











## 2. Major Material

Materials / Parts	Specification	Remarks
Plastic Material	Frame: PBT70% + FIBER30%	UL: 94V-0
	Impeller: PBT85% + FIBER15%	UL: 94V-0
Lead Wire	(+) Red; (-) Black; (Signal) Yellow; AWG#28(3Pin) Standard wire length is 200mm, custom lengths are available at no extra charge.	UL: 1007-F
Connector	See Drawing	

## 3. Electrical Characteristics & Test Environmental:

Item	Specification / Condition
3-1	Operation Temperature -10°C ~ +70°C
3-2	Storage Temperature -40°C ~ +75°C
3-3	Operating Humidity 5 to 90% RH
3-4	Storage Humidity 5 to 95% RH
3-5	Locked Rotor Protection <ul style="list-style-type: none"> <li>a. The current will shut down when rotation is locked</li> <li>b. Automatic restart after a continuous 72 hours rotation lock at rated voltage.</li> <li>c. Impedance of motor winding protects motor from fire after 72 hours of locked rotor condition at the rated voltage.</li> <li>d. Signal Alarm- Optional</li> </ul>
3-6	Insulation Strength 10Meg Ohm min at 500VDC Between Frame and (+) terminal
3-7	Dielectric Strength Withstand 5 mA Max 500 VAC 60 Hz for one minute, (between frame and (+) terminal)
3-8	Vibration Test Vibration test in rest status, scan frequency : 5~55Hz 1OCT/Min. in the 3 directions(X.Y.Z), take 16 rotating scan for each axis.
3-9	Shock Test Test of acceleration 30G is applied in the 3 directions (X.Y.Z) and 6 faces, take 11± 1ms(Half Chord Wave), 3 times for each face.
3-10	Noise Level Measured in a semi-anechoic chamber. The fan is running in free air with Microphone at a distance of one meter from the fan intake.
3-11	Tolerance ±10% on rated power and current.
3-12	Polarity Protection Capable of withstanding reverse polarity connection

#### 4. Safety Approvals

Safety Approvals	File No.
UL	E195760
CUL	E195760
TUV	B 04 03 52557 002
CE	EN5008-1

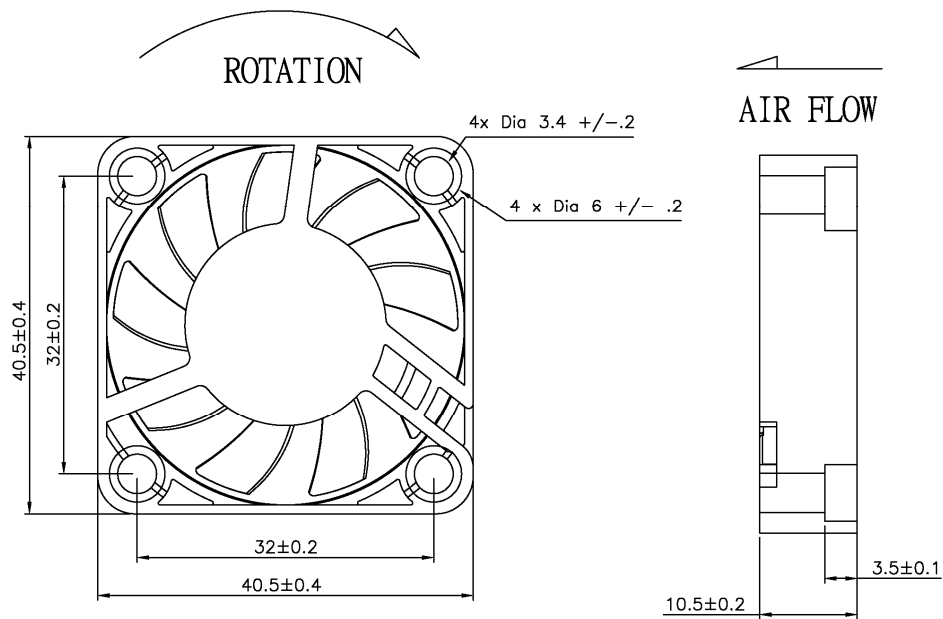
#### 5. Ozone Depleting Substances

5-1. None of our products or manufacturing processes contain or require the use of ozone-depleting chemicals such as PBB's, PBBO's, CFC's, PBBE's, PBDPE's or HCFC's.

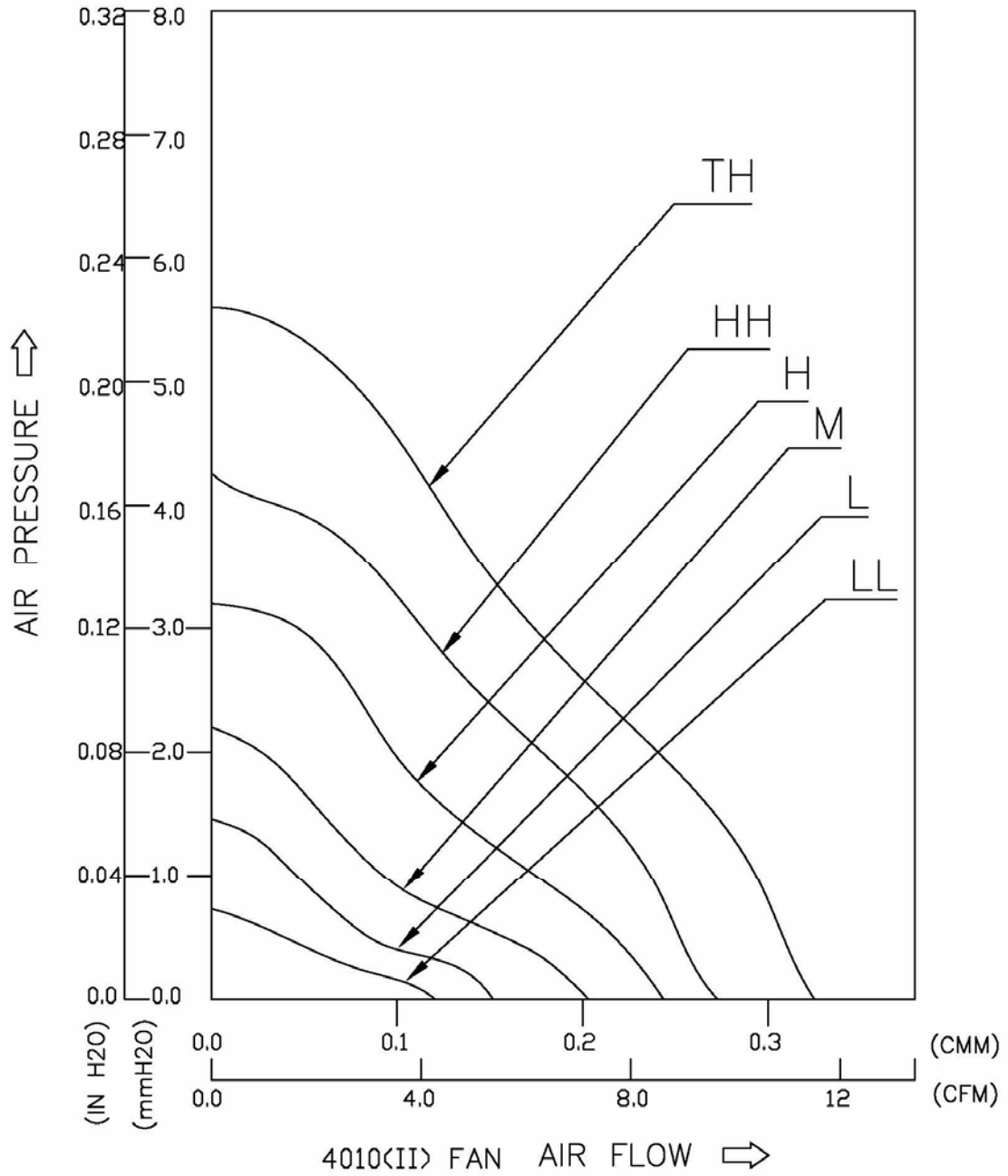
#### 6. Production Location

6-1. Products will be produced in China and Taiwan

#### 7. Dimensional Drawing



## 8. Performance Curve



## 9. Sensor Description

A. Tachometer Pulse Sensor

B. 2 Pulses Per Revolution

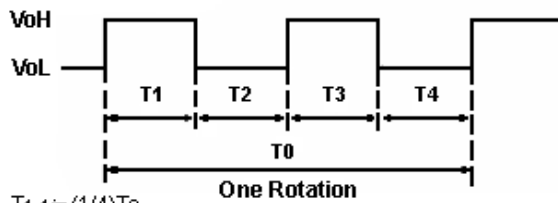
C. Drives Pin Between Nominal 0 and 12V

### Pulse Sensor

(2 Pulse per revolution signal)

Pulse sensors are used for detecting the rotational speed of the fan motor

Output Waveform



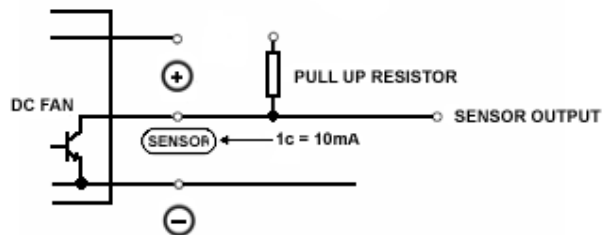
$$T_{1-4} \approx (1/4)T_0$$

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$$N = \text{Fan Rotational Speed (min}^{-1}\text{)}$$

### Output Circuit

Open Collector



If fan locked on VH, signal stays locked. If fan locked on VL, signal stays at VL for a few hundreds MS, then moves to VH.