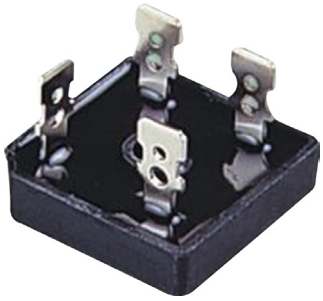
Bridge Rectifier

RoHS Compliant



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 0.2μA
- 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

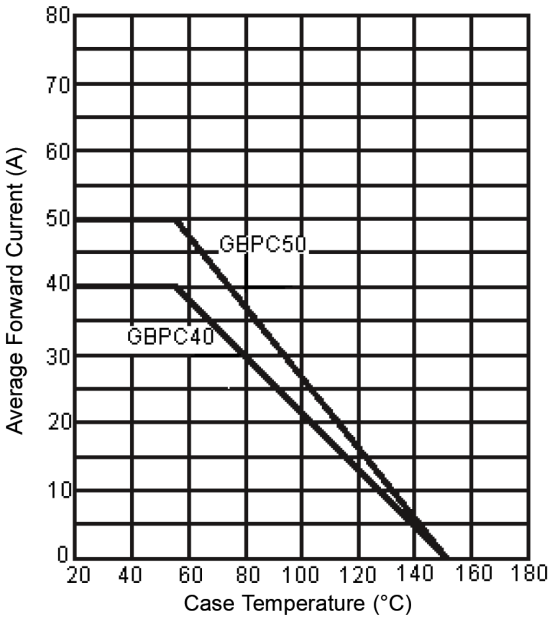
Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristics	Symbol	GBPC5008+	GBPC5010+	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	800	1,000	V
Maximum RMS Voltage	V_{RMS}	560	700	
Maximum DC Blocking Voltage	V_{DC}	800	1,000	
Maximum Average Forward Rectified Current at T_C = 55°C GBPC50	$I_{(AV)}$	50		A
Peak Forward Surge Current, Single Sine-wave Superimposed on Rated Load (JEDEC method) GBPC50	I_{FSM}	400		
Maximum Instantaneous Forward Voltage Drop Per Element at Specified Current GBPC50 at 25A	V_F	1.1		V
Maximum DC Reverse Current at Rated DC Blocking Voltage Per Element	I_R	10		μA
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

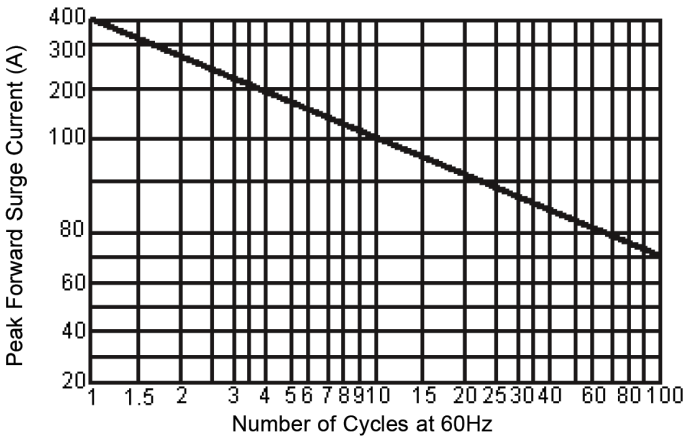
Note: 1. Thermal Resistance from Junction to Case.

Ratings and Characteristic Curves

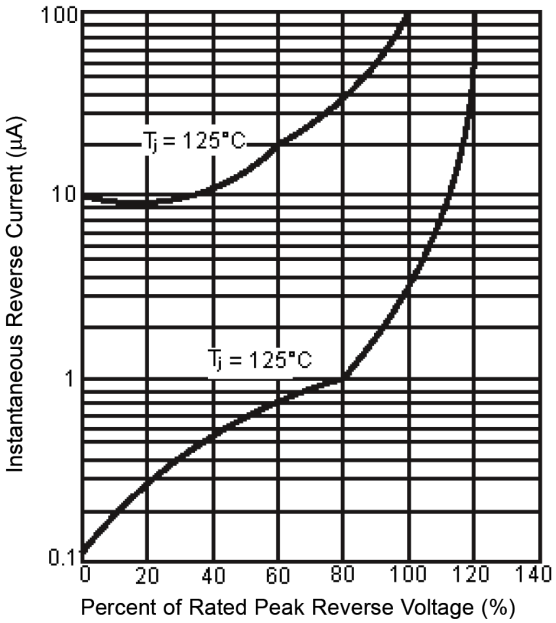
Maximum Forward Current Derating Curve



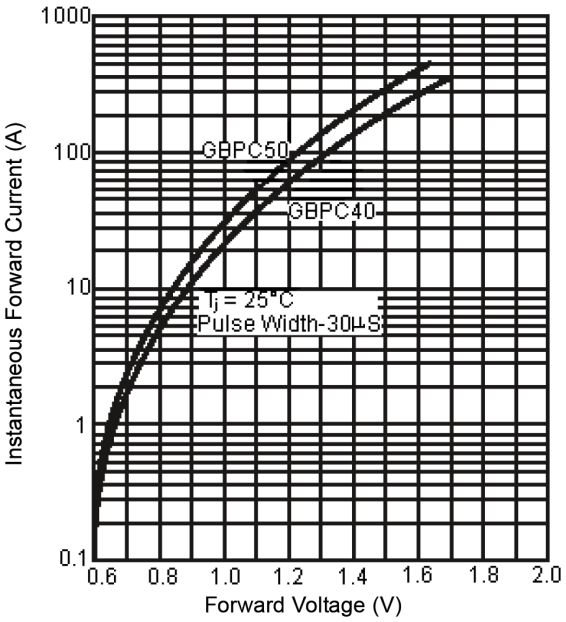
Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristics Per Bridge Element



Typical Forward Characteristics Per Bridge Element



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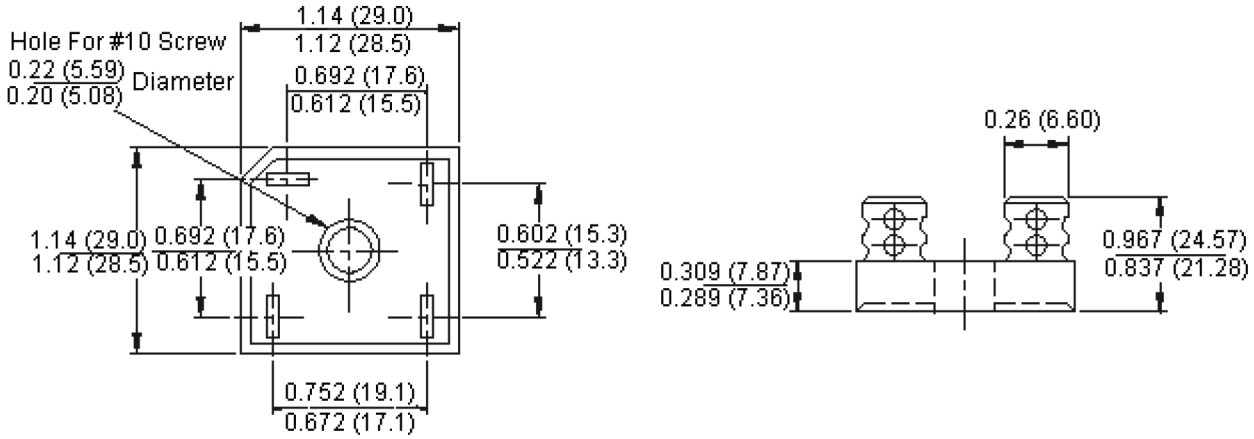
Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Bridge Rectifier, 50A, 800V	GBPC5008+
Bridge Rectifier, 50A, 1,000V	GBPC5010+