

## Glass Passivated Single-Phase Bridge Rectifier, 50A

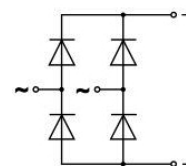
### Features

- 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)



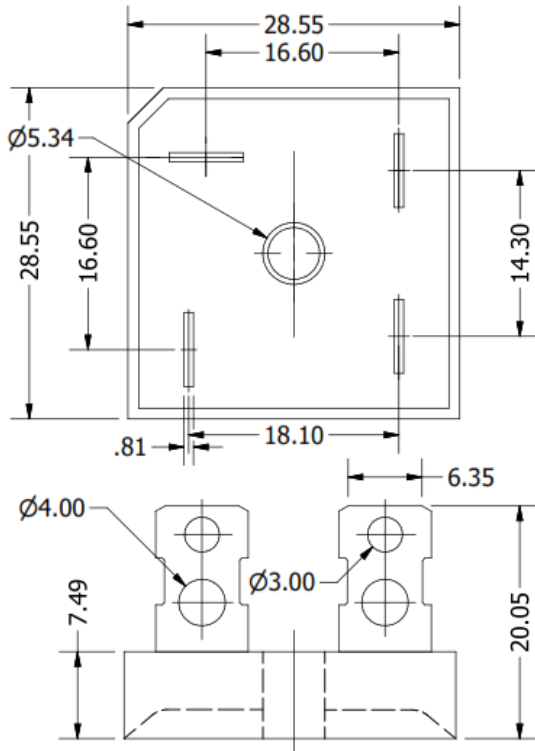
Maximum Ratings & Electrical Characteristics ( $T_A = 25^\circ\text{C}$ unless otherwise noted)										
Parameter	Symbol	GBPC50(W)								Units
		005	01	02	04	06	08	10	12	
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	1200	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	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	$I_R$	10								$\mu\text{A}$
Typical junction capacitance (Note 1)	$C_J$	400								pF
Typical thermal resistance (Note 2)	$R_{\theta J-C}$	1.0								$^\circ\text{C}/\text{W}$
RMS isolation voltage	$V_{ISO}$	2500								V
Operating and Storage temperature	$T_J, T_{STG}$	-55 to +150								$^\circ\text{C}$

### NOTES:

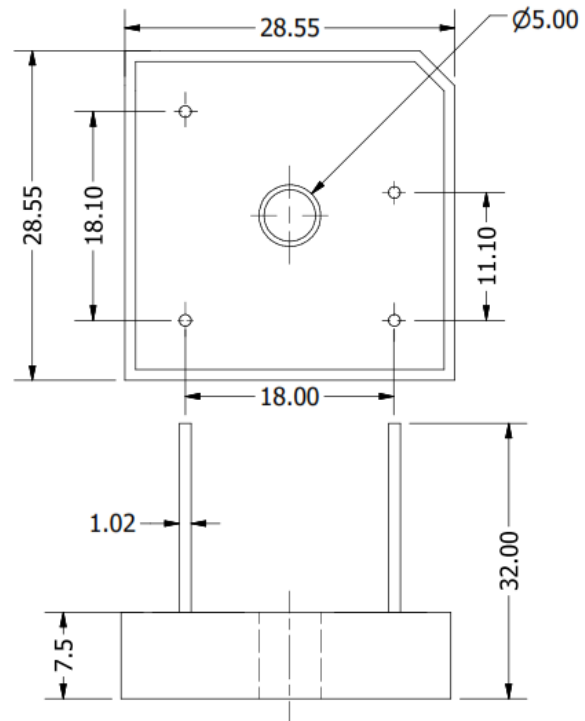
- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
- (2) Thermal resistance from Junction to Case per leg

## Package Outline

*GBPC (in millimeters)*



*GBPC-W (in millimeters)*



## Ordering Table

<i>GBPC</i>	<i>50</i>	<i>12</i>	<i>W</i>
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)