



## OD9238 Series

DC Fan - 12V, 24V

92 x 38mm (3.62 x 1.5in)



| Model #        | Pg # | Voltage | RPM  | CFM | Noise Level | Max Static Pressure  |
|----------------|------|---------|------|-----|-------------|----------------------|
| OD9238-12MB    | 2    | 12 VDC  | 3600 | 90  | 47 dB       | .34 H <sub>2</sub> O |
| OD9238-24HB    | 3    | 24 VDC  | 4000 | 90  | 50 dB       | .40 H <sub>2</sub> O |
| OD9238-24HB02A | 4    | 24 VDC  | 4000 | 90  | 50 dB       | .40 H <sub>2</sub> O |

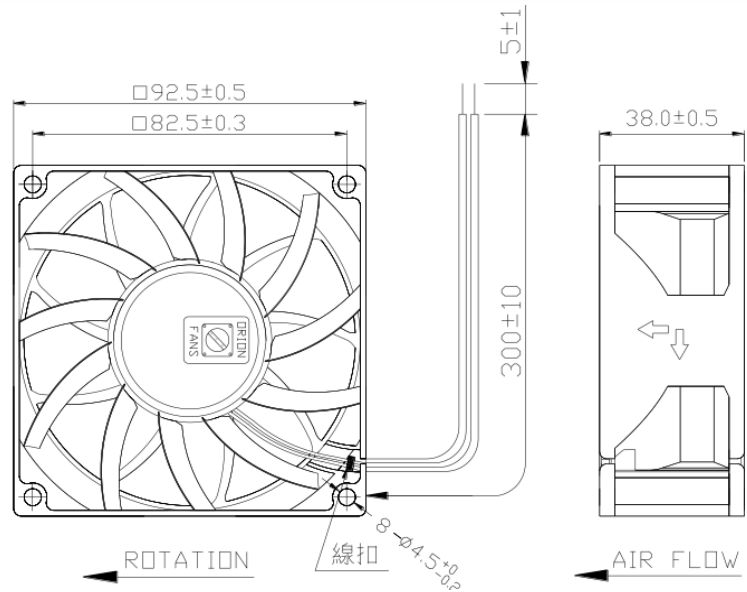
**\*\* For some models and part numbers, minimum order quantities may apply.**

OD9238-12MB



DC Fan, 12VDC

92x38mm (3.62x1.5in)



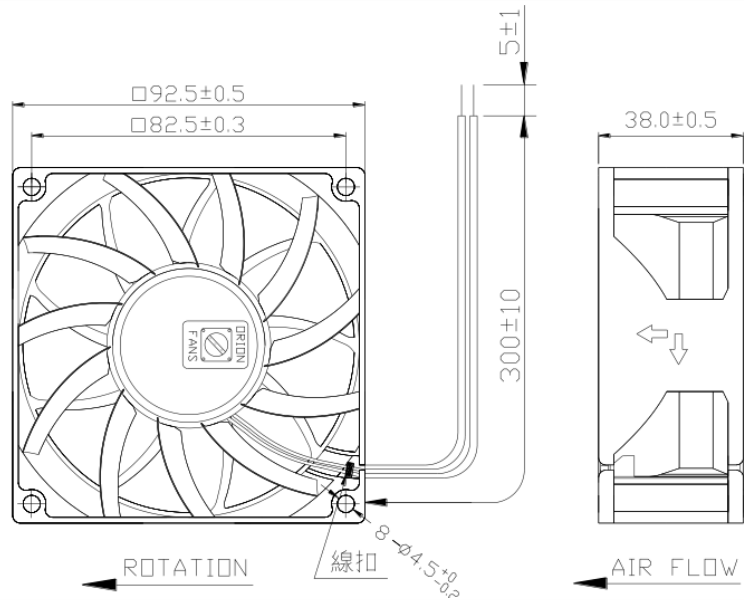
|                       |                                                 |                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frame & Impeller      | PBT, UL94V-0 plastic                            | <u>Available Options</u><br>IP55<br>Other speeds and voltages<br>Alarm<br>PWM<br>Tach<br>*Connection:<br>Wire Leads - UL1007<br>24AWG Red(+), Black (-),<br><br>Weight: 210 g | <p>The graph shows the relationship between static pressure and flow rate. The y-axis represents static pressure in mmH<sub>2</sub>O (0 to 10) and inH<sub>2</sub>O (0 to 39.37). The x-axis represents flow rate in CFM (0 to 111) and m<sup>3</sup>/min (0 to 2.528). The curve starts at approximately 8.5 mmH<sub>2</sub>O at 0 CFM and decreases to 0 mmH<sub>2</sub>O at approximately 111 CFM.</p> |
| Connection            | 2x Lead wires *                                 |                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                           |
| Motor                 | Brushless DC, auto restart, polarity protected. |                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                           |
| Bearing System        | Dual ball bearing                               |                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                           |
| Insulation Resistance | Min. 10M at 500VDC                              |                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                           |
| Dielectric Strength   | 1 second at 500VAC max leakage 500 microamp     |                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                           |
| Temperature Range     | -10C ~ +70C                                     |                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                           |
| Storage Temperature   | -40C ~ +80C                                     |                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                           |
| Life (L10)            | 70,000 hours (40C)                              |                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                           |

|                      |                       |
|----------------------|-----------------------|
| Model Number         | OD9238-12MB           |
| Part Number          | 196131001             |
| Nominal Voltage      | 12 VDC                |
| Voltage Range        | 7~13.2 VDC            |
| Nominal Current      | .45 A                 |
| Rated Power          | 12 Watts              |
| Rated Speed (RPM)    | 3600                  |
| Airflow (CFM)        | 90                    |
| Noise Level (dB)     | 47                    |
| Max. Static Pressure | .34 "H <sub>2</sub> O |

# OD9238-24HB



DC Fan, 24VDC  
92x38mm (3.62x1.5in)



|                       |                                                 |                                                                                                                                                                                     |                          |
|-----------------------|-------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| Frame & Impeller      | PBT, UL94V-0 plastic                            | <b>Available Options</b><br>IP55<br>Other speeds and voltages<br>Tachometer<br>PWM<br>Alarm<br>*Connection:<br>Wire Leads - UL1007<br>24AWG Red(+), Black (-),<br><br>Weight: 210 g | <b>FLOWRATE(CMM)</b><br> |
| Connection            | 2x Lead wires *                                 |                                                                                                                                                                                     |                          |
| Motor                 | Brushless DC, auto restart, polarity protected. |                                                                                                                                                                                     |                          |
| Bearing System        | Dual ball bearing                               |                                                                                                                                                                                     |                          |
| Insulation Resistance | Min. 10M at 500VDC                              |                                                                                                                                                                                     |                          |
| Dielectric Strength   | 1 second at 500VAC max leakage 500 microamp     |                                                                                                                                                                                     |                          |
| Temperature Range     | -10C ~ +70C                                     |                                                                                                                                                                                     |                          |
| Storage Temperature   | -40C ~ +80C                                     |                                                                                                                                                                                     |                          |
| Life (L10)            | 70,000 hours (40C)                              |                                                                                                                                                                                     |                          |

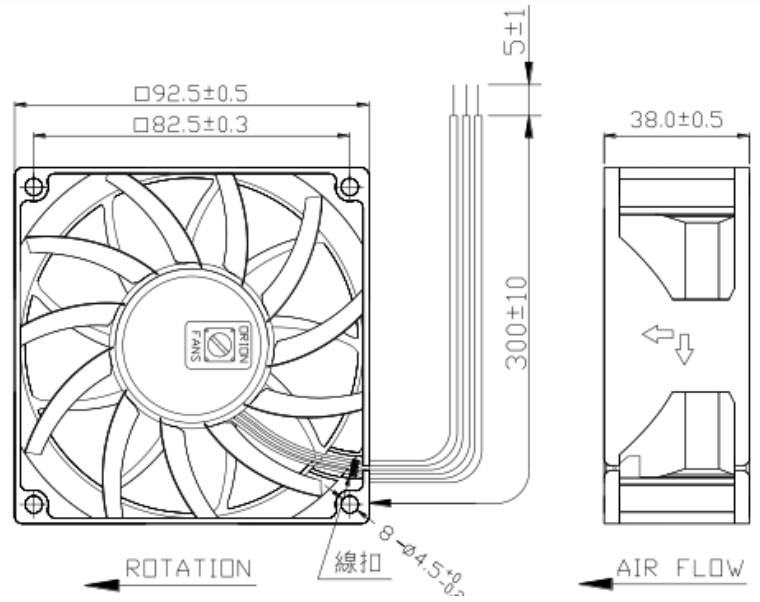
|                      |                       |
|----------------------|-----------------------|
| Model Number         | OD9238-24HB           |
| Part Number          | 196241001             |
| Nominal Voltage      | 24 VDC                |
| Voltage Range        | 17~26.4 VDC           |
| Nominal Current      | .28 A                 |
| Rated Power          | 13.2 Watts            |
| Rated Speed (RPM)    | 4000                  |
| Airflow (CFM)        | 90                    |
| Noise Level (dB)     | 50                    |
| Max. Static Pressure | .40 "H <sub>2</sub> O |

OD9238-24HB02A



DC Fan, 24VDC

92x38mm (3.62x1.5in)



|                       |                                                 |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                             |
|-----------------------|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frame & Impeller      | PBT, UL94V-0 plastic                            | <b>Available Options</b><br>IP55<br>Other speeds and voltages<br>Tachometer<br>PWM<br><br>*Connection:<br>Wire Leads - UL1007<br>24AWG Red(+), Black (-),<br>Yellow Alarm<br><br>Weight: 210 g | <b>FLOWRATE(CMM)</b><br><p>Graph showing Static Pressure (mmAq) vs Flowrate (CMM). The curve starts at approximately 10.0 mmAq at 0.0 CMM and decreases to 0.0 mmAq at 100.0 CMM. The y-axis ranges from 0.0 to 12.0 mmAq, and the x-axis ranges from 0.0 to 100.0 CMM.</p> |
| Connection            | 3x Lead wires *                                 |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                             |
| Motor                 | Brushless DC, auto restart, polarity protected. |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                             |
| Bearing System        | Dual ball bearing                               |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                             |
| Insulation Resistance | Min. 10M at 500VDC                              |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                             |
| Dielectric Strength   | 1 second at 500VAC max leakage 500 microamp     |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                             |
| Temperature Range     | -10C ~ +70C                                     |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                             |
| Storage Temperature   | -40C ~ +80C                                     |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                             |
| Life (L10)            | 70,000 hours (40C)                              |                                                                                                                                                                                                |                                                                                                                                                                                                                                                                             |

|                      |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Number         | OD9238-24HB02A        | <b>Output of locked signal</b><br>*Output type.....Open collector type<br>*Electrical design suggestion:<br>(External signal function design is decided by customer)<br><p>Circuit diagram showing the fan's output signal. It includes a transistor Q1, a fan, and a locked signal output. The fan is connected to the collector of Q1, and the locked signal output is connected to the emitter of Q1. The fan's supply voltage is <math>V_{in}</math>, and the locked signal output is <math>V_{out}</math>. The fan's current is <math>I_c</math>, and the locked signal output is <math>I_e</math>. The fan's speed is <math>N</math>, and the locked signal output is <math>L</math>. The fan's rotation is indicated by an arrow labeled "FAN". The locked signal output is indicated by an arrow labeled "Locked Signal".</p> |
| Part Number          | 196241231             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Nominal Voltage      | 24 VDC                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Voltage Range        | 17~26.4 VDC           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Nominal Current      | .28 A                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Rated Power          | 13.2 Watts            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Rated Speed (RPM)    | 4000                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Airflow (CFM)        | 90                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Noise Level (dB)     | 50                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Max. Static Pressure | .40 "H <sub>2</sub> O |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

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