



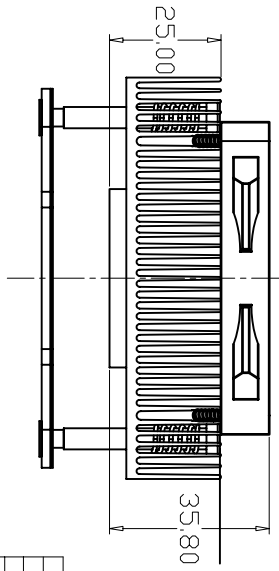
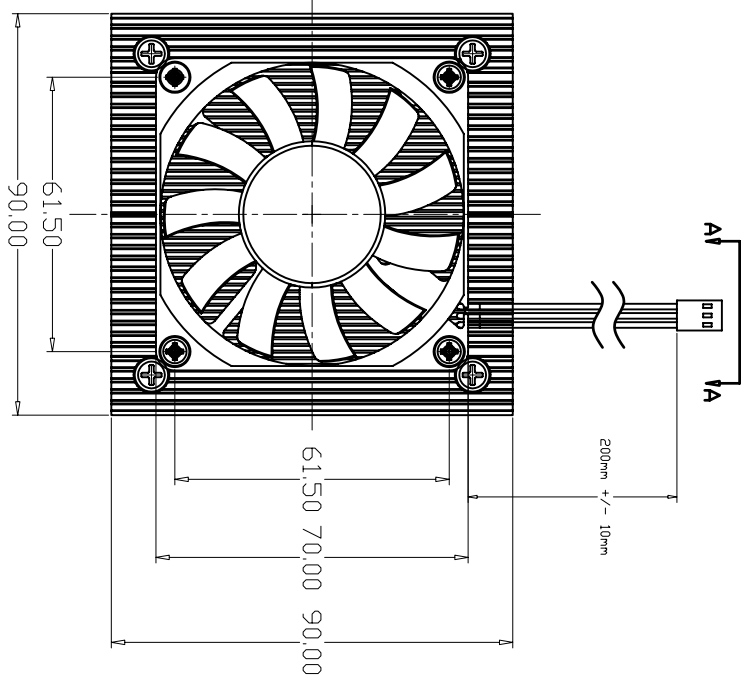
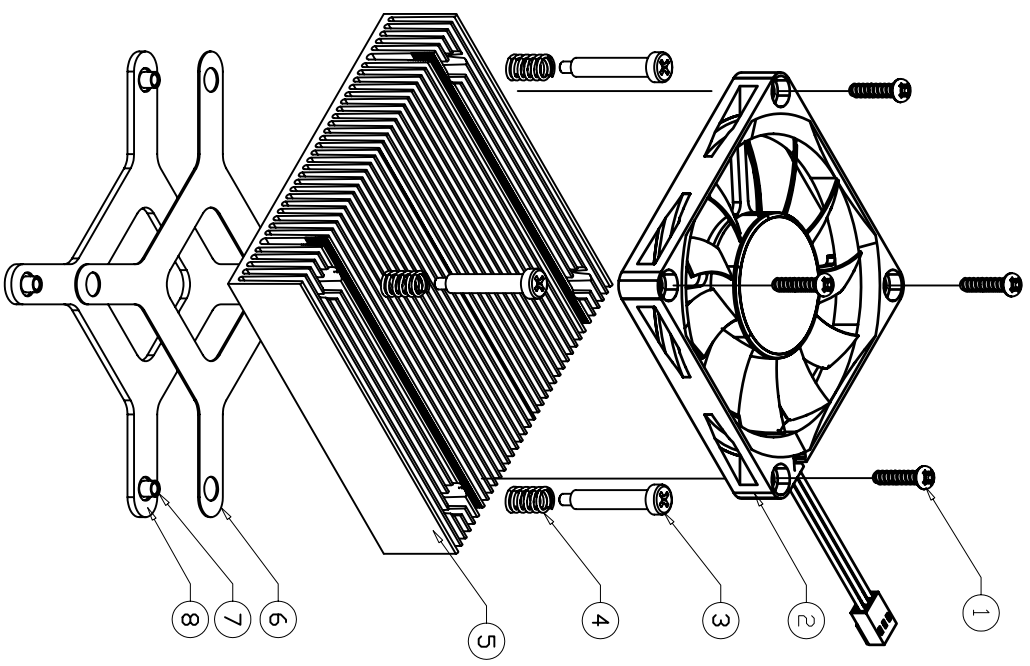
Approval Specification for Cofan Part # 30-1136 Rev 1

Socket 775 Heat Sink Assembly

Revision Date: June 6, 2006

Cofan USA, 1400 Fulton Place, Unit A Fremont, CA 94539 www.cofan-usa.com (800) 766-6097

NOTICE - PROPRIETARY INFORMATION
 THE DESIGN AND RELATED INFORMATION CONTAINED HEREIN IS THE PROPERTY OF COFAN USA. ANY REUSE, REPRODUCTION, OR DISSEMINATION OF THIS INFORMATION DOES NOT CONSTITUTE THE RELEASE OF ANY PROPRIETARY RIGHTS. HEREBY, PERMISSION TO REPRODUCE THIS INFORMATION FOR THE PRODUCTS DISCUSSED HEREIN MUST BE OBTAINED IN WRITING FROM COFAN, INC.



ITEM	DESCRIPTION	COFAN P/N	CUSTOMER DRAWING NUMBER	NAME	SCALE	CUS REV.	COF REV.
①	FAN SCREW	300 Series Stainless Steel/No Plating - Degrease Dry	775-1	HEAT SINK ASSY	NONE <td>-</td> <td>01</td>	-	01
②	F-700HBB-02 Rev B	300 Series Stainless Steel/No Plating - Degrease Dry	30-1136				
③	CAPTIVE SCREW	300 Series Stainless Steel/No Plating - Degrease Dry					
④	SPRING	Spring Steel/Music Wire/AMS 5112/ASTM A228/No Plating					
⑤	HEAT SINK	Aluminum 6063-T5					
⑥	INSULATION	0.5mm 3M TAPE					
⑦	CAPTIVE SCREW	300 Series Stainless Steel/No Plating - Degrease Dry					
⑧	BACKING PLATE	300 Series Stainless Steel/No Plating - Degrease Dry					

DID NOT SCALE DRAWING
 UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN MILLIMETRE
 TOLERANCES ARE:
 1 PLACE X ± 0.4
 2 PLACE 3X ± 0.25
 3 PLACE 30X ± 0.13
 ANGLES EXCEPT 90° ± 1°
 MAXIMUM SURFACE FINISHNESS 125√

RoHS
 Compliant
 2002/95/EC

COFAN USA
 1400 FULTON PL. UNIT A FORT CO SPRING

FINISH	CUSTOMER PART NUMBER	NAME	SCALE	CUS REV.	COF REV.
-	775-1	HEAT SINK ASSY	NONE	-	01
DRAWN BY: <i>Jim</i>	CUSTOMER DRAWING NUMBER	DATE DRAWN			
APPR BY:	30-1136	1 OF 1	MAY-09-2006		

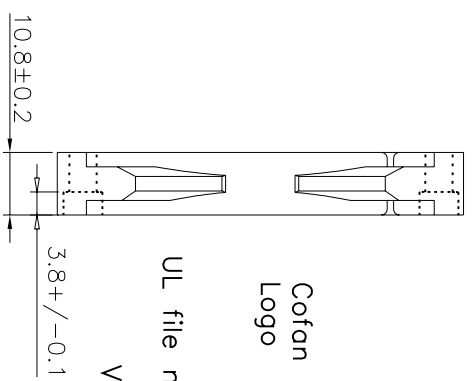
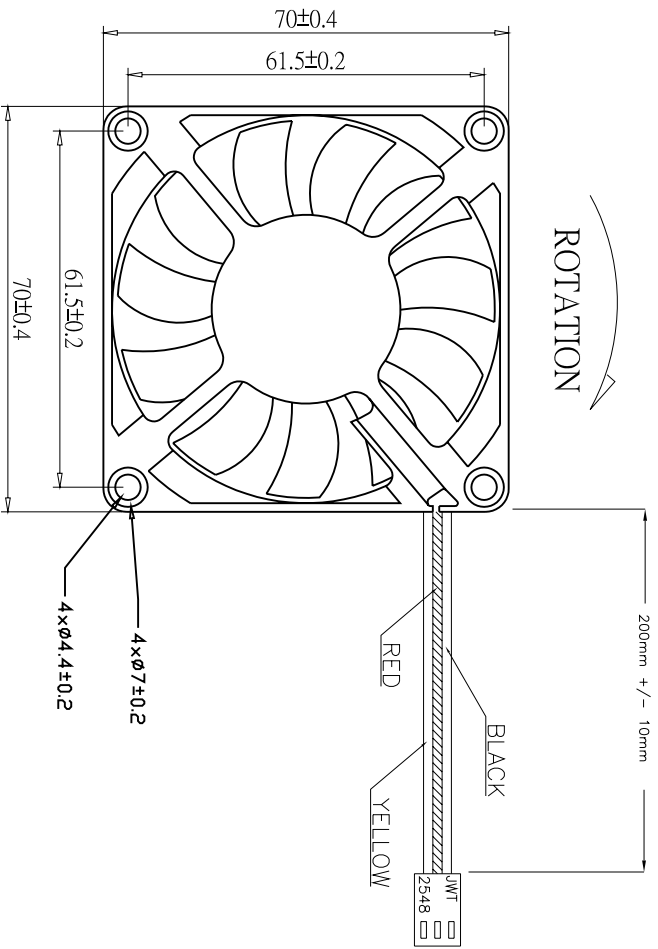


Approval Specification for Cofan Part # F-7010H12B-02 Rev 1

2 Ball Bearing, 70 x 10.8mm, 12VDC, 2 Ball Bearing, 3800 RPM Fan
w/Tach, 200mm Wire, 3 Pin Connector, RoHS Compliant

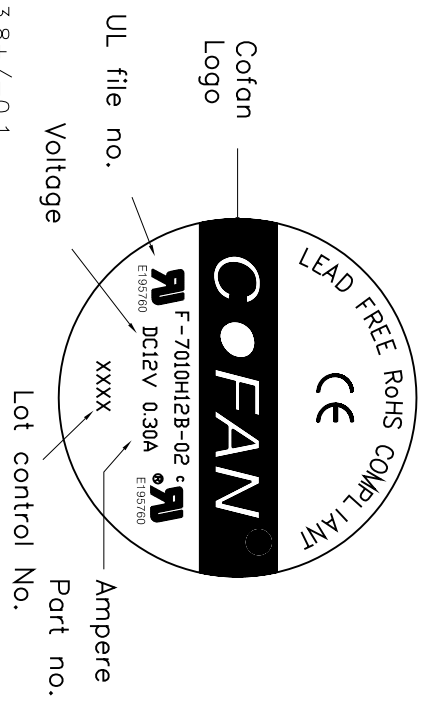
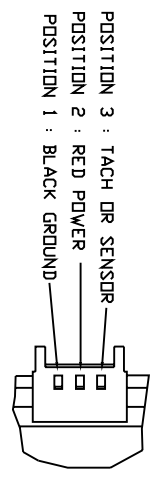
Revision Date: June 6, 2006

Cofan USA, 1400 Fulton Place, Unit A Fremont, CA 94539 www.cofan-usa.com (800) 766-6097



AIR FLOW

ROTATION



② 1X MOLEX HOUSING 22-01-3037 DR. EQUIV.
3X MOLEX TERMINAL 08-50-0113 DR. EQUIV.

MAX AIR FLOW	MAX STATIC AIR PRESSURE	NOISE LEVEL
CFM	mmHg	dBA
121	121	35.6

RoHS
Complaint
2002/95/EC

Cofan USA
1400 Fulton Place
Fremont, CA 94539
USA

TEL: (510) 490-7533
FAX: (510) 490-7931
www.cofan-usa.com

SPECIFICATION FOR APPROVAL

Rev 1

1. SCOPE:

This specification defines the electrical and mechanical characteristics of the following DC brushless axial flow fan:

Item		Description	
1-1	Part Number	F-7010H12B-02	
1-2	Outline Dimensions	70 x 70 x 10 mm (see dimensions drawing #7)	
1-3	Bearing System	2 Ball Bearing	
1-4	Rated Voltage	12 VDC	
1-5	Operating Voltage	6.0 – 13.8 VDC	
1-6	Input Current	0.30 A (.25A in Running Conditions)	
1-7	Input Power	3.60 W	
1-8	Speed	3800 R.P.M.	a. 25°C, 65% RH, b. Free Air c. Rated Voltage
1-9	Max. Air Flow (At zero static pressure)	28.93 CFM	a. Rated Voltage b. AMCA Standard
1-10	Max. Air Pressure (At zero airflow)	3.08 mmH ₂ O	c. Rated Current
1-11	Acoustical Noise (Avg)	35.6 dBA	a. Rated Voltage b. Measured in a Non-Echo Chamber c. CNS 8753 Standard d. ISO 3744 Test Condition
1-12	Life Expectance	100,000 hours	a. Continuous operation
1-13	Insulation Type	UL: Class A	
1-14	Weight	49 Grams	
1-15	Rotation	Clockwise from label side	

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#24(2 Pin), #28(3Pin) Standard wire length is 12", custom lengths are available at no extra charge.	UL: 1007-F
Connector	Upon customer specifications custom connector can be installed at minimum extra charge	

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"> a. The current will shut down when rotation is locked b. Automatic restart after a continuous 72 hours rotation lock at rated voltage. c. Impedance of motor winding protects motor from fire after 72 hours of locked rotor condition at the rated voltage. d. Signal Alarm- Optional
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	EN50081-1

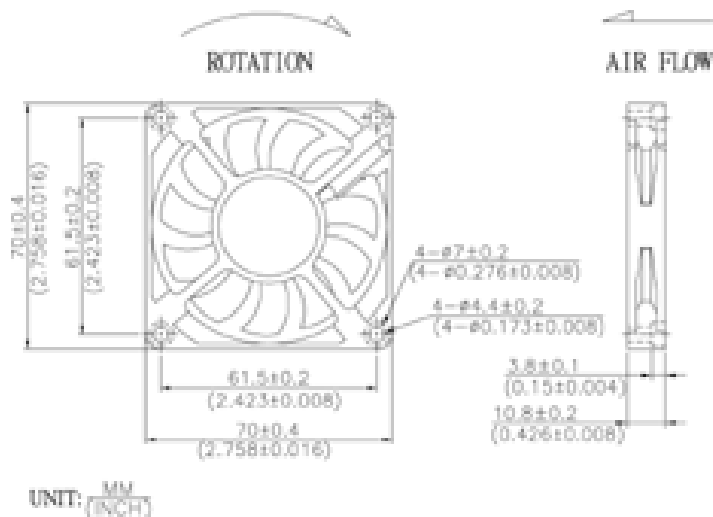
5. Ozone Depleting Substances & RoHS Compliance

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. Furthermore, this fan and all parts associated with this fan (including packaging, housings, and pins) either does not contain any hazardous substances such as lead or mercury or is below the acceptable levels, and is compliant with 2002/95/EC of the European Parliament and of the Council of 27th January, 2003 on the restriction on the use of certain hazardous substances in electrical and electronic equipment.

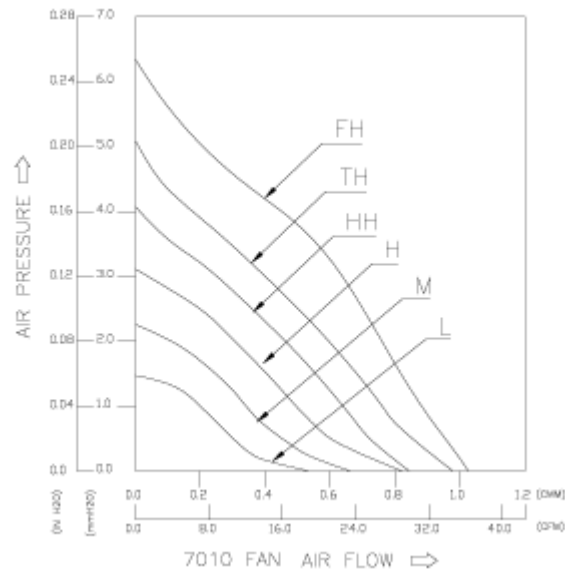
6. Production Location

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

7. Dimensional Drawing



8. Performance Curve



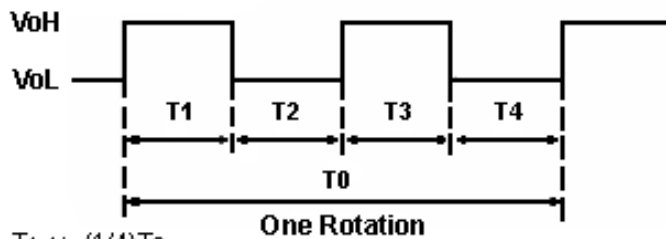
9. Sensor Description

Pulse Sensor

(2 Pulse per revolution signal)

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

Output Waveform



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

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

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