Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832
Email & Skype: info@chipsmall.com Web: www.chipsmall.com
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

DELTA ELECTRONICS, INC.

Model Name: FHS-A6025B00

Application:

- Intel Nehalem Socket 1366 2U
- Xeon (45nm) E5500/L5500 CPU sequence

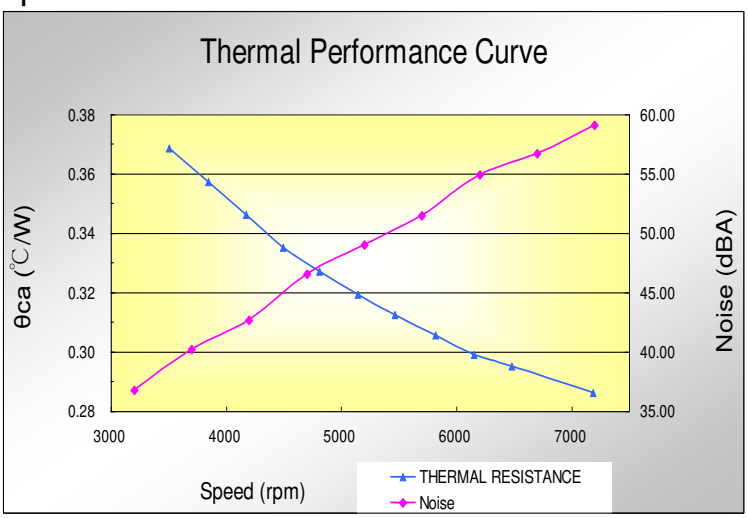
Pictures

Thermal & Mechanical Spec.:

- Thermal performance for 80W CPU
- HSK Assembly Weight: 500 g (ref.)
- Clipping Force: 16 Kgf (ref.)

Component Specification:

1. Heat Sink
   Type: Extrude HSK
   Material: Aluminum A6063 or Equivalent.
   Dimension: 90*90*64 mm
2. Thermal interface material
   Material: Dow Corning TC-5630 or Equivalent.
3. Fan
   (60x60x25 mm with PWM Control)
   Rated Voltage: 12 V
   Life Time:
   Two ball bearing 80000 hrs
   Connector:
   a. Lead wire: UL 1061 AWG#26
      pin 1: black wire--------(-)
      pin 2: yellow wire----------(+)
      pin 3: green wire---------(F00)
      pin 4: blue wire------------(PWM)
   b. Housing: Molex 47054-1000 or equivalent
   c. Terminal: Molex 2759T 08-50-0113 or equivalent



* All readings are typical values at rated voltage.

** Specifications are subject to change without notice*

DELTA ELECTRONICS, INC.
252, Shang Ying Road, Kuei San
TAOYUAN SHIEN 333,
TAIWAN,R.O.C.
TEL: 886-3-3591968 EXT 2073
FAX: 886-3-3591991

DELTA PRODUCTS CORPORATION
4405 CUSHING PARKWAY
FREMONT, CA 94538, U.S.A.
TEL: 1-510-668-5100
FAX: 1-510-668-0680

DELTA ELECTRONICS(JAPAN), INC.
DELTA SHIBADAIMON BLDG.
2-1-14 SHIBADAIMON, MINATO-KU,
TOKYO, 105-0012, JAPAN
TEL: 81-3-5733-1111
FAX: 81-3-5733-1211

DELTA ELECTRONICS EUROPE LTD.
2 YOUNG PLACE
KELVIN INDUSTRIAL ESTATE
EAST KILBRIDE, GLASGOW G75 OTD, U.K.
TEL: 44-1355-588888
FAX: 44-1355-588889

Date: 27-Apr-07

Delta Electronics Corp.

APPROVAL SHEET

Customer Name .: _____

Model Name.: COOLER

Delta Part No.: FHS-A6025B00

Customer Part No.: _____

Spec Issue Date .: 12/31/2015

Spec Revision : 02

PLEASE SEND ONE COPY OF THIS SPECIFICATION BACK AFTER YOU SIGNED APPROVAL FOR PRODUCTION PRE-ARRANGMENT.

Approved By: _____

Date: _____

Approval	Check	Designer
Alex-Hsia	Alex-Hsia	Charles Chen

Delta Electronics Corp.

REV.	Description	Drawn	Checked	Approved	Issue Date
00	**ISSUE SPEC**	Skyler-Huang01/05'10	Charles Chen01/05'10	Alex-Hsia 01/05'10	
01	1. CHANGE THE FAN P/N FROM 3620927211 TO 3620936511 2. CHANGE THE FAN LABEL P/N FROM 3266498200 TO 3266800400 3. CORRECT THE FAN LABEL MATERIAL&CARTON SIZE 4. CHANGE SCREW P/N FROM 3105464700 TO 3534205600	Skyler-Huang07/24'13	Charles. Chen 07/24'13	Charles. Chen 07/24'13	
02	Change TIM from TC-1996 to TC-5630	Charles. Chen 12/31'15	Alex-Hsia 12/31'15	Alex-Hsia 12/31'15	

Description: SAMPLE REVISION CODE LIST		
Part No.		REV
DELTA MODEL : FHS-A6025B00	TOTAL 24 PAGE	02

Delta Electronics Corp.

CONTENTS

Delta Electronics Corp.

1. SPECIFICATION

Characters

Item	Description
Scope	THIS SPECIFICATION DEFINES THE ELECTRICAL AND MECHANICAL CHARACTERISTICS OF THE FAN HEATSINK
Application	INTEL CPU COOLER
Specification	
a: Thermal Resistance	0.306 (℃/W) (REF.)
b: total weight	500 g (REF.)
c: clip force	16 kgf (REF.)

BOM

Item	Part Name	Material	Part NO.	Q'TY	Remark
1	FAN	PBT	3620936511	1	
2	HEATSINK	AL6063	3346423400	1	
3	FAN SCREW	SUS	3109183100	2	
4	SCREW	SUS	3534205600	4	
5	LABEL	PP OR PET	3266800400	1	
6	TIM	DOW TC-5630	4021107300	0.2g	Rev02
7	SPRING	SWPA	3461809700	4	
8	E-CLIP	S20C	3110262800	4	
9	CAP	SUS303	3462384700	4	

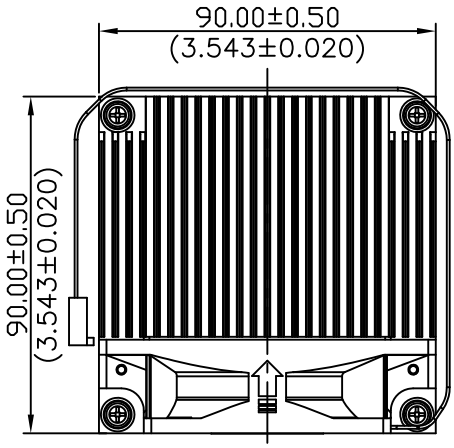
2. PRINT

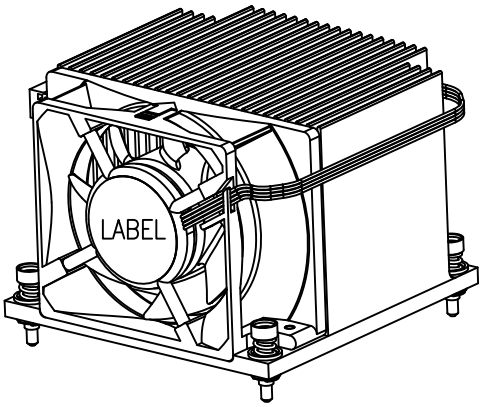
Assembly Drawing

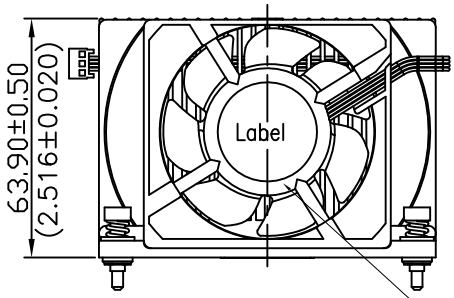
Parts Drawing

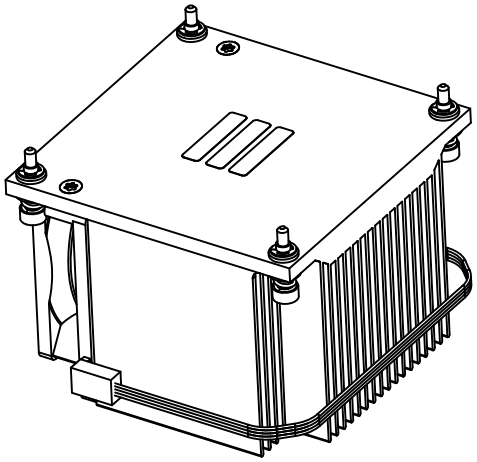
UNIT: mm (INCH)

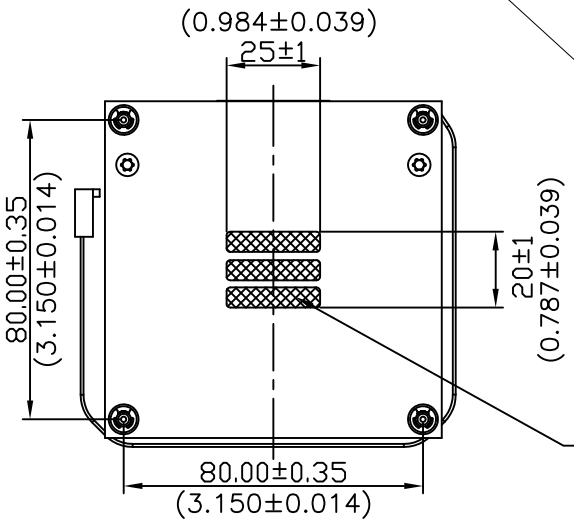
DRAWING:











FAN LABEL P/N:~~3267401300~~
1 3266800400

2
Dow Corning TC-5630 P/N:4021107300

TIM WEIGHT ON HSK MUST BE 200mg±30mg

台達電子工業股份有限公司
DELTA ELECTRONICS, INC.

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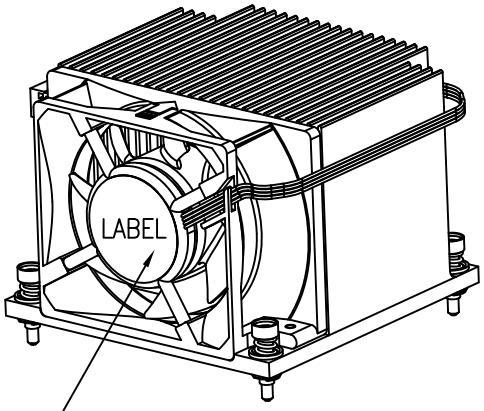
DIMENSIONAL TOLERANCES HOLES : ±0.05 ANGLES : ±0.5°

( )		( )		( )		( )	
<30	±0.25	DECIMALS		UP~100	±0.2	250~300	±0.4	UP~600	±1.5
>30~100	±0.35	X	±0.3	100~150	±0.25	300~350	±0.45	600~900	±2.4
>100~300	±0.5	X.X	±0.2	150~200	±0.3	350~400	±0.5	900~OVER	±3.1
ABOVE 300	±0.8	X.XX	±0.1	200~250	±0.35				

SCALE	---	UNIT	---	USED ON	COOLER

DELTA MODEL: FHS-A6025B00	Drawn: Charles Chen
CUSTOMER NAME:	-------
CUSTOMER P/N:	-------
THIRD ANGLE PROJECTION	Description: PRODUCTION SPEC. (PHYSICAL DIMENSION)
A4 SIZE	Part No. FHS-A6025B00-PD REV. 02
	SHEET 1 OF 2 ISSUE DATE:

FRAME NAME : DF-PSLA4V-3R01.DWG



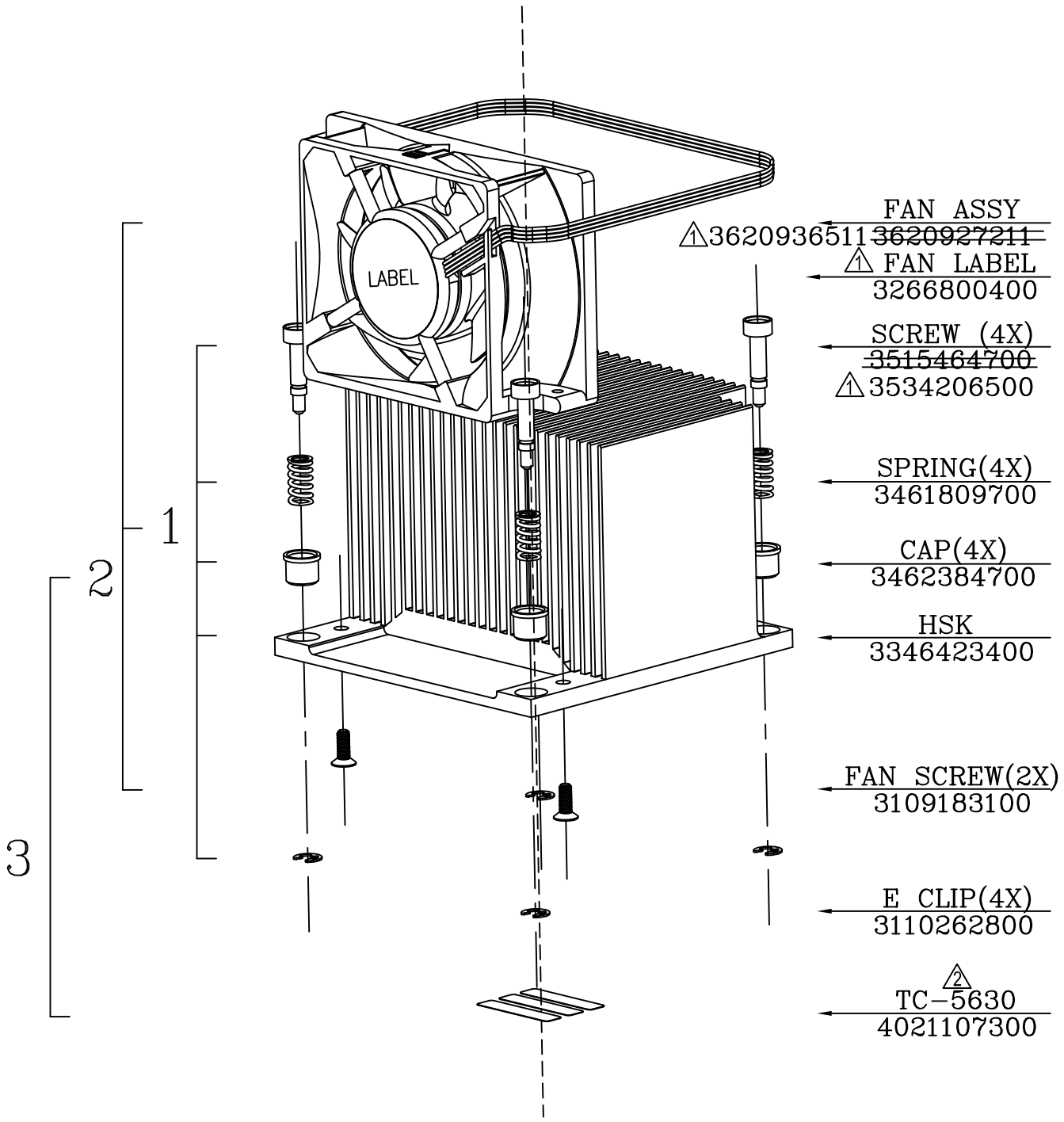
DATECODE POSITION

NOTE:

1. DATECODE ON FAN LABEL.
2. PLEASE REFER TO CP10S-00345 WHILE PRINTING DATECODE.

台達電子工業股份有限公司 DELTA ELECTRONICS, INC.		DELTA MODEL: FHS-A6025B00	Drawn: Charles Chen
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF DELTA ELECTRONICS, INC. AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SELL OF APPARATUSES OR DEVICES WITHOUT PERMISSION.		CUSTOMER NAME:	-------
		CUSTOMER P/N:	-------
DIMENSIONAL TOLERANCES HOLES : ±0.05 ANGLES : ±0.5°		THIRD ANGLE PROJECTION	Description: PRODUCTION SPEC. (PHYSICAL DIMENSION)
( ) DECIMALS / ( ) / ( ) / ( )		A4 SIZE	Part No. FHS-A6025B00-PD
<30 :±0.25 / X :±0.3 / UP~100 :±0.2 / 250~300 :±0.4 / UP~600 :±1.5			REV. 02
>30~100 :±0.35 / X.X :±0.2 / 100~150 :±0.25 / 300~350 :±0.45 / 600~900 :±2.4			
>100~300 :±0.5 / X.XX :±0.1 / 150~200 :±0.3 / 350~400 :±0.5 / 900~OVER :±3.1			
ABOVE 300 :±0.6 /			
SCALE --- UNIT --- USED ON COOLER		SHEET 2 OF 2	ISSUE DATE:

FRAME NAME : DF-PSLA4V-3R01.DWG



台達電子工業股份有限公司
DELTA ELECTRONICS, INC.

DELTA MODEL: FHS-A6025B00

Drawn: Charles Chen

CUSTOMER NAME: -------

CUSTOMER P/N: -------

DIMENSIONAL TOLERANCES HOLES : ±0.05 ANGLES : ±0.5°

( )		DECIMALS		( )				( )	
<30	:±0.25	X	:±0.3	UP~100	:±0.2	250~300	:±0.4	UP~600	:±1.5
>30~100	:±0.35	X.X	:±0.2	100~150	:±0.25	300~350	:±0.45	600~900	:±2.4
>100~300	:±0.5	X.XX	:±0.1	150~200	:±0.3	350~400	:±0.5	900~OVER	:±3.1
ABOVE 300	:±0.6			200~250	:±0.35				

THIRD ANGLE PROJECTION

Description: PRODUCTION SPEC. (ASSEMBLY ORDER)

A4 SIZE

Part No. FHS-A6025B00-AS

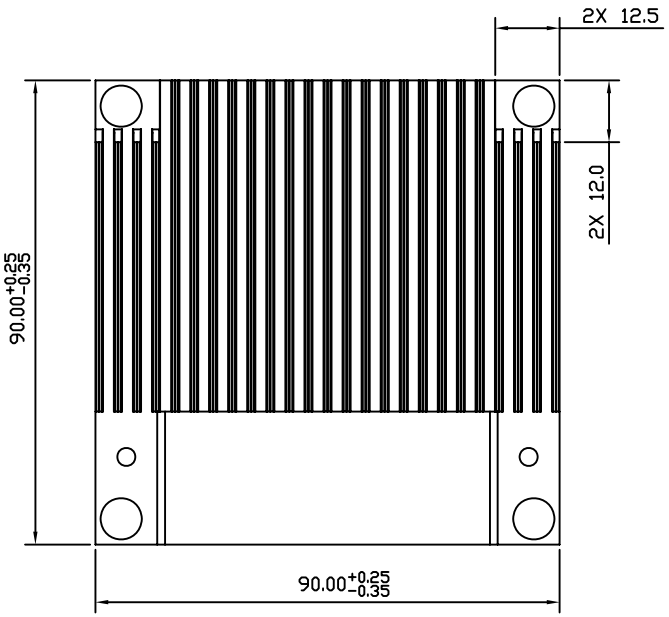
REV. 02

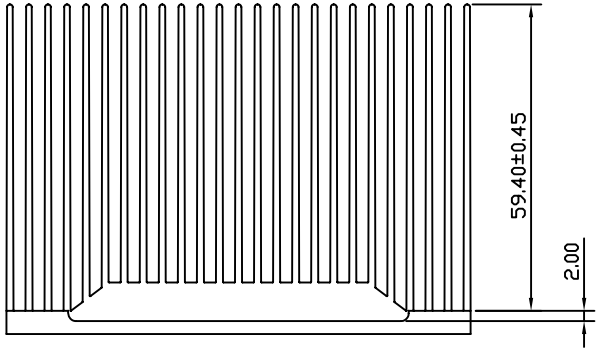
SCALE	---	UNIT	---	USED ON	COOLER

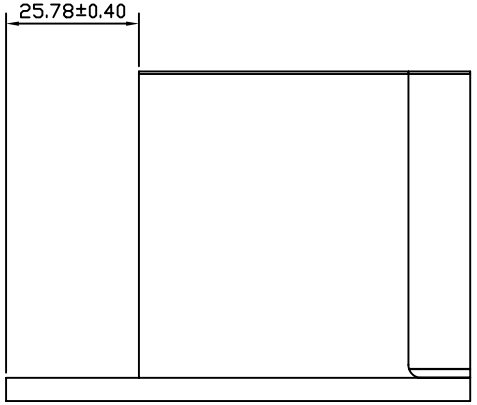
SHEET 1 OF 1

ISSUE DATE:

FRAME NAME : DF-PSLA4V-3R01.DWG







台達電子工業股份有限公司
DELTA ELECTRONICS, INC.

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES HOLES : ±0.05 ANGLES : ±0.5°

( )		(√)		( )		( )	
<30	±0.25	DECIMALS		UP~100	±0.2	250~300	±0.4	UP~600	±1.5
>30~100	±0.35	X	±0.4	100~150	±0.25	300~350	±0.45	600~900	±2.4
>100~300	±0.5	X.X	±0.3	150~200	±0.3	350~400	±0.5	900~OVER	±3.1
ABOVE 300	±0.6	X.XX	±0.20	200~250	±0.35				

SCALE	1/1	UNIT	mm	USED ON	COOLER

A3 SIZE

Drawn: Skyler Huang

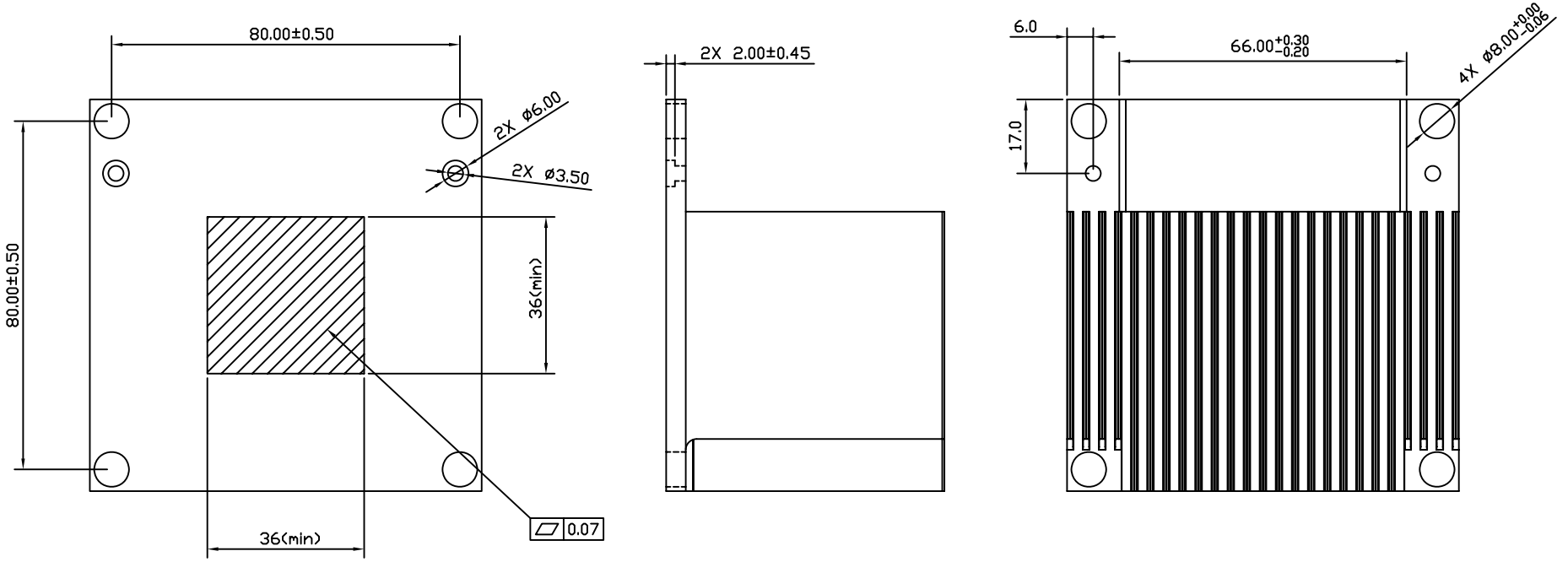
DESCRIPTION: HEATSINK

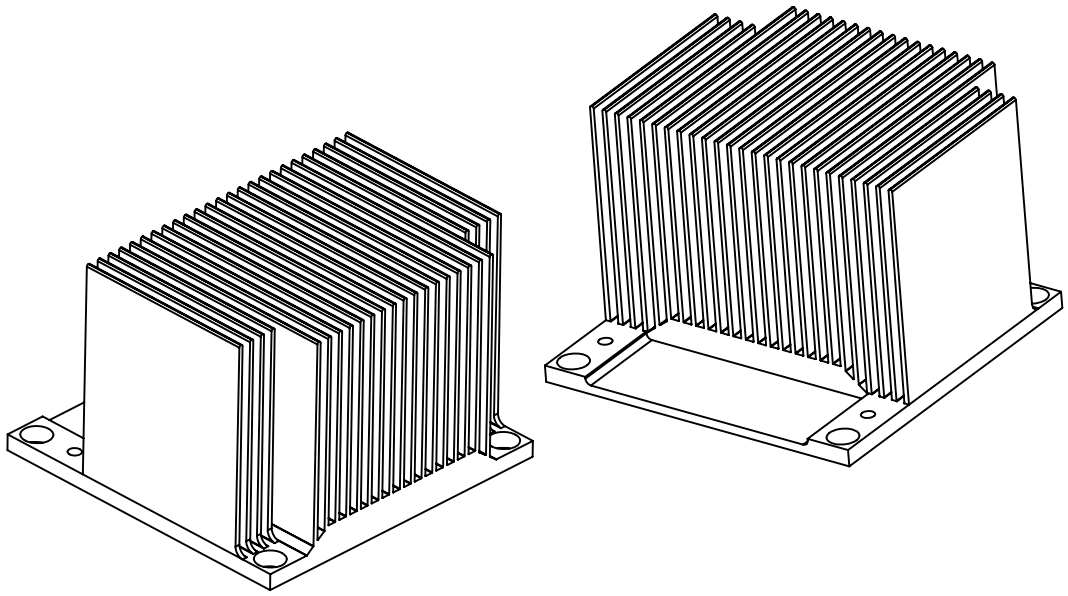
PART NO.: 3346423400

REV.: --

SHEET 1 OF 2

DF-MEA3H-4R00





NOTES:

*1.MATERIAL: A6063-T5

*2.REMOVE ALL BURRS AND SHARP EDGES.
SURFACE TO BE FREE FROM CONTAMINANTS.

*3.UNDEFINED DIMENSION PLEASE REFER TO 2D OR 3D SOURCE FILE.

*4.UNDEFINED RADII IS SMALLER THAN 0.5R UNLESS OTHERWISE SPECIFIED.

台達電子工業股份有限公司
DELTA ELECTRONICS, INC.

THIRD ANGLE PROJECTION

DIMENSIONAL TOLERANCES HOLES : ±0.05 ANGLES : ±0.5°

( )		(√)		( )		( )	
<30	±0.25	DECIMALS		UP~100	±0.2	250~300	±0.4	UP~600	±1.5
>30~100	±0.35	X	±0.4	100~150	±0.25	300~350	±0.45	600~900	±2.4
>100~300	±0.5	XX	±0.3	150~200	±0.3	350~400	±0.5	900~OVER	±3.1
ABOVE 300	±0.6	XXX	±0.20	200~250	±0.35				

SCALE	1/1	UNIT	mm	USED ON	COOLER

A3 SIZE

Drawn: Skyler Huang

DESCRIPTION: HEATSINK

PART NO.: 3346423400

REV.: --

SHEET 2 OF 2

DF-MEA3H-4R00

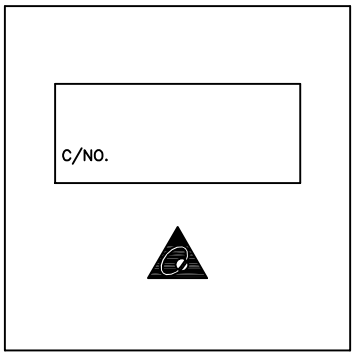
3. PACKING PLAN

Packing Specification

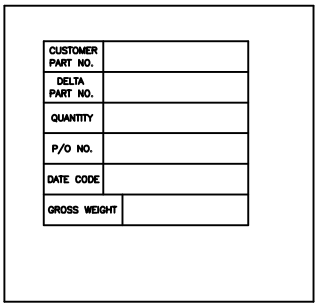
CARTON ILLUSTRATE	SIZE	420(L)*318(w)*195(H)(mm) ⚠	PACKING QUANTITY	2LAYERS/CARTON
	MATERIAL	3 LAYERS"AB" FLUTE	CARTON WEIGHT	0.62 kg (REF.)

CARTON OUTSIDE DEMONDTRATE

FRONT

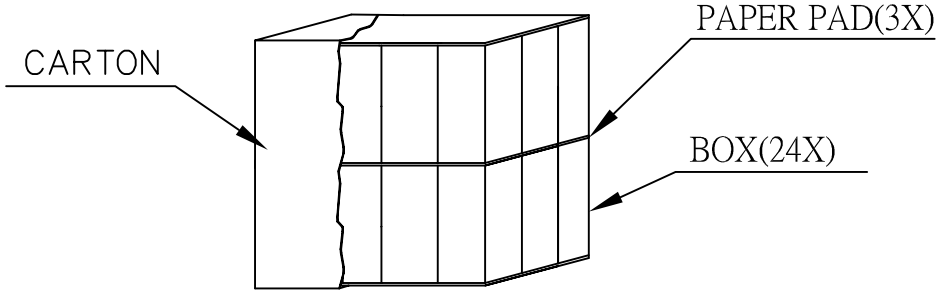


BACK



(ONE LABEL PER CARTON)

PET TRAY PACKING ILLUSTRATE	SIZE	98(L)*98(w)*21.6(H)(mm)	PACKING QUANTITY	1PCS/PET TRAY
	MATERIAL	PET TRAY		
	MATERIAL WEIGHT	6g (REF.)		



台達電子工業股份有限公司
DELTA ELECTRONICS, INC.

DIMENSIONAL TOLERANCES HOLES : ±0.05 ANGLES : ±0.5°

( )		( )		( )		( )	
<30	:±0.25	DECIMALS		UP~100	:±0.2	250~300	:±0.4	UP~600	:±1.5
>30~100	:±0.35	X	:±0.3	100~150	:±0.25	300~350	:±0.45	600~900	:±2.4
>100~300	:±0.5	XX	:±0.2	150~200	:±0.3	350~400	:±0.5	900~OVER	:±3.1
ABOVE 300	:±0.6	X.XX	:±0.1	200~250	:±0.35				

SCALE	---	UNIT	mm	USED ON	COOLER

DELTA MODEL: FHS-A6025B00

Drawn: Skyler Huang

CUSTOMER NAME: -----

CUSTOMER P/N: -----

THIRD ANGLE PROJECTION

Description: PRODUCTION SPEC. (PACKING ASSMEBLY)

A4 SIZE

Part No. FHS-A6025B00-PA

REV. --

SHEET 1 OF 2

ISSUE DATE:

PART NO.	FHS-A6025B00			
BASIC DATA	QUANTITY/CARTON	24PCS (2 LAYERS/CARTON, 12PCS/LAYER)		
	PRODUCTION NET WEIGHT	12kg (REF.)		
	PRODUCTION GROSS WEIGHT	14kg (REF.)		
20(ft)CONTAINER ILLUSTRATE	SIZE	5.889(L)*2.352(w)*2.386(H)m	PACKING QUANTITY	20PALLETS/CONTAINER
	CONTAINER	STEEL		

CONTAINER FORM

CONTAINER LOADING MATHOD

PALLET	PALLET	PALLET	PALLET	PALLET
PALLET	PALLET	PALLET	PALLET	PALLET

TOP VIEW

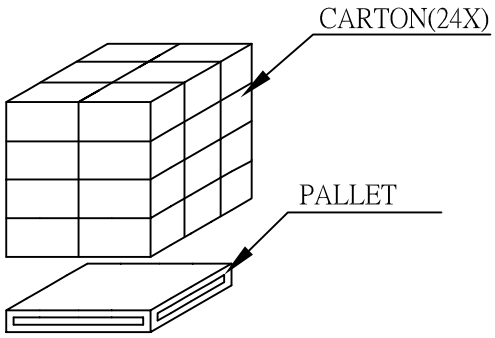
PALLET	PALLET
PALLET	PALLET

FRONT VIEW

PALLET LOADING ILLUSTRATE	SIZE	117(L)*107(w)*13(H)cm	PACKING QUANTITY	24 CARTONS/PALLET
	PALLET	WOOD		

PALLET ILLUSTRATE

PALLET LOADING MATHOD



台達電子工業股份有限公司
DELTA ELECTRONICS, INC.

DIMENSIONAL TOLERANCES HOLES : ±0.05 ANGLES : ±0.5°

( )		DECIMALS	( )		( )		( )	
<30	:±0.25	X	:±0.3	UP~100	:±0.2	250~300	:±0.4	UP~600	:±1.5
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>100~300	:±0.5	X.XX	:±0.1	150~200	:±0.3	350~400	:±0.5	900~OVER	:±3.1
ABOVE 300	:±0.6			200~250	:±0.35				

SCALE	---	UNIT	mm	USED ON	COOLER

THIRD ANGLE PROJECTION

A4 SIZE

DELTA MODEL: FHS-A6025B00	Drawn: Skyler Huang	
CUSTOMER NAME: -----		
CUSTOMER P/N: -----		
Description: PRODUCTION SPEC. (PACKING ASSMEBLY)		
Part No. FHS-A6025B00-PA		REV. --
SHEET 2 OF 2	ISSUE DATE:	

4. FAN

Fan Specification

SPECIFICATION FOR APPROVAL

Customer TMPBU

Description DC FAN

Part No. 3620936511 REV.

Delta Model No. AFB0612DH-BC01 REV. 01

Sample Issue No.

Sample Issue Date AUG.13.2012

PLEASE SEND ONE COPY OF THIS SPECIFICAITON BACK AFTER YOU SIGNED APPROVAL FOR PRODUCTION PRE-ARRANGMENT.

APPROVED BY:

DATE :

DELTA ELECTRONICS, INC.
TAOYUAN PLANT
252, SHANG YING ROAD, KUEI SAN INDUSTRIAL ZONE TAOYUAN SHIEN, TAIWAN, R.O.C.
TEL:886-(0)3-3591968
FAX:886-(0)3-3591991

DELTA ELECTRONICS, INC.
252, SHANG YING ROAD, KUEI SAN
TAOYUAN SHIEN 333, TAIWAN, R. O. C.
TEL : 886-(0)3-3591968
FAX : 886-(0)3-3591991

SPECIFICATION FOR APPROVAL

****

Customer:	TMPBU	
Description:	DC FAN	
Customer P/N:	3620936511	REV:
Delta Model NO.:	AFB0612DH-BC01	**Delta Safety Model NO: N/A**
Sample Rev:	01	Issue NO:
Sample Issue Date:	AUG.13.2012	Quantity:

1. SCOPE:

THIS SPECIFICATION DEFINES THE ELECTRICAL AND MECHANICAL CHARACTERISTICS OF THE DC BRUSHLESS AXIAL FLOW FAN. THE FAN MOTOR IS WITH SINGLE PHASES AND FOUR POLES.

2. CHARACTERS:

ITEM	DESCRIPTION
RATED VOLTAGE	12.0 VDC
OPERATION VOLTAGE	10.8 - 13.2 VDC
INPUT CURRENT	0.31 (MAX. 1.20) A **(CURRENT ON SAFETY LABEL 1.20A)**
INPUT POWER	3.72 (MAX. 14.40) W
SPEED (FAN ONLY)	7300±10% R.P.M.
SPEED (ON SINK)	7200±10% R.P.M.
MAX. AIR FLOW (AT ZERO STATIC PRESSURE)	0.878 (MIN. 0.790) M^3/MIN. 31.01 (MIN. 27.91) CFM
MAX. AIR PRESSURE (AT ZERO AIRFLOW)	13.79 (MIN. 11.17) mmH_2O 0.543 (MIN. 0.440) $inchH_2O$
ACOUSTICAL NOISE (AVG. ON SINK)	61.0 (MAX. 65.0) dB-A
INSULATION TYPE	UL: CLASS A

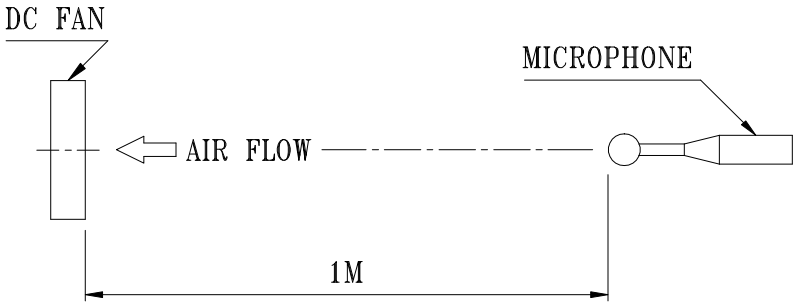
(continued)

PART NO: 3620936511

DELTA MODEL: AFB0612DH-BC01

INSULATION STRENGTH	10 MEG OHM MIN. AT 500 VDC (BETWEEN FRAME AND (+) TERMINAL)
DIELECTRIC STRENGTH	5 mA MAX. AT 500 VAC 50/60 Hz ONE MINUTE, (BETWEEN FRAME AND (+) TERMINAL)
EXTERNAL COVER	OPEN TYPE
LIFE EXPECTANCE (AT LABEL VOLTAGE)	80,000 HOURS CONTINOUS OPERATION AT 45 °C WITH 15 ~ 65 %RH.
ROTATION	CLOCKWISE VIEW FROM NAME PLATE SIDE
OVER CURRENT SHUT DOWN	THE CURRENT WILL SHUT DOWN WHEN LOCKING ROTOR.
LEAD WIRE	UL 10368 -F- AWG #24 BLACK WIRE:NEGATIVE (-) YELLOW WIRE:POSITIVE (+) GREEN WIRE:TACHOMETER OUTPUT (F00) BLUE WIRE:SPEED CONTROL (PWM)

NOTES: 1. ALL READINGS ARE MEASURED AFTER STABLY WARMING UP THROUGH 10 MINUTES.
2. THE VALUES WRITTEN IN PARENS , ( ), ARE LIMITED SPEC.
3. ACOUSTICAL NOISE MEASURING CONDITION:



NOISE IS MEASURED AT RATED VOLTAGE IN FREE AIR IN ANECHOIC CHAMBER WITH B & K SOUND LEVEL METER WITH MICROPHONE AT A DISTANCE OF ONE METER FROM THE FAN INTAKE.

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3. MECHANICAL:

3-1. DIMENSIONS ---------- SEE DIMENSIONS DRAWING

3-2. FRAME ---------- PLASTIC UL: 94V-0

(THE CONTACT OF HALOGEN LESS THAN 1500 PPM FOR USING EDX ...ETC)

3-3. IMPELLER ---------- PLASTIC UL: 94V-0

(THE CONTACT OF HALOGEN LESS THAN 1500 PPM FOR USING EDX ...ETC)

3-4. BEARING SYSTEM ---------- TWO BALL BEARING

3-5. WEIGHT ---------- 85 GRAMS

4. ENVIRONMENTAL:

4-1. OPERATING TEMPERATURE ---------- -10 TO +70 DEGREE C

4-2. STORAGE TEMPERATURE ---------- -30 TO +85 DEGREE C

4-3. OPERATING HUMIDITY --- 85% RELATIVE HUMIDITY WITH 55 DEGREE C

4-4. STORAGE HUMIDITY ---------- 5 TO 95 % RH

5. PROTECTION:

5-1. LOCKED ROTOR PROTECTION

IMPEDANCE OF MOTOR WINDING PROTECTS MOTOR FROM FIRE IN 96 HOURS OF LOCKED ROTOR CONDITION AT THE RATED VOLTAGE.

5-2. POLARITY PROTECTION

BE CAPABLE OF WITHSTANDING IF REVERSE CONNECTION FOR POSITIVE AND NEGATIVE LEADS.

6. RE OZONE DEPLETING SUBSTANCES:

6-1. NO CONTAINING PBBs, PBBOs, CFCs, PBBEs, PBDPEs AND HCFCs.

7. PRODUCTION LOCATION

7-1. PRODUCTS WILL BE PRODUCED IN CHINA OR TAILAND OR TAIWAN.

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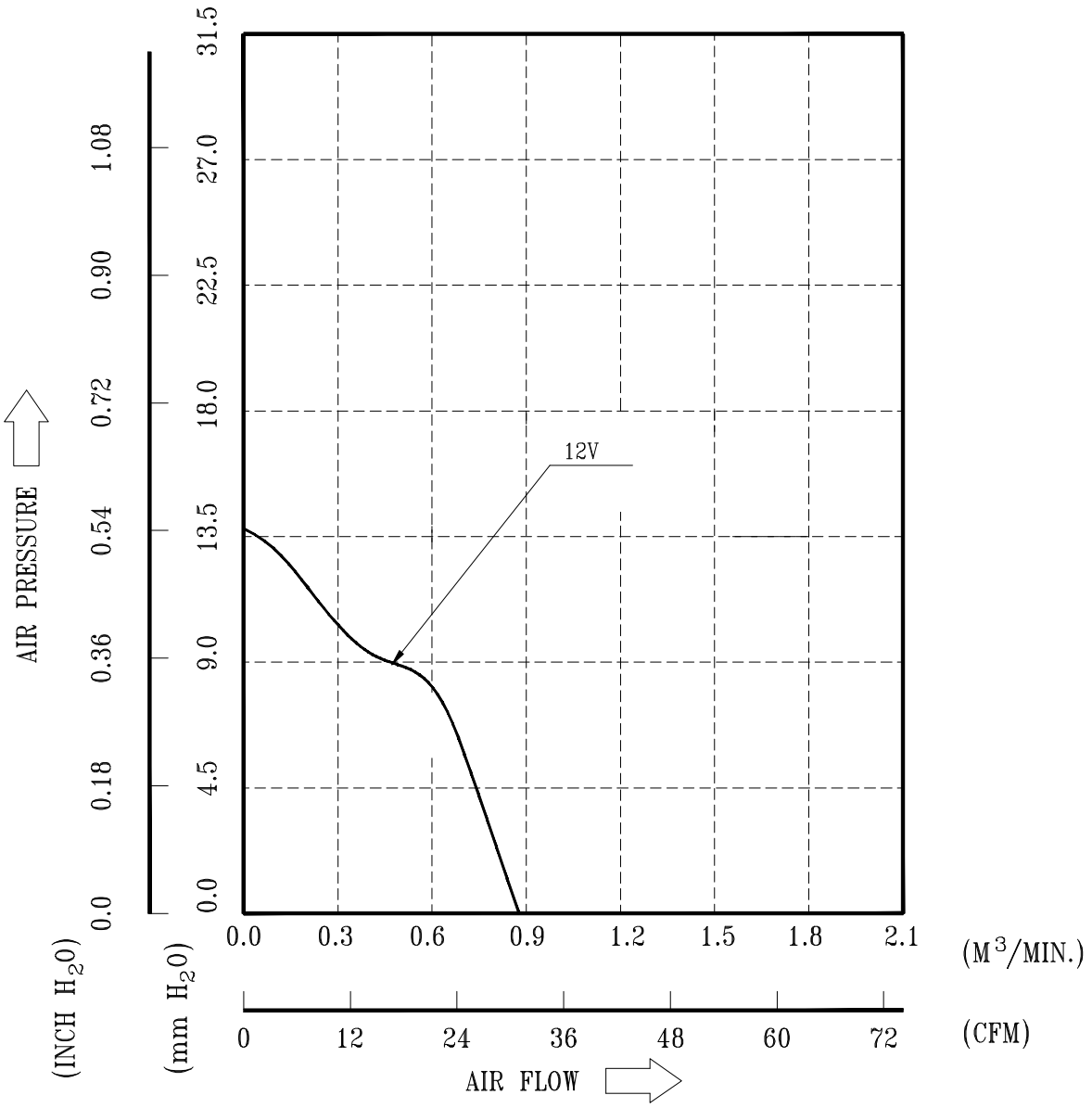
8. P & Q CURVE:



* TEST CONDITION: INPUT VOLTAGE ----- OPERATION VOLTAGE
TEMPERATURE ------ ROOM TEMPERATURE
HUMIDITY ---------- 65%RH

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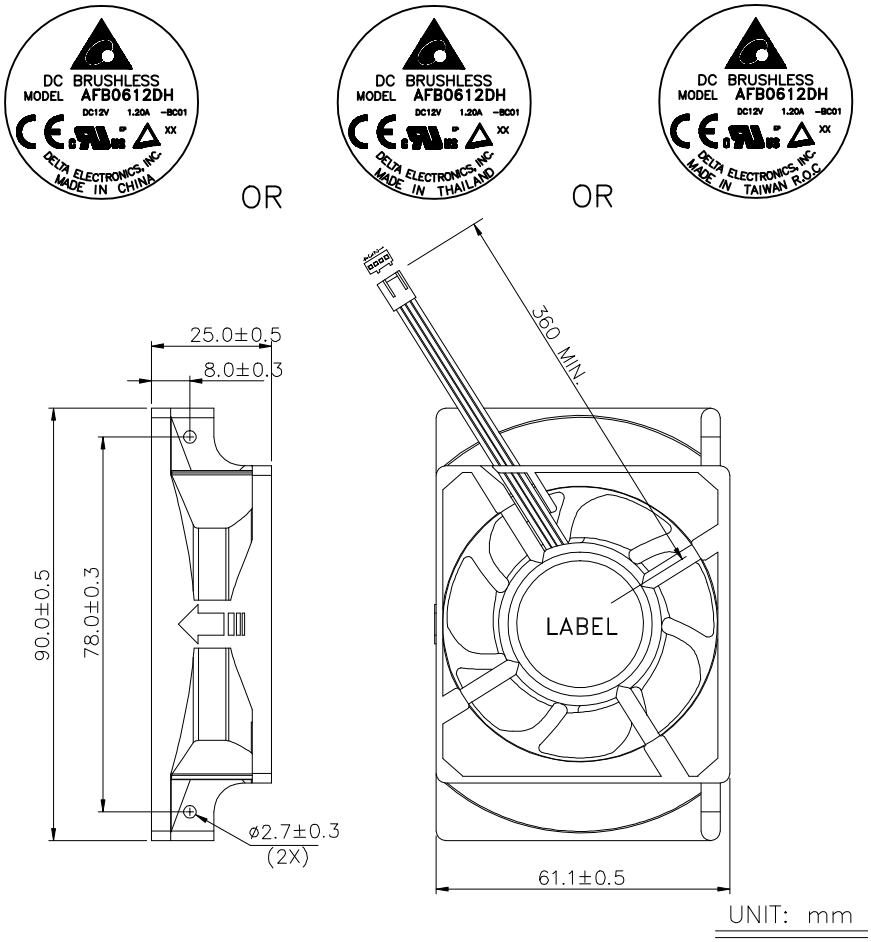
9. DIMENSION DRAWING:

LABEL:

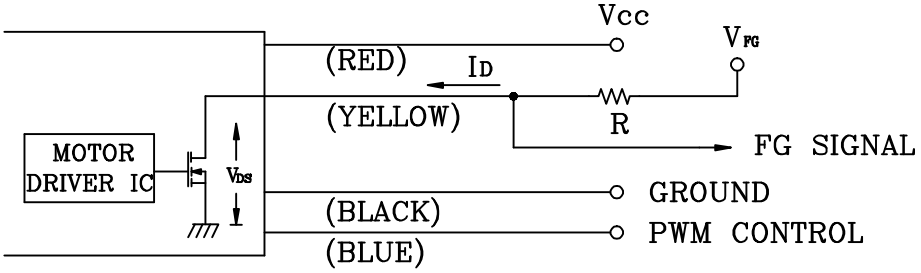


NOTES : 1. LEAD WIRE: UL 10368 -F- AWG #24
PIN 1: BLACK WIRE: NEGATIVE (-)
PIN 2: YELLOW WIRE: POSITIVE (+)
PIN 3: GREEN WIRE: TACHOMETER OUTPUT (F00)
PIN 4: BLUE WIRE: SPEED CONTROL (PWM)

2. HOUSING : MOLEX 47054-1000 OR EQUIVALENT
3. TERMINAL : MOLEX 2759T 08-50-0113 OR EQUIVALENT
4. THIS PRODUCT IS RoHS COMPLIANT
5. DELTA'S RESTRICTIONS ON HALOGEN APPLY ONLY TO BROMINATED AND CHLORINATED COMPOUNDS. NO OTHER HALOGEN IS RESTRICTED. SUBSTANCES RESTRICTIONS FOR HALOGEN-FREE (INCLUDE FAN PLASTIC PARTS, PWB BOARD, IC, ELECTRICAL MATERIALS & CABLE ASSY),
a. BROMINE(Br) < 900 PPM,
b. CHLORINE(Cl) < 900 PPM
c. (Br) + (Cl) < 1500 PPM.

10. FREQUENCY GENERATOR (FG) SIGNAL:

10-1. OUTPUT CIRCUIT - OPEN DRAIN MODE:



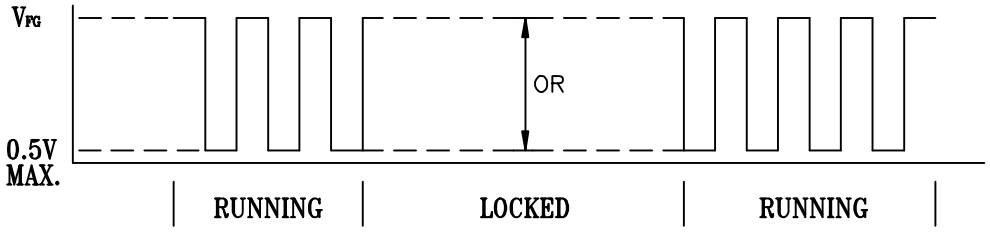
CAUTION: THE FG SIGNAL LEAD WIRE MUST BE KEPT AWAY FROM "+" LEAD WIRE & "−" LEAD WIRE.

10-2. SPECIFICATION:

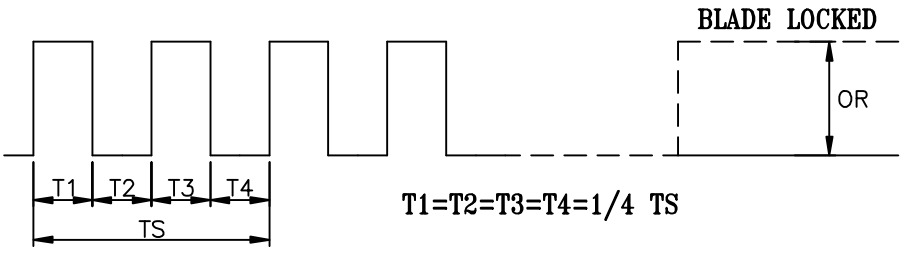
V_{DS} (LINEAR)=0.5V MAX. V_{FG} =5.0V TYP. (Vcc MAX.)

I_D =5mA MAX. $R \geq V_{FG}/I_D$

10-3. FREQUENCY GENERATOR WAVEFORM:



FAN RUNNING FOR 4 POLES



T1=T2=T3=T4=1/4 TS

N=R.P.M

TS=60/N(SEC)

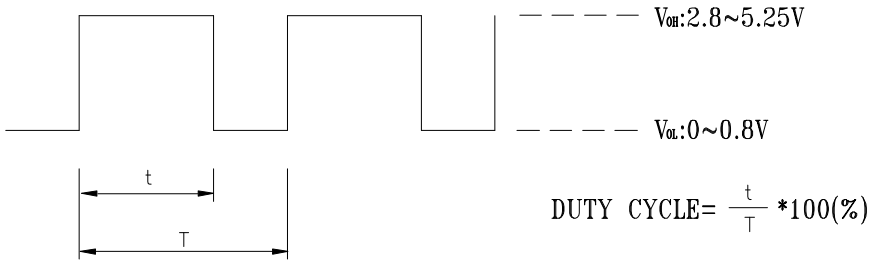
*VOLTAGE LEVEL AFTER BLADE LOCKED

*4 POLES

A00

11. PWM CONTROL SIGNAL:

SIGNAL VOLTAGE RANGE: 0~5.25 VDC

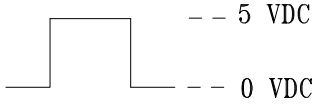


- THE FREQUENCY FOR CONTROL SIGNAL OF THE FAN SHALL BE ABLE TO ACCEPT A 21KHZ~28KHZ.
- THE PREFERRED OPERATING POINT FOR THE FAN IS 25K HZ.
- AT 100% DUTY CYCLE,THE ROTOR WILL SPIN AT MAXIMUM SPEED.
- AT 0~10% DUTY CYCLE,THE ROTOR WILL SPIN AT MINIIMUM SPEED.
- WITH CONTROL SIGNAL LEAD DISCONNECTED,THE FAN WILL SPIN AT MAXIMUM SPEED.

12. SPEED VS PWM CONTROL SIGNAL:
(AT 25°C, RATED VOLTAGE & PWM SIGNAL AS FOLLOW)

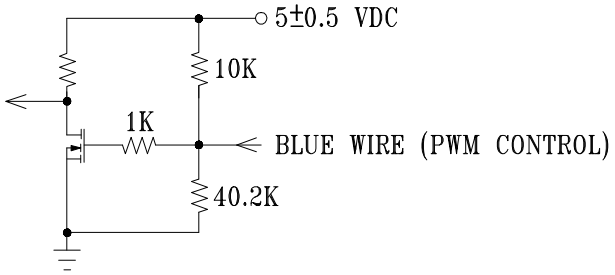
DUTY CYCLE (%)	FAN ONLY		FAN ON SINK	
	SPEED (R.P.M.)	CURRENT (A) TYP.	SPEED (R.P.M.)	CURRENT (A) TYP.
100	7300±10%	0.31	7200±10%	0.31
0~10	1000±250	0.03	1000±250	0.03

* PWM SIGNAL
PWM FREQUENCY = 25KHz



- MIN. START DUTY CYCLE : 30%.
WHEN DUTY CYCLE IS SET FOR MORE THAN 30%, THE FAN WILL BE ABLE TO START FROM A DEAD STOP.

13. PWM CONTROL LEAD WIRE INPUT IMPEDANCE:



Application Notice

1. Delta will not guarantee the performance of the products if the application condition falls outside the parameters set forth in the specification.
2. A written request should be submitted to Delta prior to approval if deviation from this specification is required.
3. Please exercise caution when handling fans. Damage may be caused when pressure is applied to the impeller, if the fans are handled by the lead wires, or if the fan was hard-dropped to the production floor.
4. Except as pertains to some special designs, there is no guarantee that the products will be free from any such safety problems or failures as caused by the introduction of powder, droplets of water or encroachment of insect into the hub.
5. The above-mentioned conditions are representative of some unique examples and viewed as the first point of reference prior to all other information.
6. It is very important to establish the correct polarity before connecting the fan to the power source. Positive (+) and Negative (-). Damage may be caused to the fans if connection is with reverse polarity, if there is no foolproof method to protect against such error specifically mentioned in this spec.
7. Delta fans without special protection are not suitable where any corrosive fluids are introduced to their environment.
8. Please ensure all fans are stored according to the storage temperature limits specified. Do not store fans in a high humidity environment. We highly recommend performance testing is conducted before shipping, if the fans have been stored over 6 months.
9. Not all fans are provided with the Lock Rotor Protection feature. If you impair the rotation of the impeller for the fans that do not have this function, the performance of those fans will lead to failure.
10. Please be cautious when mounting the fan. Incorrect mounting of fans may cause excess resonance, vibration and subsequent noise.
11. It is important to consider safety when testing the fans. A suitable fan guard should be fitted to the fan to guard against any potential for personal injury.
12. Except where specifically stated, all tests are carried out at room (ambient) temperature and relative humidity conditions of 25°C, 65% RH. The test value is only for fan performance itself.
13. Be certain to connect an " 4.7µF or greater" capacitor to the fan externally when the application calls for using multiple fans in parallel, to avoid any unstable power.