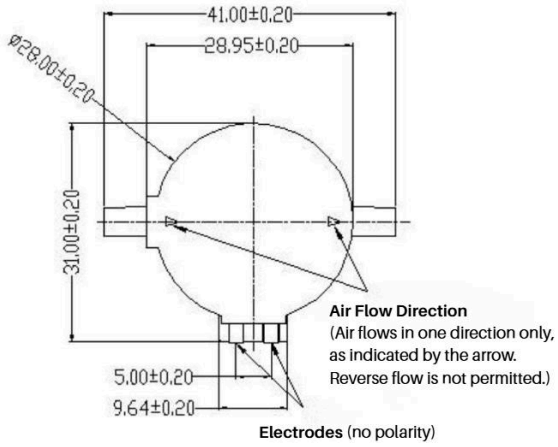
BD - 05T Series - Micro Piezoelectric pump

Model:BD-05T01PZ08

The BD-05T01PZ08 is a compact piezoelectric micro air pump that generates airflow through ultrasonic vibration of a piezoelectric element. It features low noise, lightweight construction, and reliable airflow performance.

Performance Data	
Model	BD-05T01PZ08
Drive Voltage	18–30V DC
Ambient Temperature Range	1-45 ° C
Drive Frequency	18–22 kHz
Drive Resonant Frequency	19.5 kHz
Flow Rate @ 28 Vdc	≥ 0.8 L/min
Vacuum Pressure @ 28 Vdc	≤ -15kPa
No-Load Flow Rate	0.8L/min(@28VDC)
Static Pressure	-15kPa(@28VDC)
Note	
1. External Connection: Soldering by customer	
2. Performance Tolerance: ±10% depending on test conditions	
3. Driven by AC square wave. The driver should provide 18–30VDC with current limited below 100mA.	
4. Test conditions: Ambient temperature 20–28°C, atmospheric pressure 950–1020hPa.	
5. Flow rate and vacuum pressure may vary with temperature, atmospheric pressure, and test conditions.	
6. Continuous operation at elevated voltage levels may increase heat generation and shorten service life.	
7. For reliable operation, the pump surface temperature should remain below 60 ° C. Additional heat dissipation is recommended if necessary.	
8. Due to heat buildup, continuous operation may result in reduced performance.	
9. Airflow direction is fixed and indicated by the arrow on the pump body. Reverse airflow operation is not recommended.	
10. The pump electrodes are non-polarized.	

Dimensions (mm)



Precautions

1. This pump is designed for air transfer only and is not waterproof. Do not expose it to liquids or clean it with water. Use only a slightly damp cloth for cleaning.
2. Avoid operation in environments with condensation or excessive humidity.
3. Do not use the pump in dusty environments. Airborne particles may accumulate inside the pump chamber and affect performance and service life.
4. For optimal reliability, operation in filtered or clean-air environments is recommended.
5. Avoid exposure to smoke, oil mist, corrosive gases, or other airborne contaminants.
6. Do not pull, bend, or apply excessive force to the air nozzles, wires, or solder joints.
7. Do not press on the upper or lower surface of the pump body, as excessive force may damage internal components.
8. Do not disassemble or modify the pump.