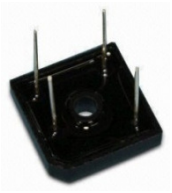
Glass Passivated Single-Phase Bridge Rectifier, 50A

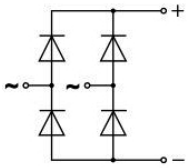
Features

- 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)



Maximum Ratings & Electrical Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	GBPC50(W)								Units
		005	01	02	04	06	08	10	12	
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	I_O	50								A
Non-repetitive peak forward surge current, single half sine-wave superimposed on rated 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°C	I_R	10								µA
Typical junction capacitance (Note 1)	C_J	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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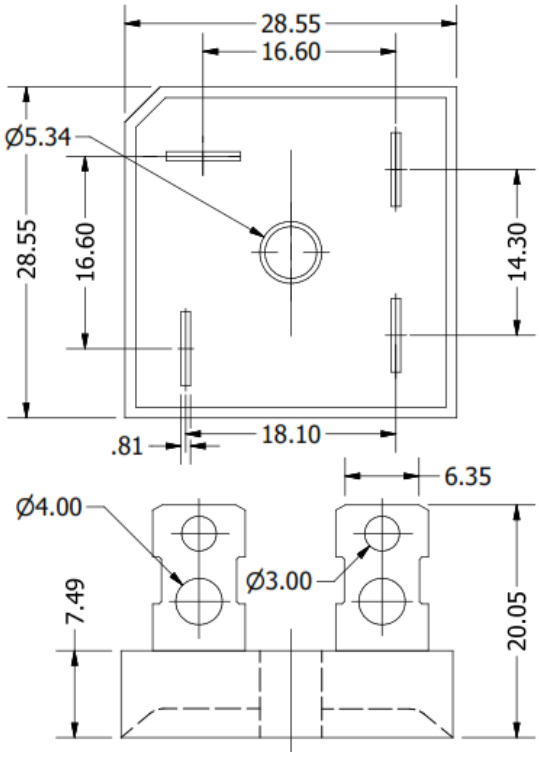
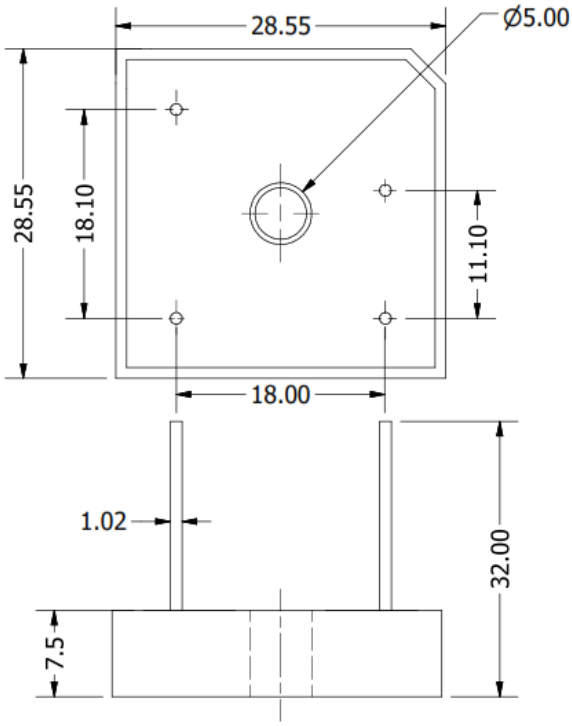
Package Outline

GBPC (in millimeters)



GBPC-W (in millimeters)



Ordering Table

GBPC	*50*	*12*	*W*
1	2	3	4

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

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