NSL> Naina Semiconductor Ltd.

GBPC50-GBPC50W

Glass Passivated Single-Phase Bridge Rectifier, 50A

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

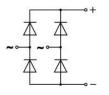
Mechanical Data

- 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	2	
-	3		-
		1	







Parameter		Symbol	GBPC50(W)								11
			005	01	02	04	06	08	10	12	Units
Maximum repetitive peak reverse voltage		V _{RRM}	50	100	200	400	600	800	1000	1200	V
Maximum RMS voltage		V _{RMS}	35	70	140	280	420	560	700	840	V
Maximum DC blocking voltage		V_{DC}	50	100	200	400	600	800	1000	1200	V
Average rectified output current	Ι _ο	50							А		
Non-repetitive peak forward surge single half sine-wave superimposed load (JEDEC method)	I _{FSM}	450						A			
DC forward voltage drop per element @ 25A		V _F	1.1							V	
Peak reverse current at rated DC blocking voltage	$T_c = 25^{\circ}C$	I _R				1	.0				μΑ
Typical junction capacitance (Note 1)		CJ	400							pF	
Typical thermal resistance (Note 2)		$R_{\theta J-C}$	1.0							°C/W	
RMS isolation voltage		V _{ISO}	2500							V	
Operating and Storage temperature		T _J , T _{STG}	-55 to +150							°C	

NOTES:

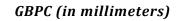
(1) Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

(2) Thermal resistance from Junction to Case per leg

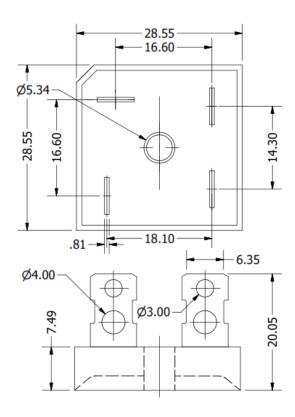
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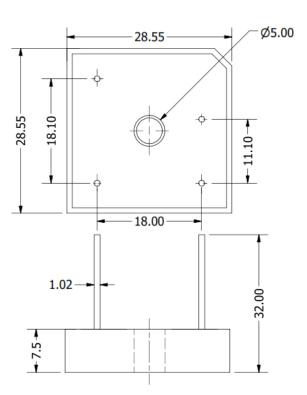
GBPC50-GBPC50W

Package Outline



GBPC-W (in millimeters)





Ordering Table

GBPC	50	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)