# Nsl> Naina Semiconductor Ltd.

## GBPC25-GBPC25W

## Glass Passivated Single-Phase Bridge Rectifier, 25A

#### **Features**

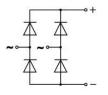
- Glass passivated chip junction
- Low reverse leakage current
- High surge current capability
- Low power loss
- High efficiency
- Electrically isolated metal case for maximum heat dissipation

#### **Mechanical Data**

- Case: Molded plastic body with heatsink
- Terminals: Plated lead Solderable (Add "W" suffix for Wire Leads)
- Polarity: As marked on Case
- Mounting: Through hole for #10 Screw
- Mounting Torque: 20 in-lbs max.
- Weight: 18 grams (approx)

- 1		
3		2
	1	
	1	





Demonstern	Symbol	GBPC25(W)								11
Parameter		005	01	02	04	06	08	10	12	Units
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	1200	V
Maximum RMS voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	840	V
Maximum DC blocking voltage	$V_{\text{DC}}$	50	100	200	400	600	800	1000	1200	V
Average rectified output current	Ι <sub>ο</sub>	25							А	
Non-repetitive peak forward surge current, single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	350							A	
DC forward voltage drop per element @12.5A	V <sub>F</sub>	1.1							V	
Peak reverse current at rated DC $T_c = 25^{\circ}C$ blocking voltage $T_c = 125^{\circ}C$	– I <sub>R</sub>	5.0 500						μΑ		
Typical junction capacitance (Note 1)	C	300							pF	
Typical thermal resistance (Note 2)	$R_{\theta J-C}$	1.9						°C/W		
RMS isolation voltage	V <sub>ISO</sub>	2500						V		
Operating and Storage temperature	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150						°C		

#### NOTES:

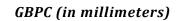
(1) Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

(2) Thermal resistance from Junction to Case per leg.

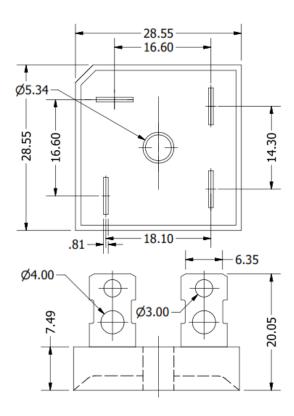
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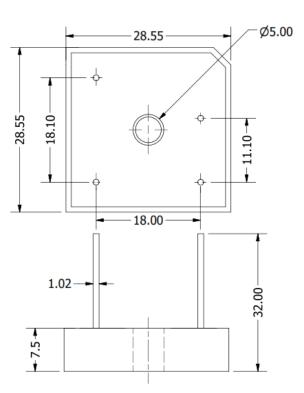
GBPC25-GBPC25W

### **Package Outline**



**GBPC-W** (in millimeters)





## **Ordering Table**

GBPC	25	12	W
1	2	3	4

- 1 Single-Phase Bridge
- $2 Current rating = I_0$
- 3 Voltage Code (005, 01, 02, 04, 06, 08, 10, 12)
- 4 None = GBPC (with Terminal Leads)
  - W = GBPC-W (with Wire Leads)