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:

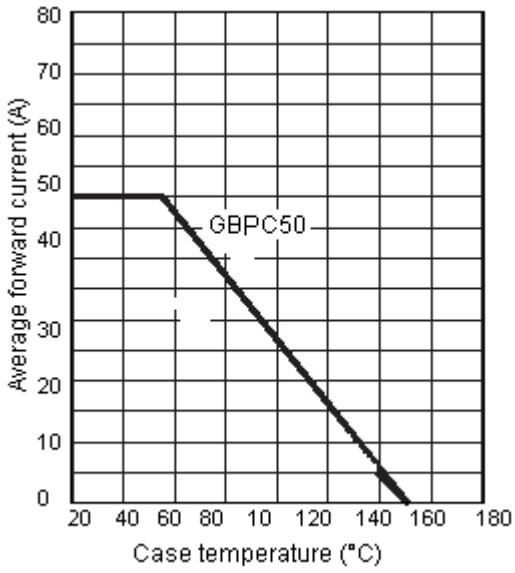
Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

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	µA
Typical Thermal Resistance (Note 1)	RθJC	1.5	°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-50 to +150	°C

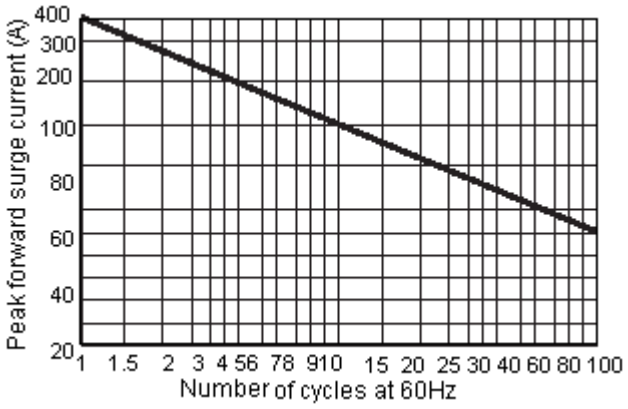
Note: 1. Thermal Resistance from Junction to Case

Ratings and Characteristic Curves

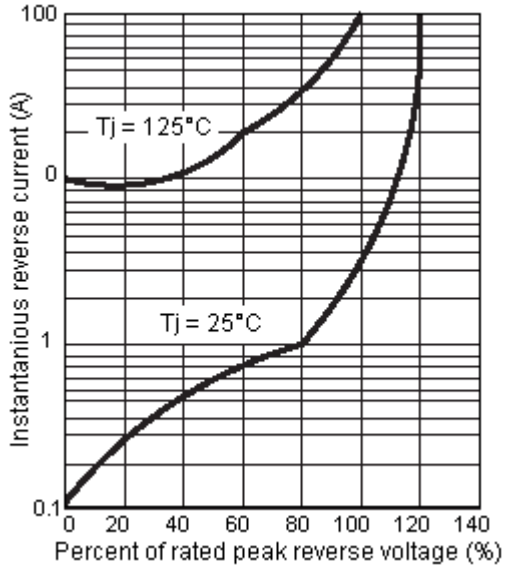
Maximum Forward Current Derating Curve



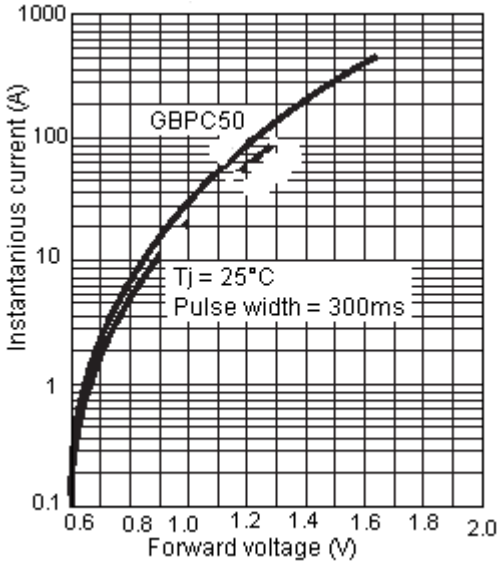
Maximum Non-Repetitive Forward Surge Current



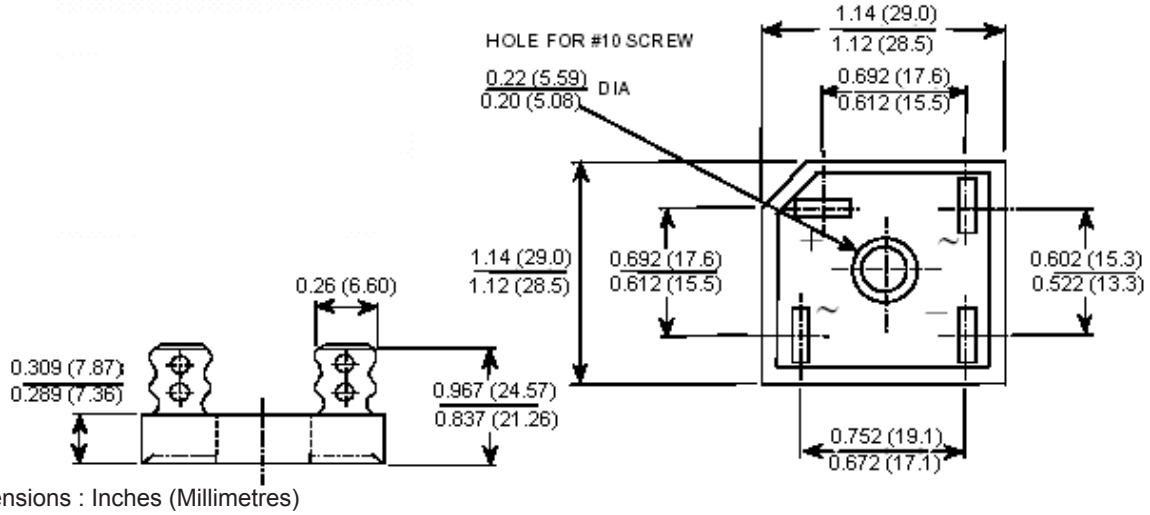
Typical Reverse Characteristics per Bridge Element



Typical Forward Characteristics per Bridge Element



Dimensions:



Dimensions : Inches (Millimetres)

Part Number Table

Description	V_{RRM} (V)	Maximum Input Voltage (V AC)	Io at 55°C (A)	I_{FSM} (A)	Part Number
Single Phase Bridge Rectifier	50	35	50	400	GBPC50005+