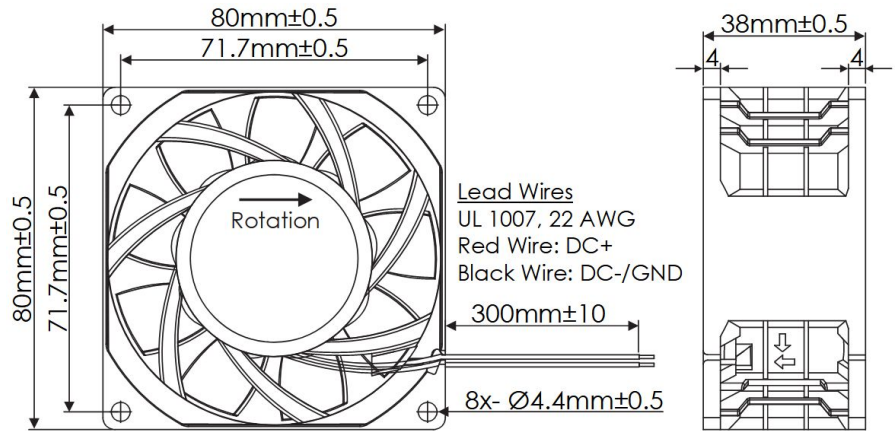


# OD8038 Series



DC Fans - 12, 24V  
80mm x 38mm (3.15" x 1.5")



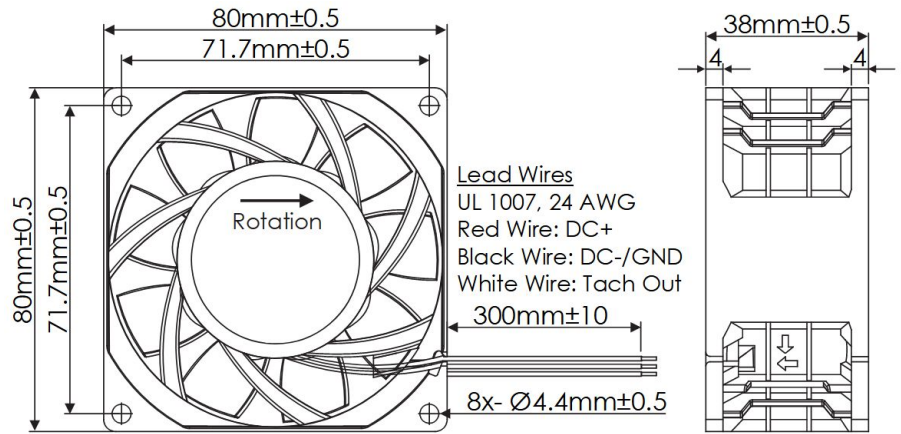
| Frame                 | PBT, UL94 V-0 Plastic                                                                 | <u>Operating Temperature</u><br>-20°C ~ +65°C<br><br><u>Storage Temperature</u><br>-20°C ~ +75°C<br><br><u>Life Expectancy</u><br>70,000 Hours (L10 at 40°C)<br><br><u>Available Options</u><br>Tachometer Output<br>PWM Speed Control Input<br>Alarm Output<br>IP Ratings<br><br>Weight: 0.46 lbs. | <table border="1"><caption>Approximate data points from the Static Pressure vs. Airflow graph</caption><thead><tr><th>Airflow (CFM)</th><th>HH (Static Pressure)</th><th>H (Static Pressure)</th><th>M (Static Pressure)</th><th>L (Static Pressure)</th></tr></thead><tbody><tr><td>0</td><td>0.78</td><td>0.58</td><td>0.40</td><td>0.28</td></tr><tr><td>15</td><td>0.65</td><td>0.48</td><td>0.32</td><td>0.22</td></tr><tr><td>30</td><td>0.52</td><td>0.38</td><td>0.25</td><td>0.18</td></tr><tr><td>45</td><td>0.40</td><td>0.28</td><td>0.18</td><td>0.12</td></tr><tr><td>60</td><td>0.28</td><td>0.18</td><td>0.12</td><td>0.08</td></tr><tr><td>75</td><td>0.18</td><td>0.12</td><td>0.08</td><td>0.05</td></tr><tr><td>90</td><td>0.12</td><td>0.08</td><td>0.05</td><td>0.03</td></tr></tbody></table> | Airflow (CFM)       | HH (Static Pressure) | H (Static Pressure) | M (Static Pressure) | L (Static Pressure) | 0 | 0.78 | 0.58 | 0.40 | 0.28 | 15 | 0.65 | 0.48 | 0.32 | 0.22 | 30 | 0.52 | 0.38 | 0.25 | 0.18 | 45 | 0.40 | 0.28 | 0.18 | 0.12 | 60 | 0.28 | 0.18 | 0.12 | 0.08 | 75 | 0.18 | 0.12 | 0.08 | 0.05 | 90 | 0.12 | 0.08 | 0.05 | 0.03 |
|-----------------------|---------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|----------------------|---------------------|---------------------|---------------------|---|------|------|------|------|----|------|------|------|------|----|------|------|------|------|----|------|------|------|------|----|------|------|------|------|----|------|------|------|------|----|------|------|------|------|
| Airflow (CFM)         | HH (Static Pressure)                                                                  |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | H (Static Pressure) | M (Static Pressure)  | L (Static Pressure) |                     |                     |   |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |
| 0                     | 0.78                                                                                  |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.58                | 0.40                 | 0.28                |                     |                     |   |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |
| 15                    | 0.65                                                                                  |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.48                | 0.32                 | 0.22                |                     |                     |   |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |
| 30                    | 0.52                                                                                  |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.38                | 0.25                 | 0.18                |                     |                     |   |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |
| 45                    | 0.40                                                                                  |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.28                | 0.18                 | 0.12                |                     |                     |   |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |
| 60                    | 0.28                                                                                  | 0.18                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | 0.12                | 0.08                 |                     |                     |                     |   |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |
| 75                    | 0.18                                                                                  | 0.12                                                                                                                                                                                                                                                                                                | 0.08                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.05                |                      |                     |                     |                     |   |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |
| 90                    | 0.12                                                                                  | 0.08                                                                                                                                                                                                                                                                                                | 0.05                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 0.03                |                      |                     |                     |                     |   |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |
| Impeller              | PBT, UL94 V-0 Plastic                                                                 |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                      |                     |                     |                     |   |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |
| Connection            | 2x Lead Wires, 22 AWG                                                                 |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                      |                     |                     |                     |   |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |
| Motor                 | Brushless DC, Auto Cutoff, Auto Restart, Polarity Protected, Electronically Protected |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                      |                     |                     |                     |   |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |
| Bearing System        | Ball Bearings                                                                         |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                      |                     |                     |                     |   |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |
| Dielectric Strength   | 500VDC/min, <1mA                                                                      |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                      |                     |                     |                     |   |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |
| Insulation Resistance | ≥10M @ 500 VDC                                                                        |                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                     |                      |                     |                     |                     |   |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |    |      |      |      |      |

| Part Number  | Rated Voltage (Volts DC) | Voltage Range (Volts DC) | Input Power (Watts) | Rated Current (Amps) | Rated Speed (RPM) | Max Airflow (CFM) | Noise Level (dBA) | Max Static Pressure ("H <sub>2</sub> O) |
|--------------|--------------------------|--------------------------|---------------------|----------------------|-------------------|-------------------|-------------------|-----------------------------------------|
| OD8038-12HHB | 12                       | 8 ~ 13.8                 | 10.8                | 0.90                 | 5800              | 82                | 52.2              | 0.78                                    |
| OD8038-12HB  | 12                       | 8 ~ 13.8                 | 7.20                | 0.60                 | 5000              | 71                | 49.1              | 0.58                                    |
| OD8038-12MB  | 12                       | 8 ~ 13.8                 | 4.80                | 0.40                 | 4200              | 60                | 45.6              | 0.41                                    |
| OD8038-12LB  | 12                       | 8 ~ 13.8                 | 3.60                | 0.30                 | 3500              | 50                | 41.3              | 0.28                                    |
| OD8038-24HHB | 24                       | 15 ~ 26                  | 10.8                | 0.45                 | 5800              | 82                | 52.2              | 0.78                                    |
| OD8038-24HB  | 24                       | 15 ~ 26                  | 7.20                | 0.30                 | 5000              | 71                | 49.1              | 0.58                                    |
| OD8038-24MB  | 24                       | 15 ~ 26                  | 6.00                | 0.25                 | 4200              | 60                | 45.6              | 0.41                                    |
| OD8038-24LB  | 24                       | 15 ~ 26                  | 4.80                | 0.20                 | 3500              | 50                | 41.3              | 0.28                                    |

# OD8038 Series with Tachometer

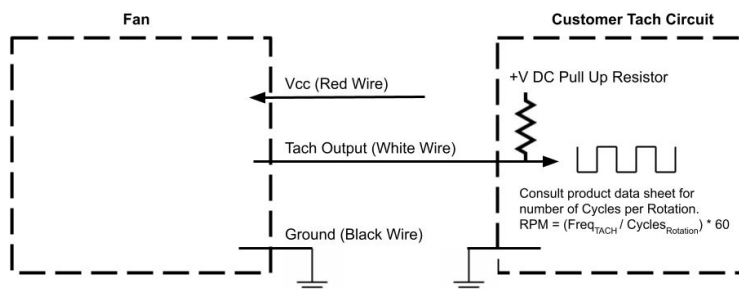


DC Fans - 12, 24V  
80mm x 38mm (3.15" x 1.5")



|                       |                                                                                       |                                                                                                                                                                                                                                                                                                  |  |
|-----------------------|---------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Frame                 | PBT, UL94 V-0 Plastic                                                                 | <b>Operating Temperature</b><br>-20°C ~ +65°C<br><b>Storage Temperature</b><br>-20°C ~ +75°C<br><b>Life Expectancy</b><br>70,000 Hours (L10 at 40°C)<br><b>Installed Options</b><br>Open Collector Tachometer<br><b>Available Options</b><br>+5V TTL Tachometer Type<br><b>Weight:</b> 0.46 lbs. |  |
| Impeller              | PBT, UL94 V-0 Plastic                                                                 |                                                                                                                                                                                                                                                                                                  |  |
| Connection            | 3x Lead Wires, 24 AWG                                                                 |                                                                                                                                                                                                                                                                                                  |  |
| Motor                 | Brushless DC, Auto Cutoff, Auto Restart, Polarity Protected, Electronically Protected |                                                                                                                                                                                                                                                                                                  |  |
| Bearing System        | Ball Bearings                                                                         |                                                                                                                                                                                                                                                                                                  |  |
| Dielectric Strength   | 500VDC/min, <1mA                                                                      |                                                                                                                                                                                                                                                                                                  |  |
| Insulation Resistance | ≥10M @ 500 VDC                                                                        |                                                                                                                                                                                                                                                                                                  |  |

| Part Number     | Rated Voltage (Volts DC) | Voltage Range (Volts DC) | Input Power (Watts) | Rated Current (Amps) | Rated Speed (RPM) | Max Airflow (CFM) | Noise Level (dBA) | Max Static Pressure ("H <sub>2</sub> O) |
|-----------------|--------------------------|--------------------------|---------------------|----------------------|-------------------|-------------------|-------------------|-----------------------------------------|
| OD8038-12HHB01A | 12                       | 8 ~ 13.8                 | 10.8                | 0.90                 | 5800              | 82                | 52.2              | 0.78                                    |
| OD8038-12HB01A  | 12                       | 8 ~ 13.8                 | 7.20                | 0.60                 | 5000              | 71                | 49.1              | 0.58                                    |
| OD8038-12MB01A  | 12                       | 8 ~ 13.8                 | 4.80                | 0.40                 | 4200              | 60                | 45.6              | 0.41                                    |
| OD8038-12LB01A  | 12                       | 8 ~ 13.8                 | 3.60                | 0.30                 | 3500              | 50                | 41.3              | 0.28                                    |
| OD8038-24HHB01A | 24                       | 15 ~ 26                  | 10.8                | 0.45                 | 5800              | 82                | 52.2              | 0.78                                    |
| OD8038-24HB01A  | 24                       | 15 ~ 26                  | 7.20                | 0.30                 | 5000              | 71                | 49.1              | 0.58                                    |
| OD8038-24MB01A  | 24                       | 15 ~ 26                  | 6.00                | 0.25                 | 4200              | 60                | 45.6              | 0.41                                    |
| OD8038-24LB01A  | 24                       | 15 ~ 26                  | 4.80                | 0.20                 | 3500              | 50                | 41.3              | 0.28                                    |



Tach Max Pullup Voltage: Fan Vcc  
Tach Max Sink Current: 8mA  
Tach Cycles per Revolution: 2