

# Single Phase Bridge Rectifier



## Features:

- The glass passivation process offers improvements to reliability at high operating temperatures, moisture resistance capability and overall durability
- Integrally moulded heatsink provided very low thermal resistance for maximum heat dissipation
- Universal 4-way terminals; snap-on, wrap-around, solder or P.C. board mounting
- Surge overload rating 400A
- Terminals solderable per MIL-STD-202, Method 208
- Typical IR less than 0.2uA
- High temperature soldering guaranteed: 260°C/10 seconds/0.375" (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%.

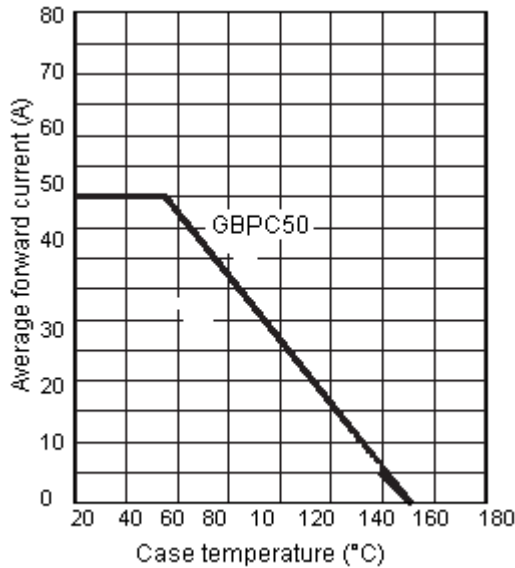
Characteristics	Symbol	Values	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	V
Maximum RMS Voltage	$V_{RMS}$	35	
Maximum DC Blocking Voltage	$V_{DC}$	50	
Maximum Average Forward Rectified Current at TC = 55°C GBPC50	$I_{(AV)}$	50	A
Peak Forward Surge Current, Single Sine-wave Superimposed on 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	$\mu A$
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

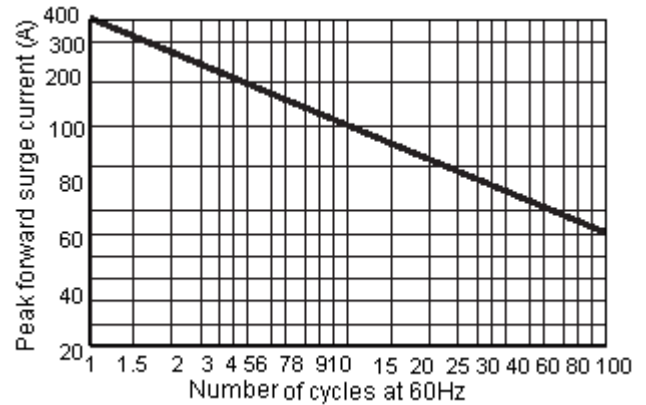
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## Ratings and Characteristic Curves

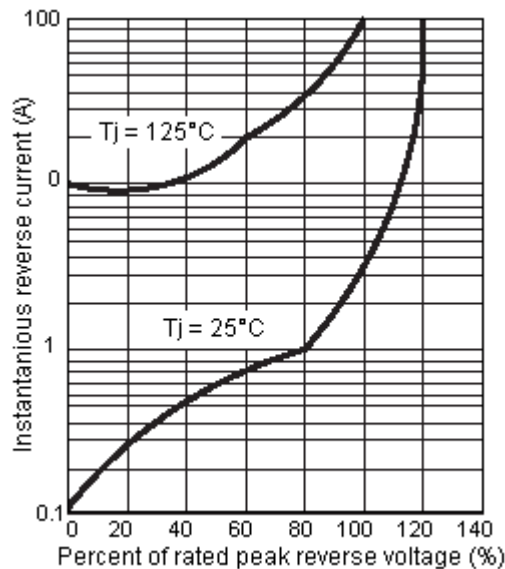
Maximum Forward Current Derating Curve



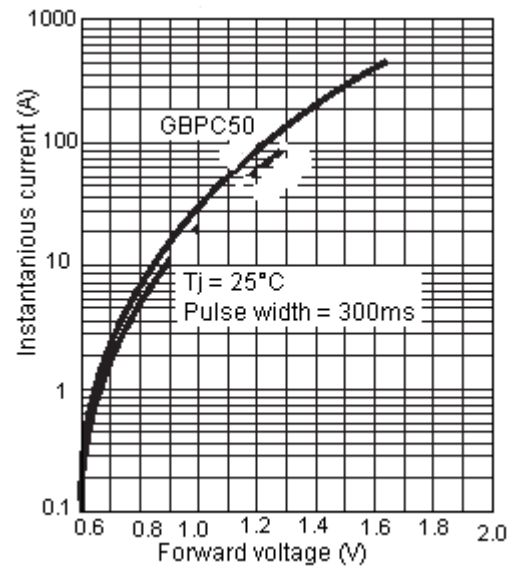
Maximum Non-Repetitive Forward Surge Current



Typical Reverse Characteristics per Bridge Element

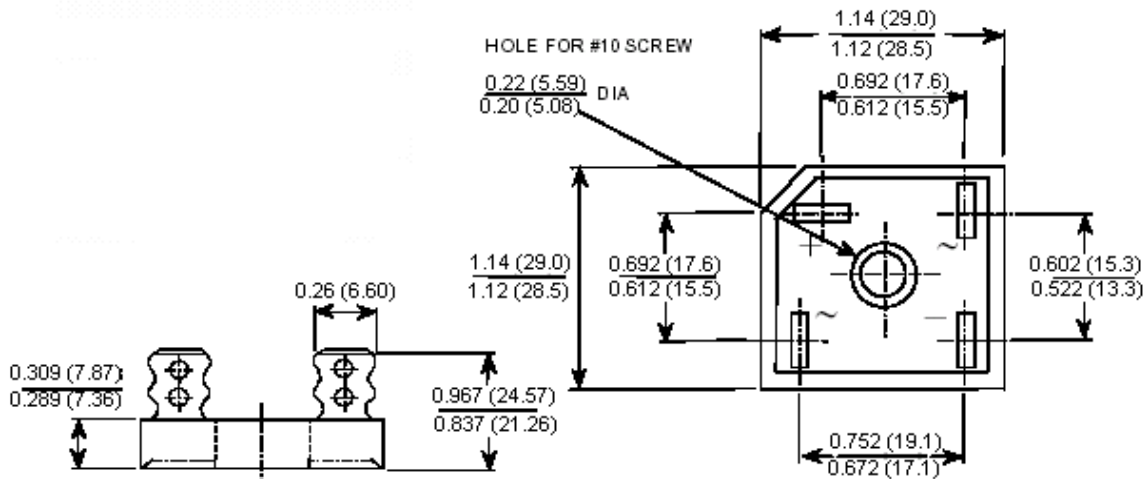


Typical Forward Characteristics per Bridge Element



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## Dimensions:



Dimensions : Inches (Millimetres)

## Part Number Table

Description	V <sub>RRM</sub> (V)	Maximum Input Voltage (V AC)	I <sub>o</sub> at 55°C (A)	I <sub>FSM</sub> (A)	Part Number
Single Phase Bridge Rectifier	50	35	50	400	GBPC50005+

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