



## OD7025 Series Datasheets

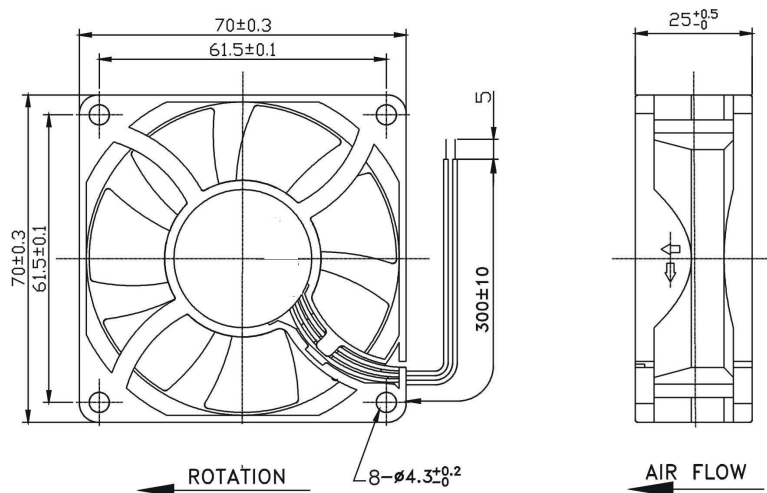
DC Fan

70 x 25mm (2.76 x 1.0in)



| Model #          | Pg # | Voltage | RPM  | CFM | Noise Level | Max Static Pressure  |
|------------------|------|---------|------|-----|-------------|----------------------|
| OD7025-12HBXC    | 2    | 12 VDC  | 6000 | 57  | 52.3 dB     | .46 H <sub>2</sub> O |
| OD7025-12HBXC01A | 3    | 12 VDC  | 6000 | 57  | 52.3 dB     | .46 H <sub>2</sub> O |
| OD7025-12HHB10A  | 4    | 12 VDC  | 5000 | 51  | 46 dB       | .35 H <sub>2</sub> O |
| OD7025-24HHB     | 5    | 24 VDC  | 5000 | 51  | 46 dB       | .35 H <sub>2</sub> O |
| OD7025-24MB      | 6    | 24 VDC  | 3800 | 33  | 36 dB       | .20 H <sub>2</sub> O |

OD7025-12HBXC


 DC Fan, 12VDC  
 70x25mm (2.76x1.0in)


|                       |                                                 |                                                                                                                                                                                |  |
|-----------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Frame & Impeller      | PBT, UL94V-0 plastic                            | <u>Available Options</u><br>IP55<br>Other speeds and voltages<br>Alarm<br>Tachometer<br>PWM<br>*Connection:<br>Wire Leads - UL1007<br>24AWG Red(+), Black (-),<br>Weight: 90 g |  |
| 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)                              |                                                                                                                                                                                |  |

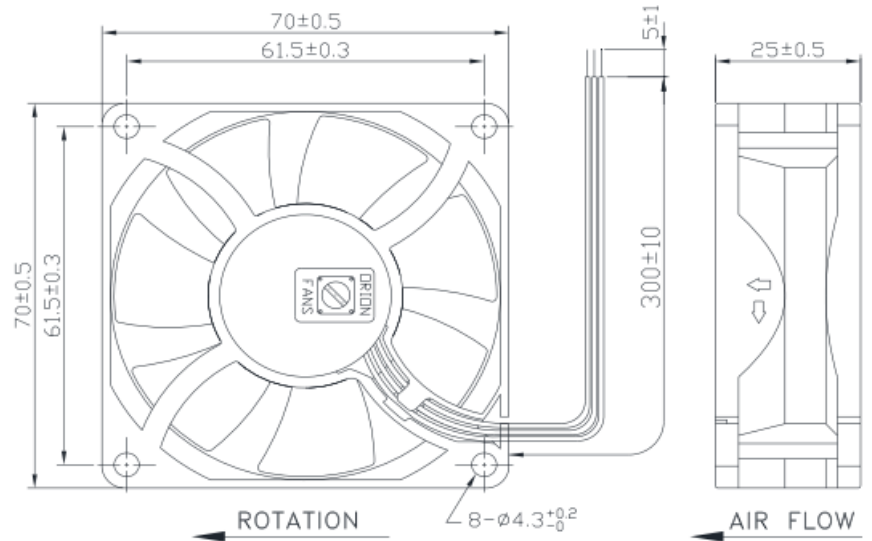
|                      |                       |
|----------------------|-----------------------|
| Model Number         | OD7025-12HBXC         |
| Part Number          | 114181001             |
| Nominal Voltage      | 12 VDC                |
| Voltage Range        | 7~13.2 VDC            |
| Nominal Current      | .62 A                 |
| Rated Power          | 9.6 Watts             |
| Rated Speed (RPM)    | 6000                  |
| Airflow (CFM)        | 57                    |
| Noise Level (dB)     | 52.3                  |
| Max. Static Pressure | .46 "H <sub>2</sub> O |

OD7025-12HBXC01A



DC Fan, 12VDC

70x25mm (2.76x1.0in)



|                       |                                                 |                                                                                                                                                                                                    |  |
|-----------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Frame & Impeller      | PBT, UL94V-0 plastic                            | <b>Available Options</b><br>IP55<br>Other speeds and voltages<br>Alarm<br>Tachometer<br>PWM<br>*Connection:<br>Wire Leads - UL1007<br>24AWG Red(+), Black (-),<br>White Tachometer<br>Weight: 90 g |  |
| 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)                              |                                                                                                                                                                                                    |  |

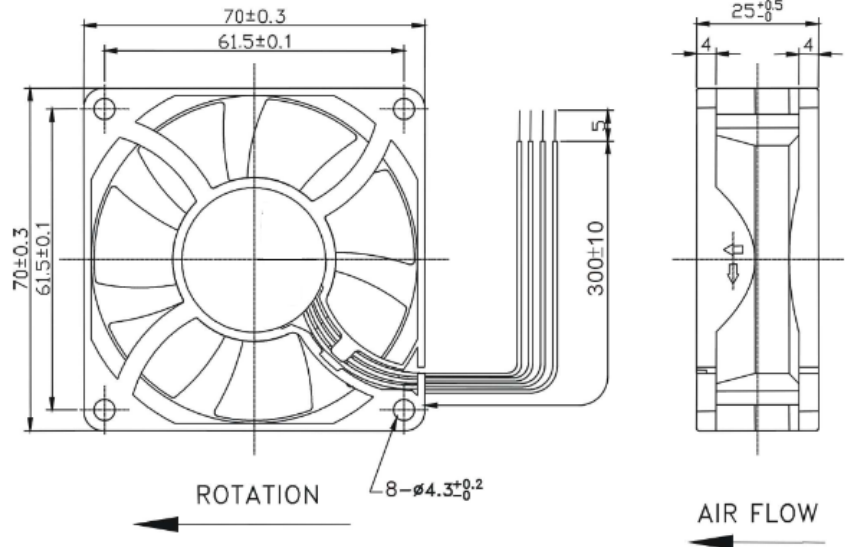
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|----------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Number         | OD7025-12HBXC01A      | <p>*Output type.....Open collector type<br/>         *Electrical design suggestion:<br/>         (External signal function design is decided by customer)</p> <p>*Transistor Q1 at "ON" position<br/>         Collector current.....<math>I_c = 10\text{mA}</math> Max<br/>         Saturation Voltage.....<math>V_{ce} = 1.0\text{V}</math> Max<br/>         (Between Collector and Emitter at <math>I_c = 10\text{mA}</math>)<br/>         *Transistor Q1 at "OFF" position<br/>         Release Voltage.....<math>V_{ce} = 15\text{V}</math> Max</p> <p>*Output waveform</p> <p>Supply voltage: LOCK, LOCK RELEASE</p> <p>Fan rotation: LOCK, LOCK RELEASE</p> <p>Fan current: LOCK, LOCK RELEASE</p> <p>Locked signal: LOCK, LOCK RELEASE</p> <p>IF LOCKED MAYBE HIGH OR LOW</p> |
| Part Number          | 114181221             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Nominal Voltage      | 12 VDC                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Voltage Range        | 7~13.2 VDC            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Nominal Current      | .62 A                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Rated Power          | 9.6 Watts             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Rated Speed (RPM)    | 6000                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Airflow (CFM)        | 57                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Noise Level (dB)     | 52.3                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Max. Static Pressure | .46 "H <sub>2</sub> O |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

OD7025-12HHB10A



DC Fan, 12VDC

70x25mm (2.76x1.0in)



|                       |                                                 |                                                                                                                                                                                                    |  |
|-----------------------|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Frame & Impeller      | PBT, UL94V-0 plastic                            | <u>Available Options</u><br>IP55<br>Other speeds and voltages<br>Alarm<br><br>*Connection:<br>Wire Leads - UL1061<br>26AWG Red(+), Black (-),<br>White Tachometer,<br>Blue PWM<br><br>Weight: 90 g |  |
| Connection            | 4x 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)                              |                                                                                                                                                                                                    |  |

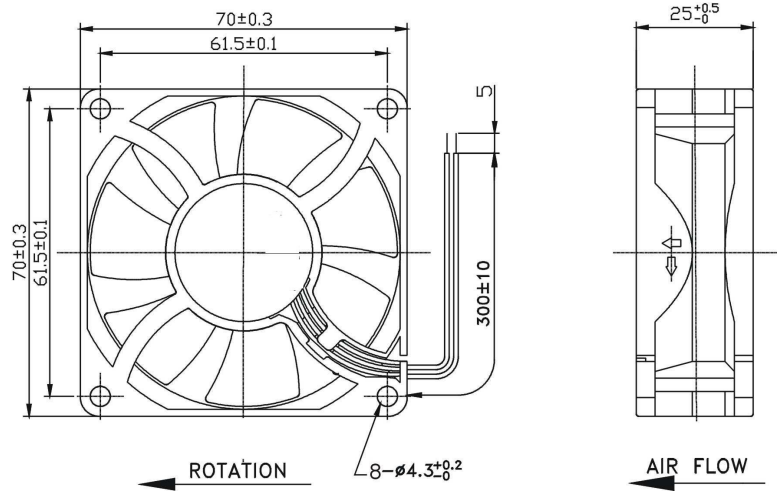
|                      |                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Number         | OD7025-12HHB10A       | <p>(External signal function design is decided by customer)</p> <p>*TRANSISTOR Q1 AT "ON" POSITION<br/>COLLECTOR CURRENT.....<math>I_L = 10\text{mA MAX}</math><br/>SATURATION VOLTAGE.....<math>V_{CE} = 1\text{V MAX}</math><br/>*TRANSISTOR Q1 AT "OFF" POSITION<br/>RELEASE VOLTAGE.....<math>V_{CE} = 15\text{V MAX}</math><br/>*DIGITAL PWM SPEED CONTROL POSITION<br/>PWM INPUT VOLTAGE HIGH.....<math>V_{IN} = 5.5\text{V MAX}</math><br/>PWM INPUT VOLTAGE LOW.....<math>V_{IN} = 0.5\text{V MAX}</math><br/>*PWM INPUT FREQUENCY.....<math>f_{PWM} = 18\text{KHZ} \sim 30\text{KHZ}</math></p> |
| Part Number          | 114151261             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Nominal Voltage      | 12 VDC                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Voltage Range        | 7~13.2 VDC            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Nominal Current      | .33 A                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Rated Power          | 5.04 Watts            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Rated Speed (RPM)    | 5000                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Airflow (CFM)        | 51                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Noise Level (dB)     | 46                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Max. Static Pressure | .35 "H <sub>2</sub> O |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

OD7025-24HHB



DC Fan, 24VDC

70x25mm (2.76x1.0in)



|                       |                                                 |                                                                                                                                                                                |                                                                                                                                                                                                                                                                                            |
|-----------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Frame & Impeller      | PBT, UL94V-0 plastic                            | <u>Available Options</u><br>IP55<br>Other speeds and voltages<br>Alarm<br>Tachometer<br>PWM<br>*Connection:<br>Wire Leads - UL1007<br>24AWG Red(+), Black (-),<br>Weight: 90 g | <p>Static Pressure graph showing performance curves for different flow rates (0 to 63 cfm). The y-axis represents Static Pressure in mmH<sub>2</sub>O (0 to 8.8) and inH<sub>2</sub>O (0 to .433). The x-axis represents Flowrate in cfm (0 to 63) and m<sup>3</sup>/min (0 to 1.432).</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         | OD7025-24HHB          |
| Part Number          | 114251001             |
| Nominal Voltage      | 24 VDC                |
| Voltage Range        | 17~26.4 VDC           |
| Nominal Current      | .20 A                 |
| Rated Power          | 6.24 Watts            |
| Rated Speed (RPM)    | 5000                  |
| Airflow (CFM)        | 51                    |
| Noise Level (dB)     | 46                    |
| Max. Static Pressure | .35 "H <sub>2</sub> O |

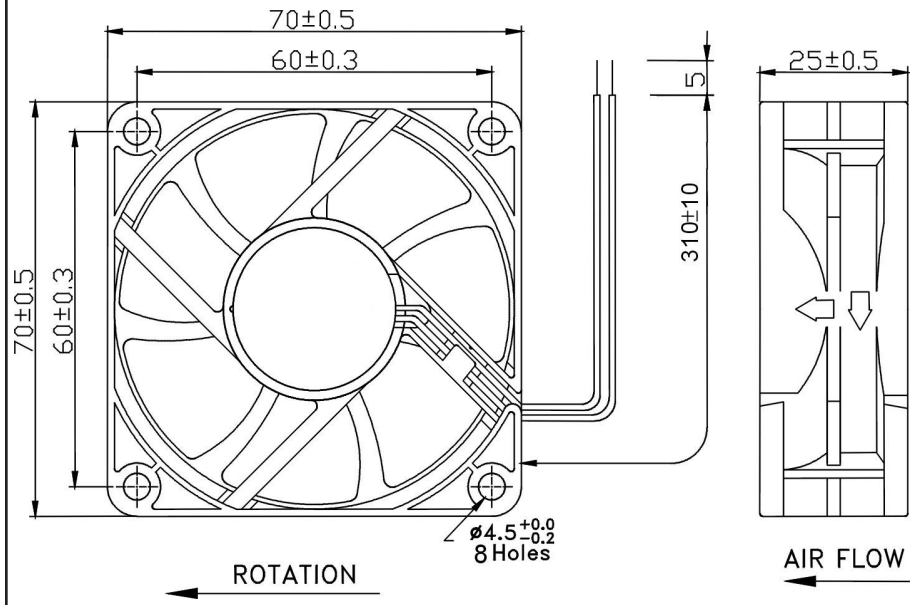


OD7025-24MB



DC Fan, 24VDC

70x25mm (2.76x1.0in)



|                       |                                                 |                                                                                                                                                                                |  |
|-----------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| Frame & Impeller      | PBT, UL94V-0 plastic                            | <u>Available Options</u><br>IP55<br>Other speeds and voltages<br>Alarm<br>Tachometer<br>PWM<br>*Connection:<br>Wire Leads - UL1007<br>24AWG Red(+), Black (-),<br>Weight: 61 g |  |
| 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         | OD7025-24MB           |
| Part Number          | 114231001             |
| Nominal Voltage      | 24 VDC                |
| Voltage Range        | 17~26.4 VDC           |
| Nominal Current      | .085 A                |
| Rated Power          | 2.64 Watts            |
| Rated Speed (RPM)    | 3800                  |
| Airflow (CFM)        | 33                    |
| Noise Level (dB)     | 36                    |
| Max. Static Pressure | .20 "H <sub>2</sub> O |