

General Specifications

Motor Type: DC Brushless Motor

Motor Protection:

Auto Restart/Polarity Protection
(Motor withstands reverse connection for positive and negative leads.)

Insulation Resistance:

10M Ω or over with a DC500V Megger

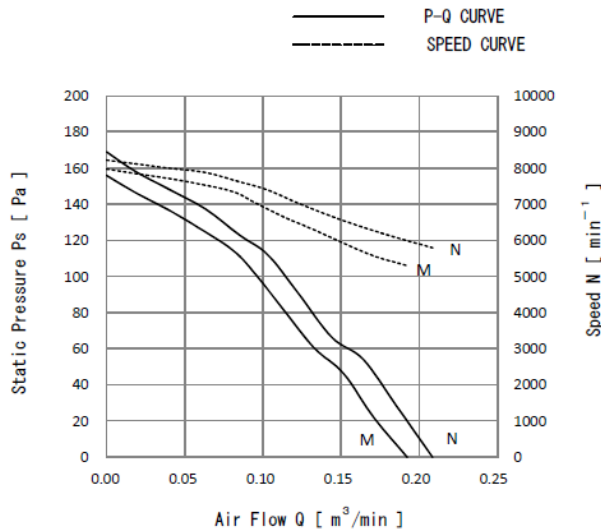
Dielectric Withstand Voltage:

AC 700V 1s or 500V 1min

Allowable Ambient Temperature Range:

-10°C ~ +70°C (Operating)
-40°C ~ +70°C (Storage)
(non-condensing environment)

Characteristics Curves



DC Blower Benefits & Applications

DC Blower

With high static pressure, NMB centrifugal blowers are suitable for cooling electronic systems generating lots of heat and high impedance from back pressure. A DC blower contains a circular impeller within an enclosed cage, which is often referred to as a “squirrel cage”. This design allows DC Blowers to create directed airflow under high pressure conditions. A DC Blower has a more concentrated airflow in which the equipment pulls air in from the sides and forces it out at a concentrated 90° angle.

Benefits

- High pressure and high airflow
- Cost savings with sleeve bearing, yet reliable
- Concentrated airflow to effectively cool target
- Smooth PQ curve with no knee
- Tacho Signal output for speed monitoring

Applications

- Factory Automation
- Humidifiers
- Telecomm
- OA Equipment
- Network Servers
- Home Appliances
- Medical Devices

Life Expectancy L10

40°C 40,000 Hours

Specifications

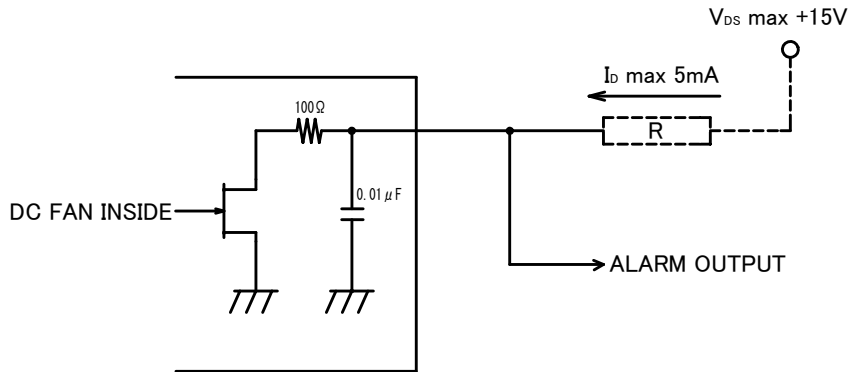
Model	Product Number	Rating Voltage (V)	Operating Voltage (V)	Current (A)*1	Input Power (W)*1	Speed (min ⁻¹)*1	Max Air Flow (m ³ /min)*1	(CFM)*1	Max Static Pressure (Pa)	(In H ₂ O)*1	Noise (dB)*1	Mass (g)
05125GS-12M-AAD-	0	12	6.0 ~ 13.8	0.19	2.28	5300	0.19	6.7	155.0	0.62	38.3	40
05125GS-12N-AAD-	0	12	6.0 ~ 13.8	0.21	2.52	5800	0.21	7.4	170.0	0.68	41.0	

*1: Values in Free Air

TACHO Specifications

TACHO SIGNAL

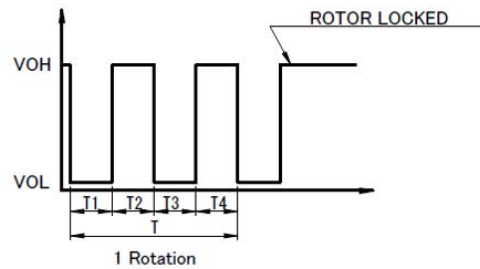
1. OUTPUT CIRCUIT : OPEN COLLECTOR
2. SPECIFICATION
Absolute Maximum Ratings at $T_a=25^\circ\text{C}$
 $V_{CE\text{ max}} : +15\text{V}$
 $I_c\text{ max} : 5\text{mA}$ [$V_{DS(\text{sat})}\text{max} = 1.4\text{V}$]



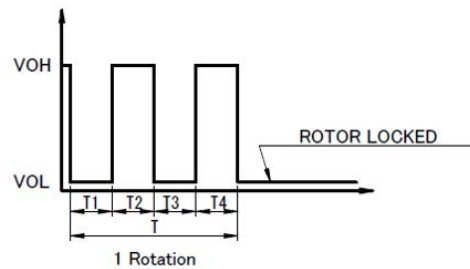
3. OUTPUT WAVEFORM : AT RATED VOLTAGE

4. OUTPUT SIGNAL VOLTAGE

3-1 Case-1



3-2 Case-2



- 1) When the rotor is locked at V_OH position of signal, signal keeps V_OH position.
- 2) When the rotor is locked at V_OL position of signal, signal keeps V_OL position.
- 3) $T = T_1 + T_2 + T_3 + T_4 = 60/m = 1\text{ rotation}$
m : Fan Rotation Speed (min^{-1})
Tach Duty Cycle = $50\% \pm 10\%$

Materials

Casing : Plastic (Black UL94V-0)

Impeller : Plastic (Black UL94V-0)

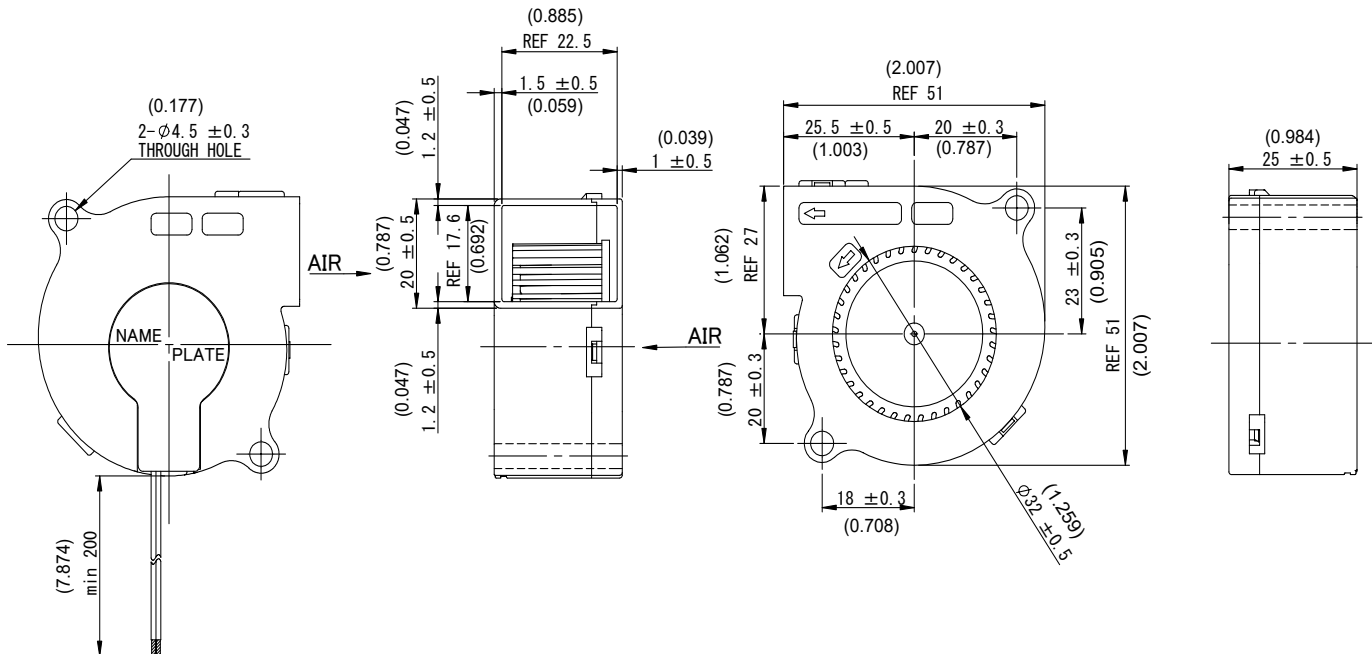
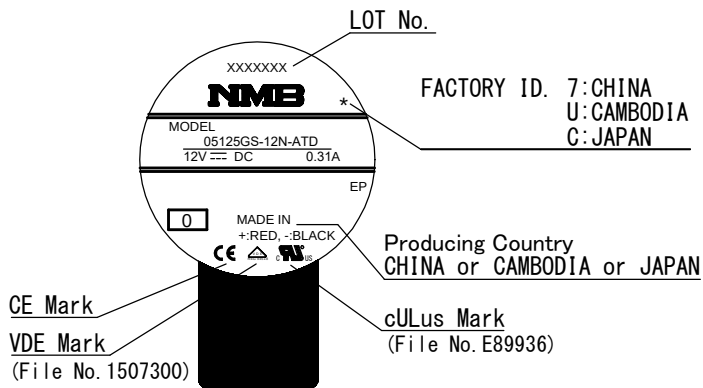
Bearing : Sleeve Bearing

Lead Wire : UL1061 AWG26

(+) : Red (-) : Black Tach: White

Outline

Name Plate



Unit: mm (inch)

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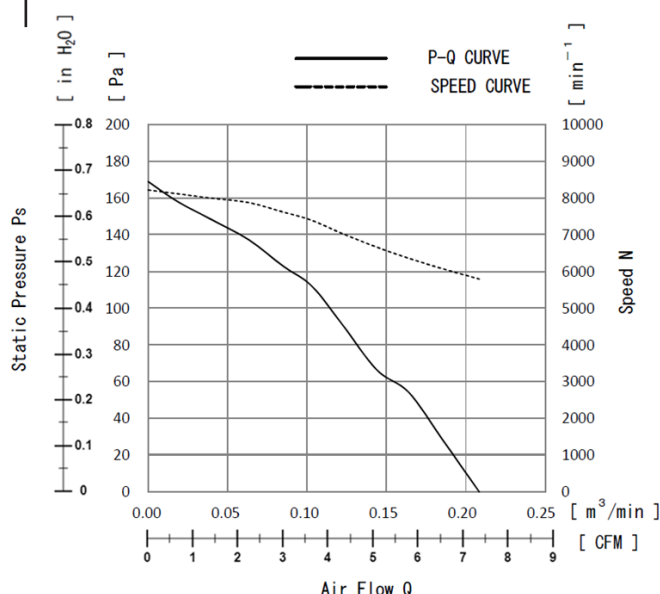
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40°C 40,000 Hours

Specifications

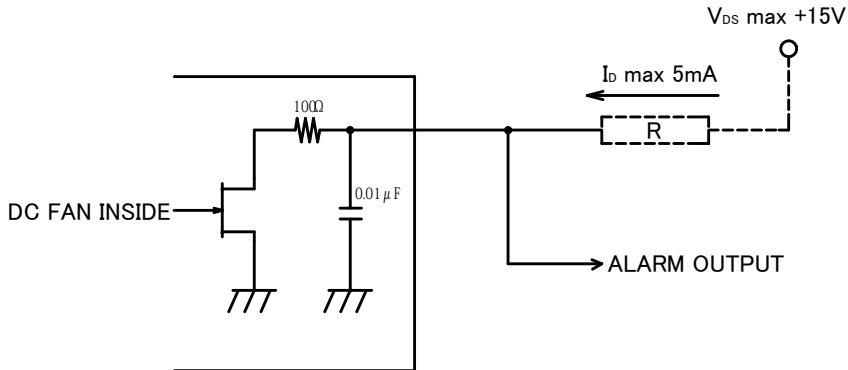
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			Avg (A)*1	Max (A)*1	Avg (W)*1	Max (W)*1		(CFM)	(m³/min)	(in H₂O)	(Pa)		
05125GS-24N-ATD-0	24	10.0 ~ 27.6	0.11	0.16	2.64	3.84	5800	7.42	0.21	0.68	170	41.0	40

*1: Values in Free Air

TACHO Specifications

TACHO SIGNAL

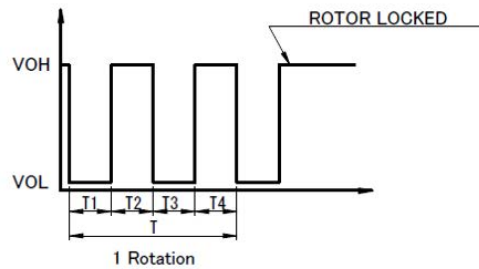
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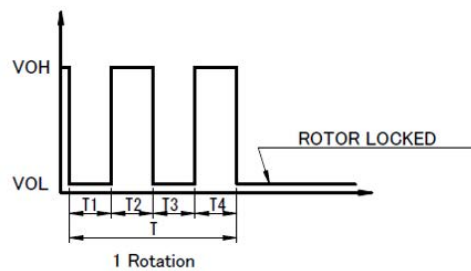
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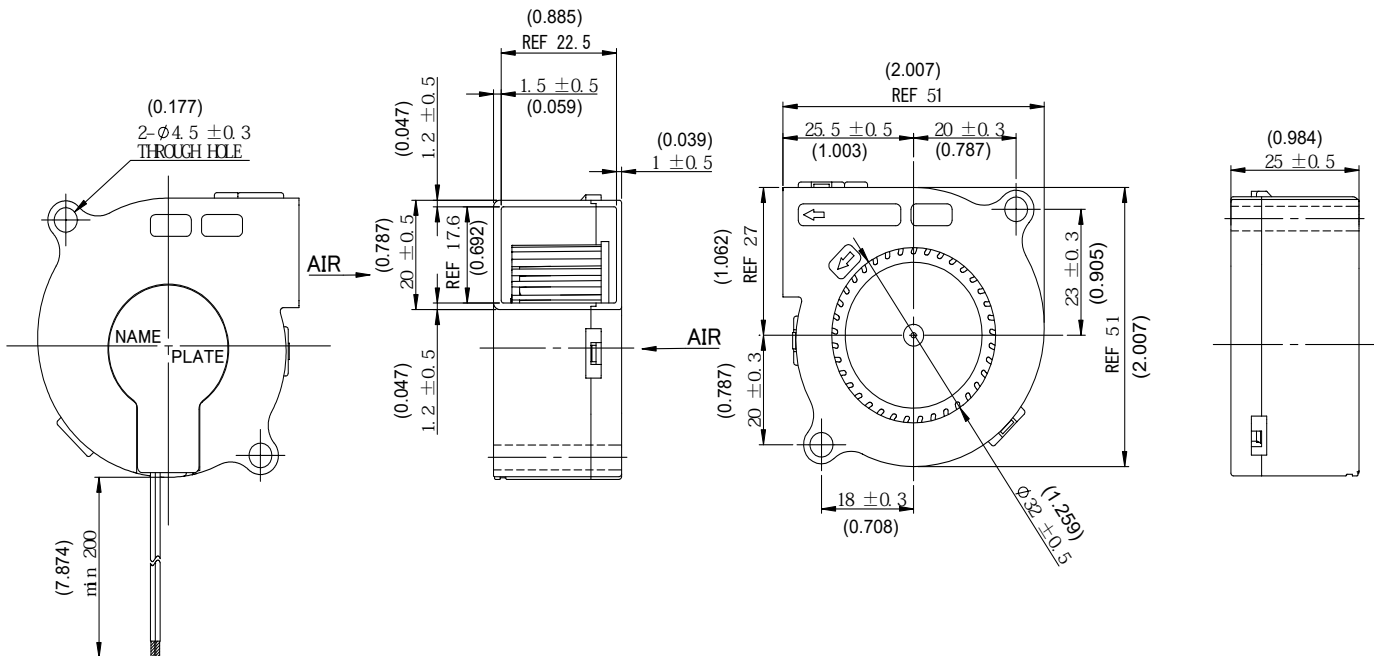
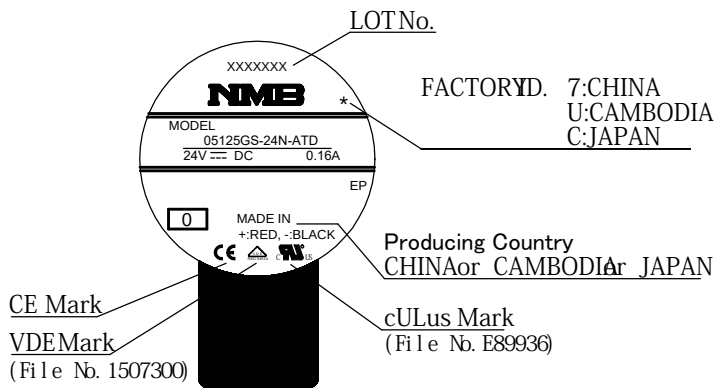
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(+) : Red (-) : Black Tach: White

Outline

Name Plate



Unit: mm (inch)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

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<u>05125GS-12L-AA-D0</u>	<u>05125GS-12L-AL-D0</u>	<u>05125GS-12L-AT-D0</u>	<u>05125GS-12M-AL-D0</u>	<u>05125GS-12M-AT-D0</u>
<u>05125GS-12N-AL-D0</u>	<u>05125GS-12N-AT-D0</u>	<u>05125GS-24N-AA-D0</u>	<u>05125GS-24N-AL-D0</u>	<u>05125GS-24N-AT-D0</u>
<u>05125GS-12N-AA-00</u>	<u>05125GS-12N-AL-00</u>	<u>05125GS-12N-AT-00</u>	<u>05125GS-12M-AAD-0</u>	<u>05125GS-12N-AAD-0</u>
<u>05125GS-05M-AAD-0</u>	<u>05125GS-05L-ALD-0</u>	<u>05125GS-05M-ATD-0</u>	<u>05125GS-05L-AAD-0</u>	<u>05125GS-05M-ALD-0</u>
<u>05125GS-05L-ATD-0</u>				