

# Bridge Rectifier Diode



## Features:

- The Plastic material used carries underwriters laboratory flammability recognition 94V-0.
- Integrally moulded heatsink provide very low thermal resistance for maximum heat dissipation
- Surge overload ratings from 300 to 400A
- Terminals solderable per MIL-STD-202, method 208 (for wire type)
- Typical  $I_R$  less than 0.2 $\mu$ A
- High temperature soldering guaranteed : 260°C / 10 seconds 0.375 inches (9.5mm) lead lengths (for wire type)
- Isolated voltage from case to lead over 2,500 volts

## Mechanical Data

Case : Moulded plastic body.  
Terminals : Pure tin plated, lead free leads solderable per MIL-STD-202, Method 208.  
Mounting Torque : 20 inches-lbs. maximum.

## 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	Units
Max. Recurrent Peak Reverse Voltage	$V_{RRM}$	50	V
Max. RMS Voltage	$V_{RMS}$	35	
Max. DC Blocking Voltage	$V_{DC}$	50	
Rectified Current	GBPC25 $I(AV)$	25	A
Single Sine-wave Superimposed	GBPC25 $I_{FSM}$	300	
Forward Voltage Drop Per	GBPC25 12.5A $V_F$	1.1	V
Maximum DC Reverse Current at Rated DC Blocking Voltage per Element (Note 1)	$I_R$	5	$\mu$ A
Typical Thermal Resistance	$R_{\theta JC}$	1.5	°C/W
Operating and Storage Temperature Range	$T_J, T_{STG}$	-50 to +150	°C

**Notes:** 1. Pulse test with PW = 300 $\mu$ sec, 1% duty cycle.  
2. Suffix "W" - wire lead structure/ "M" - terminal location face to face.

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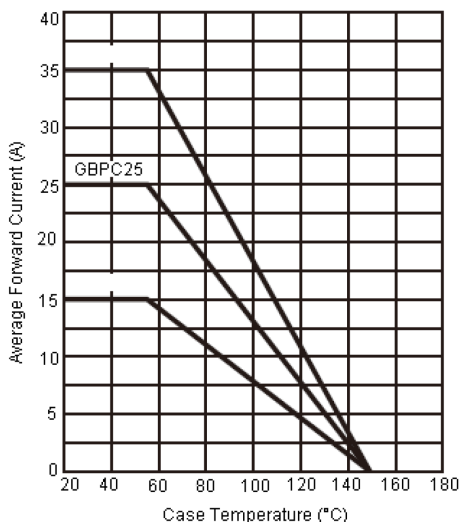


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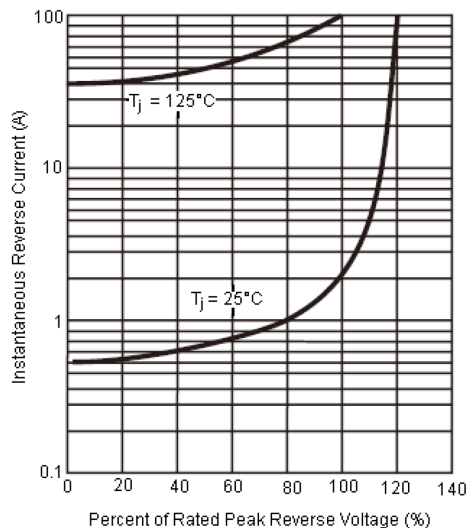


## Ratings and Characteristic Curves

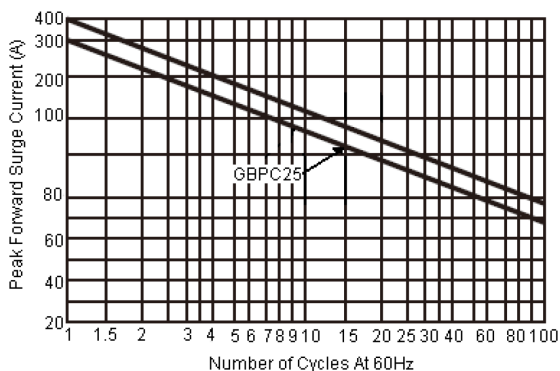
Maximum Forward Current Derating Curve



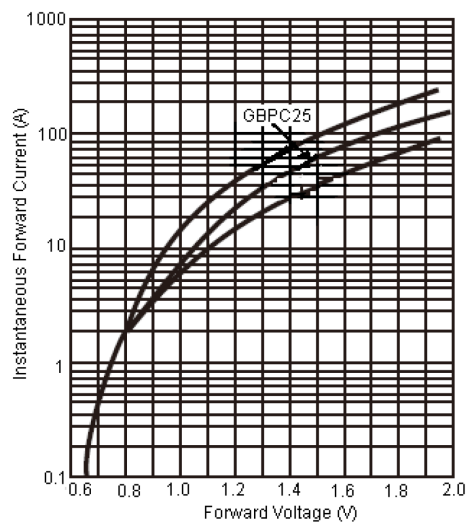
Typical Reverse Characteristics Per Bridge Element



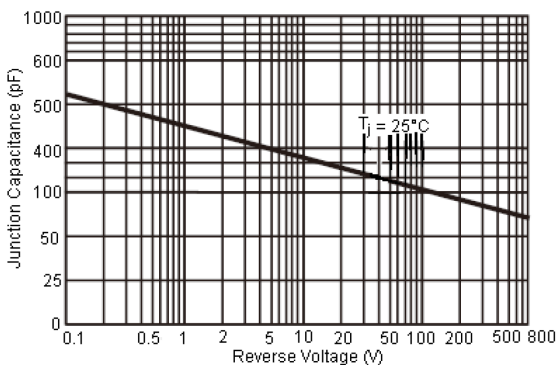
Maximum Non-Repetitive Forward Surge Current Per Bridge Element



Typical Reverse Characteristics Per Bridge Element



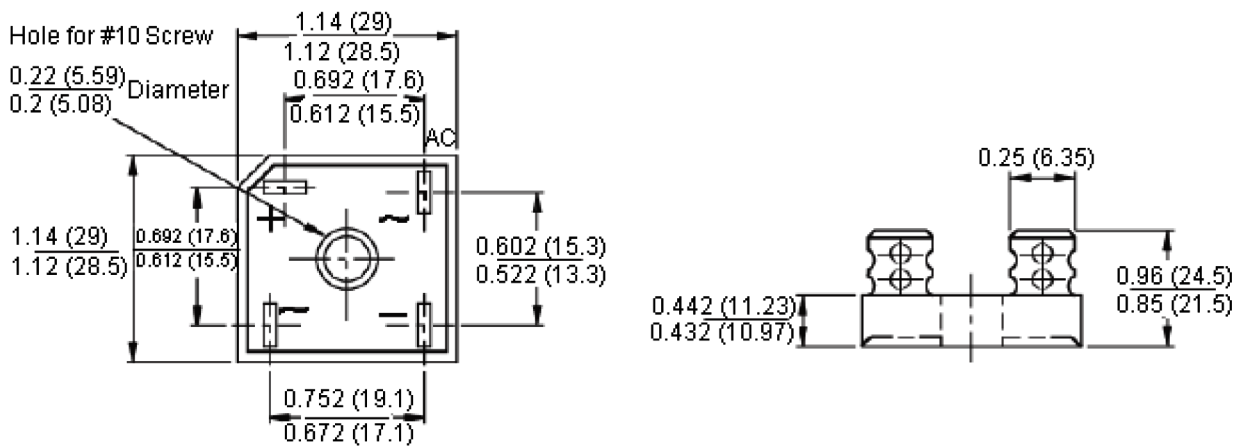
Typical Junction Capacitance



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## Dimensions:



Dimensions : Inches (Millimetres)

## Part Number Table

Description	Part Number
Bridge Rectifier, 25A, 50V	GBPC25005+

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