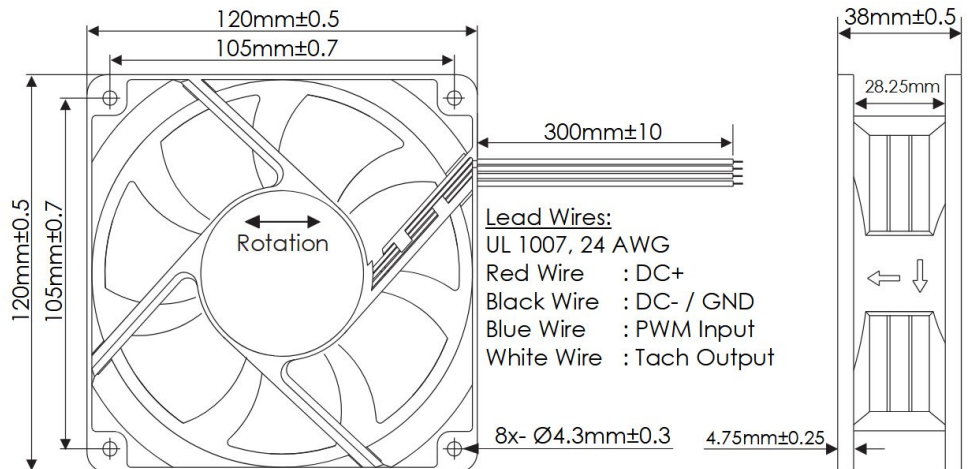


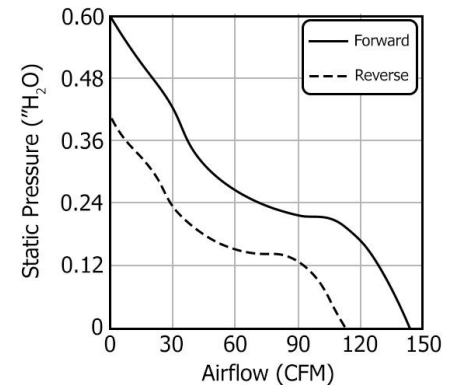
# OD1238 Reversible Flow Series



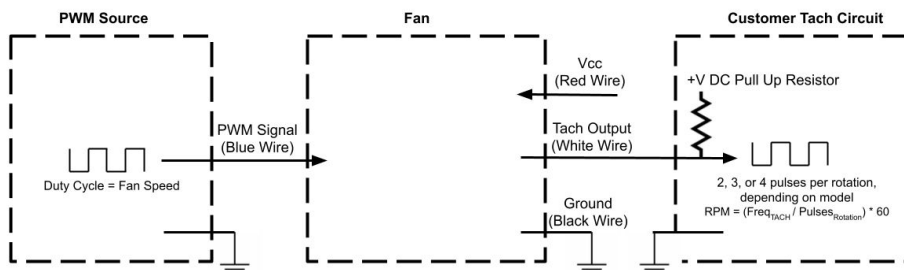
DC Fans - 12, 24, 48V  
120mm x 120mm x 38mm  
(4.7" x 4.7" x 1.5")



|                       |                                                                                       |                                                                                                                                                                                                                                                                              |
|-----------------------|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frame                 | PBT, UL94 V-0 Plastic                                                                 | <b>Operating Temperature</b><br>-15°C ~ +65°C<br><br><b>Storage Temperature</b><br>-25°C ~ +80°C<br><br><b>Life Expectancy</b><br>70,000 Hours (L10 at 40°C)<br><br><b>Included Options</b><br>PWM Speed Control Input<br>Open Collector Tach Output<br><br>Weight: 0.69 lbs |
| Impeller              | PBT, UL94 V-0 Plastic                                                                 |                                                                                                                                                                                                                                                                              |
| Connection            | 4x Lead Wires, 24 AWG                                                                 |                                                                                                                                                                                                                                                                              |
| Motor                 | Brushless DC, Auto Cutoff, Auto Restart, Polarity Protected, Electronically Protected |                                                                                                                                                                                                                                                                              |
| Bearing System        | Ball Bearings                                                                         |                                                                                                                                                                                                                                                                              |
| Dielectric Strength   | 500 VDC/min, <1mA                                                                     |                                                                                                                                                                                                                                                                              |
| Insulation Resistance | ≥10M Ohm @ 500 VDC                                                                    |                                                                                                                                                                                                                                                                              |



| Part Number      | Rated Voltage (Volts DC) | Voltage Range (Volts DC) | Input Power (Watts)(Max) | Rated Current Forward/Reverse (Amps)(Max) | Rated Speed Forward/Reverse (RPM) | Max Airflow Forward/Reverse (CFM) | Noise Level (dBA) | Max Static Pressure ("H <sub>2</sub> O") Forward / Reverse |
|------------------|--------------------------|--------------------------|--------------------------|-------------------------------------------|-----------------------------------|-----------------------------------|-------------------|------------------------------------------------------------|
| OD1238-12HHB10AZ | 12                       | 8 ~ 13.8                 | 10.8                     | 0.90                                      | 3590                              | 146 / 115                         | 50                | 0.6 / 0.4                                                  |
| OD1238-24HHB10AZ | 24                       | 12 ~ 26.4                | 10.8                     | 0.45                                      | 3590                              | 146 / 115                         | 50                | 0.6 / 0.4                                                  |
| OD1238-48HHB10AZ | 48                       | 28 ~ 52.0                | 10.8                     | 0.20                                      | 3590                              | 146 / 115                         | 50                | 0.6 / 0.4                                                  |



Tach Max Pullup Voltage: Fan +Vcc  
Tach Max Current: 5mA  
Tach Low Voltage: ≤0.5 V  
Tach Cycles per Rotation: 2  
PWM Input Voltage Max: ≤5V  
PWM Input Max Sink Current: 5mA  
PWM Frequency Range: 18KHz-30KHz  
PWM Typical Frequency: 25KHz  
RPM will be full speed if PWM input is disconnected.

| Air flow Direction | Toward Label (FWD) | Toward Label (FWD) | Toward Label (FWD) | Toward Label (FWD) | Toward Label (FWD) | STOPPED | Reverse | Reverse | Reverse | Reverse | Reverse |
|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------|---------|---------|---------|---------|---------|
| PWM Duty Cycle     | 0%                 | 10%                | 20%                | 30%                | 40%                | 46~55%  | 60%     | 70%     | 80%     | 90%     | 100%    |
| Speed (RPM) ±10%   | 3580               | 3275               | 2450               | 1650               | 875                | 0       | 825     | 1550    | 2350    | 3150    | 3600    |