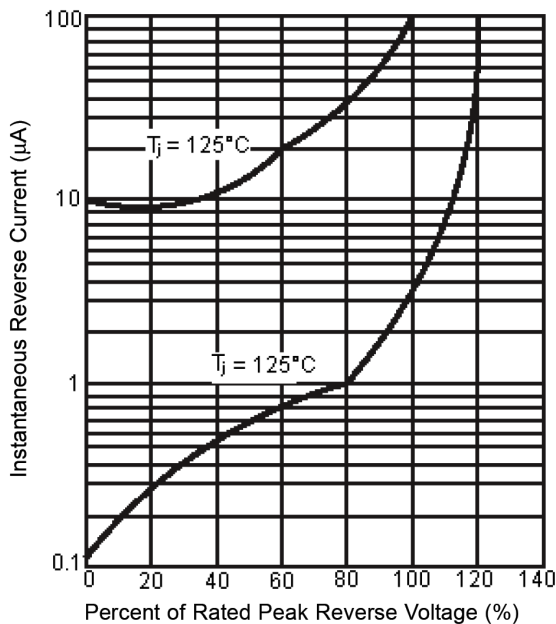
Maximum Forward Current Derating Curve



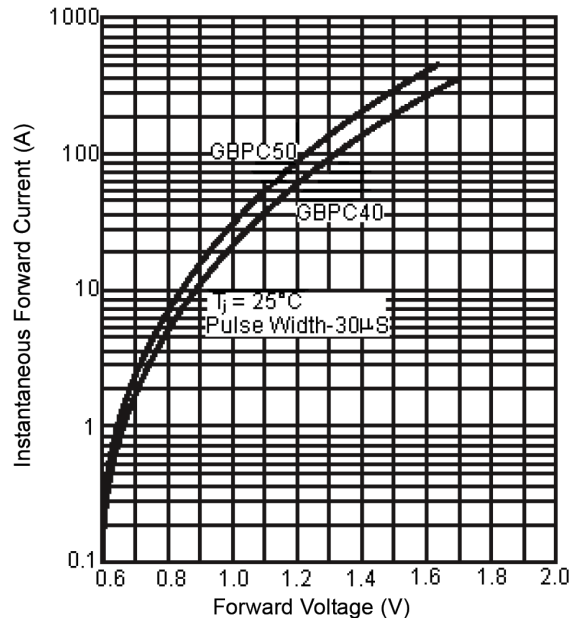
Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristics Per Bridge Element



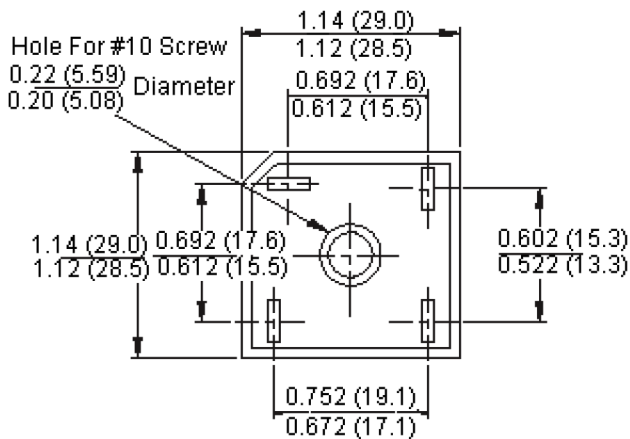
Typical Forward Characteristics Per Bridge Element



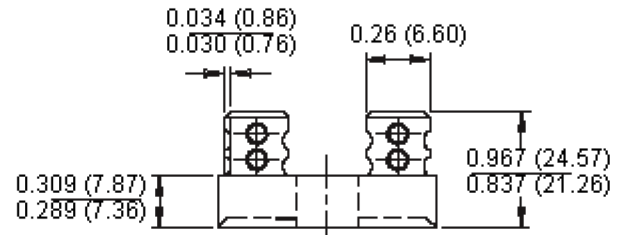
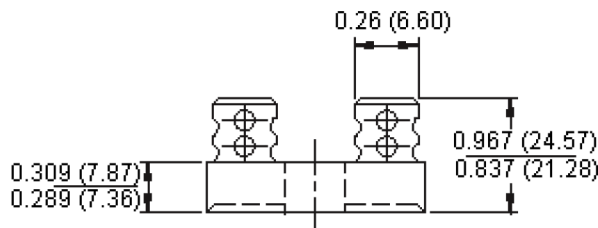
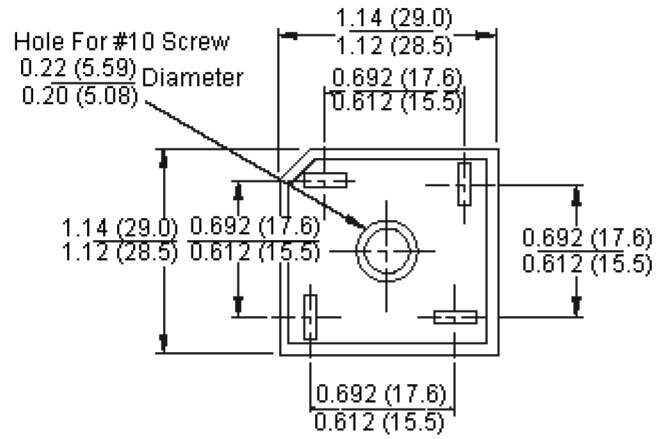
Bridge Rectifier



GBPC40



GBPC40-M



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Bridge Rectifier, 50A, 100V	GBPC5001
Bridge Rectifier, 50A, 400V	GBPC5004
Bridge Rectifier, 50A, 800V	GBPC5008
Bridge Rectifier, 50A, 1,000V	GBPC5010

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