

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

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Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China









Model Name: FHS-A9025S17

Application:

- Intel LGA775 Conroe-L Celeron CPU
- E1000/400 sequence

Thermal & Mechanical Spec.:

- Thermal performance for 35W CPU
- HSK Assembly Weight: 205 g (ref.)
- Clipping Force: 20 Kgf (ref.)

Component Specification:

1. Heat Sink

Type: Extruded HSK

Material: Aluminum A6063 or Equivalent.

Dimension: 90*90*19.05 mm

2. Thermal interface material $\sqrt{03}$

Material: Dow Corning TC-5630 or Equivalent.

3. Fan (90x90x25 mm with single speed)

Rated Voltage: 12 V

Life Time:

Superflo bearing 50000 hrs

Connector:

a. Lead wire: UL 1430 AWG#26

pin 1: black wire-----(-)

pin 2: yellow wire----(+)

pin 3: green wire----(F00)

b. Housing: Molex 2695-03 22-01-3037 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

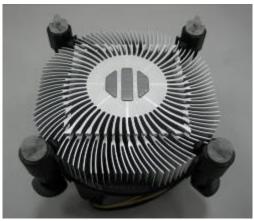
DELTA ELECTRONICS, INC.
252, Shang Ying Road, Kuei San
TAOYUAN SHIEN 333,
TAIWAN,R.O.C.
TEL

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

Pictures







DELTA ELECTRONICS EUROPE LTD.2 YOUNG PLACE
KELVIN INDUSTRIAL ESTATE
EAST KILBRIDE, GLASGOW G75 OTD, U.K.
TEL: 44-1355-58888
FAX: 44-1355-588889

Date: 27-Apr-07

APPROVAL SHEET

Customer Name .:			
Model Name.:	COOLER		
Delta Part No.: FHS-A9025S17			
Customer Part No.	:		
Spec Issue Date .:	01/05/2016		
Spec Revision:	03		
	PY OF THIS SPECIFICATION BACK AFTER YOU L FOR PRODUCTION PRE-ARRANGMENT.		
Approved By	<u>:</u>		
Date:			

Approval	Check	Designer
Alex-Hsia	Charles. Chen	Skyler-Huang

Form No.: tMP—D029 Form Rev.: 00



REV.	Description	Drawn	Checked	Approved	Issue Date
00	ISSUE SPEC	Skyler-Huang12/29'09		Alex-H;ia 12/29'09	
01	1. Modify the Package spec	Skyler-Huang08/09'12	Charles, Chem 08/09°12	Alex-Hsia 08/09'12	
02	1. Modify the Package spec	Skyler-Huang06/10'13	Charles. Chen 06/10°13	Alex-H;\a\ 06/10'13	
03	1.Change the TIM to TC-5630	Skyler-Huang1/05'16	Charles. Chen 1/05°16	Alex-Hsia 1/05'16	
Description	n:				
	SAMPLE REVI	SION CODE LIST			
Part No.					REV
DELTA MOI	DEL:				
	FHS-A9025S17		TOTAL	23 PAGE	03

Form No.: tMP-D029 Form Rev.: 00

CONTENTS

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4	Fan	15	

Form Rev.: 00 Form No.: tMP-D029



1. SPECIFICATION

Characters

Item	Description
Scope	THIS SPECIFICATION DEFINES THE ELECTRICAL AND
	MECHANICAL CHARACTERISTICS OF THE FAN HEATSINK
Application	INTEL P4 CPU COOLER
Specification	
a: Thermal Resistance	0.640 (°C/W) (REF.)
b: total weight	205 g (REF.)
c: clip force	20 kgf (REF.)

BOM

Item	Part Name	Material	Part NO.	Q'TY	Remark
1	FAN	PBT	3622916811	1	
2	HSK	AL A6063	3346208500	1	
3	FASTENER CAP	PC	3470415400	4	
4	FASTENER BASE	PC	3470415500	4	
5	LABEL	PE	3266708200	1	
6	TIM	DOW TC-1996	4021107300	0.1125g	Rev03

Form No.: tMP—D029 Form Rev.: 00

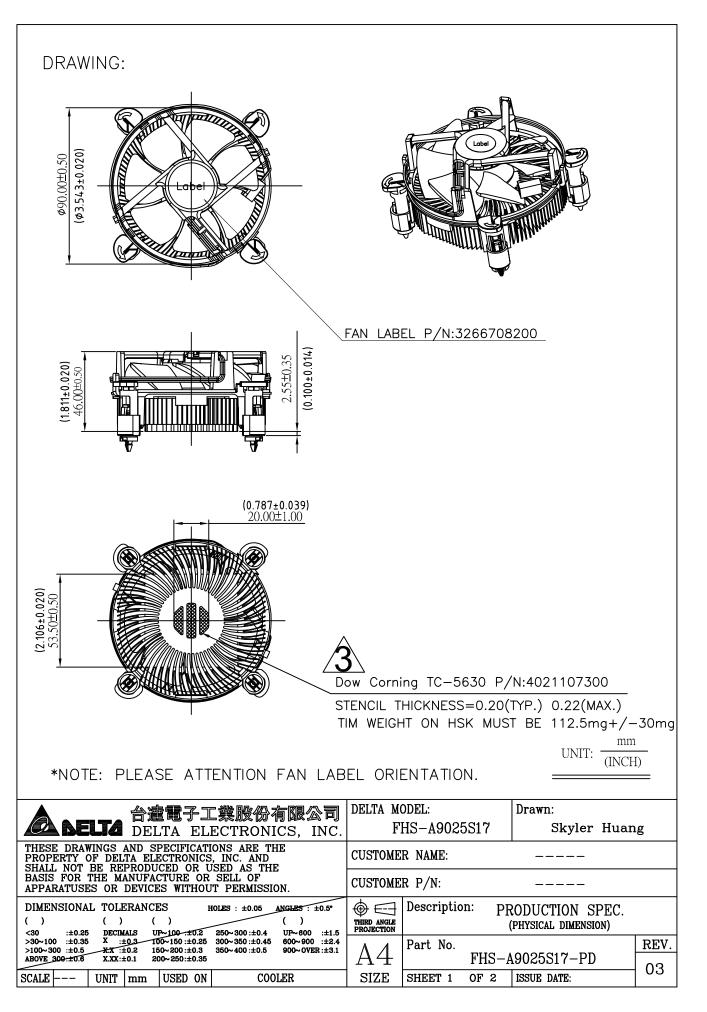


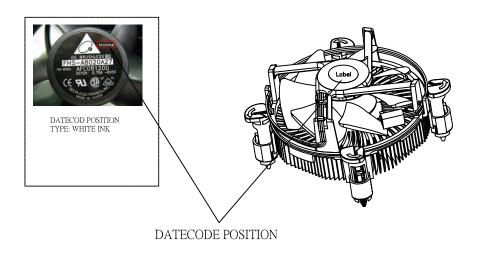
2. PRINT

Assembly Drawing

Parts Drawing

Form No.: tMP-D029 Form Rev.: 00

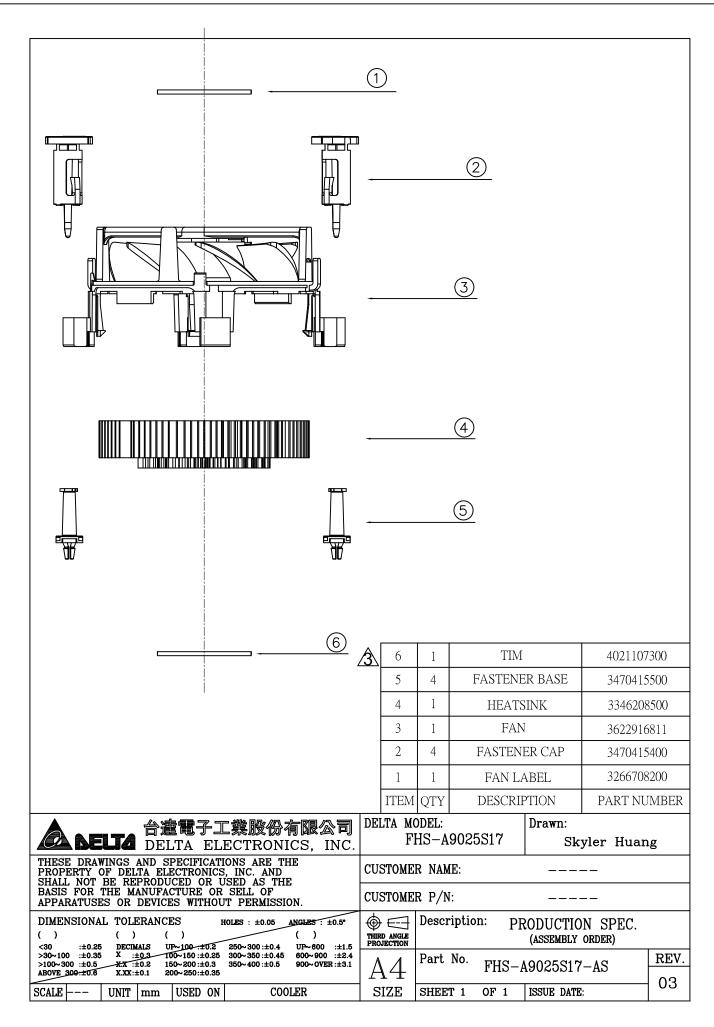


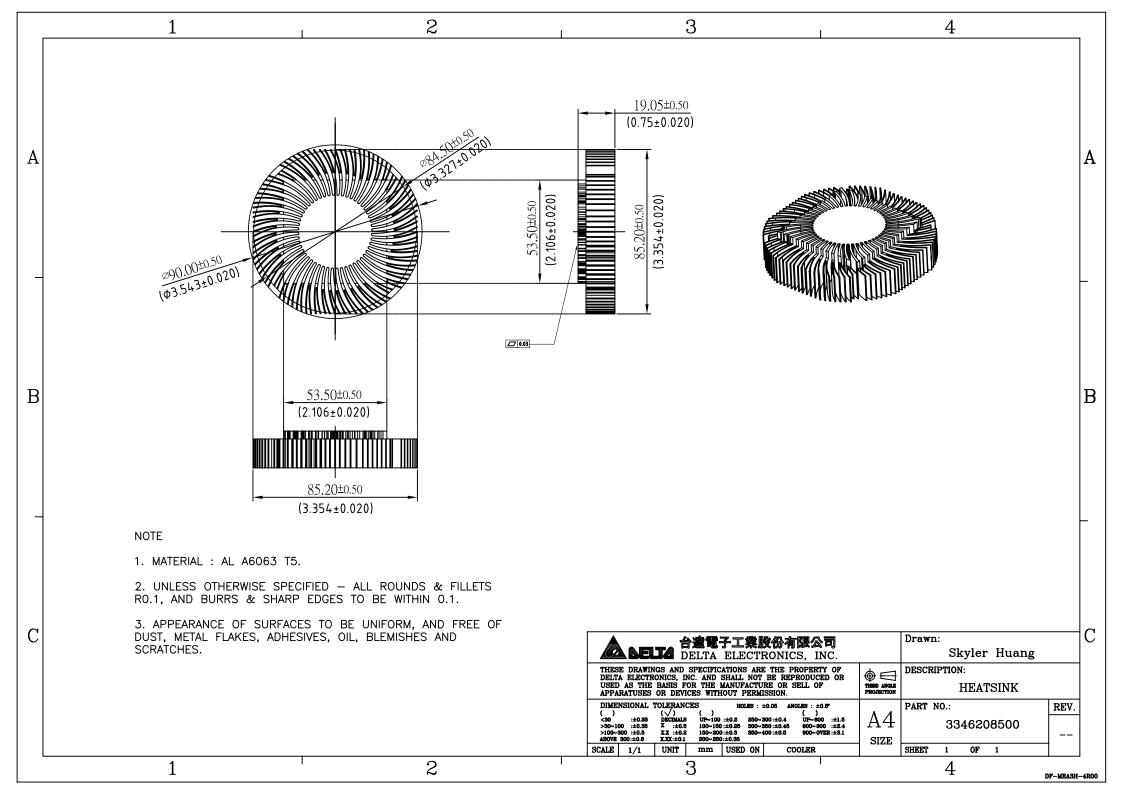


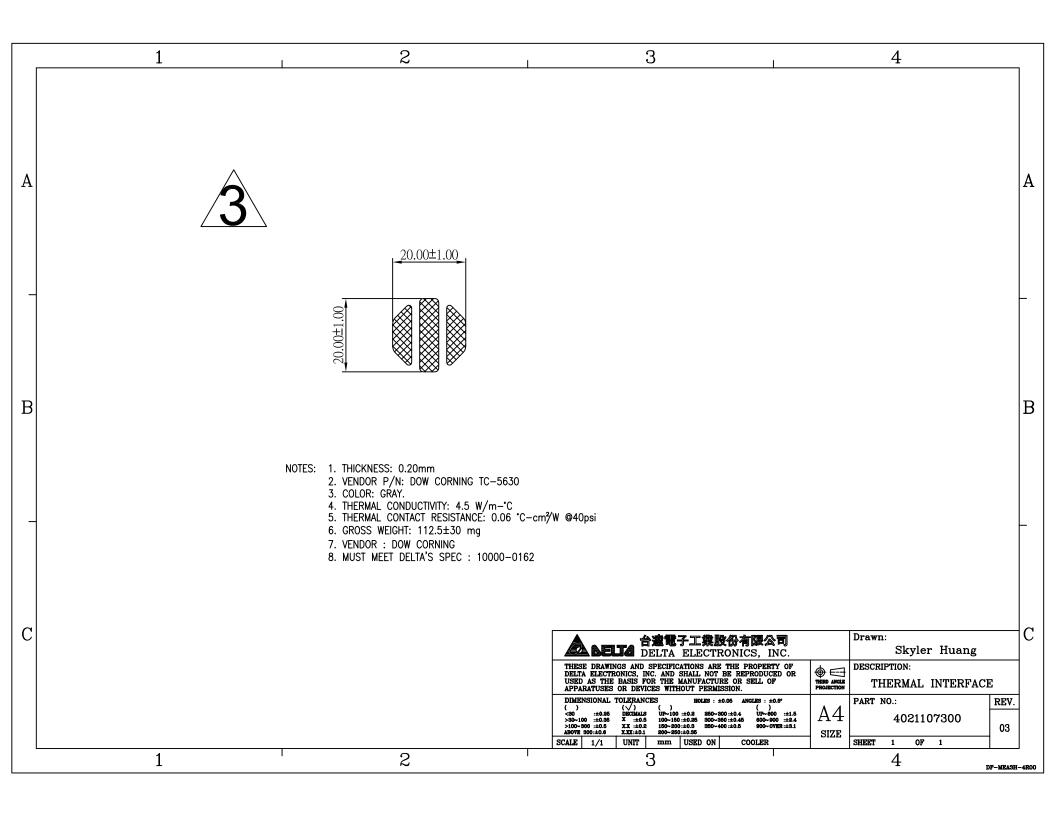
NOTE:

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

▲ 台畫電子工業股份有限公司	DELTA MODEL: Drawn:
DELTA ELECTRONICS, INC.	FHS-A9025S17 Skyler Huang
THESE DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF DELTA ELECTRONICS, INC. AND SHALL NOT BE REPRODUCED OR USED AS THE	CUSTOMER NAME:
BASIS FOR THE MANUFACTURE OR SELL OF APPARATUSES OR DEVICES WITHOUT PERMISSION.	CUSTOMER P/N:
DIMENSIONAL TOLERANCES HOLES: ±0.05 ANGLES: ±0.5° () () () () () () (30 :±0.25 DECIMALS UP~100:±0.2 250~300:±0.4 UP~600 :±1.5	Description: PRODUCTION SPEC. (PHYSICAL DIMENSION)
>30~100 :±0.35	A4 Part No. FHS-A9025S17-PD 03
SCALE UNIT mm USED ON COOLER	SIZE SHEET 2 OF 2 ISSUE DATE:





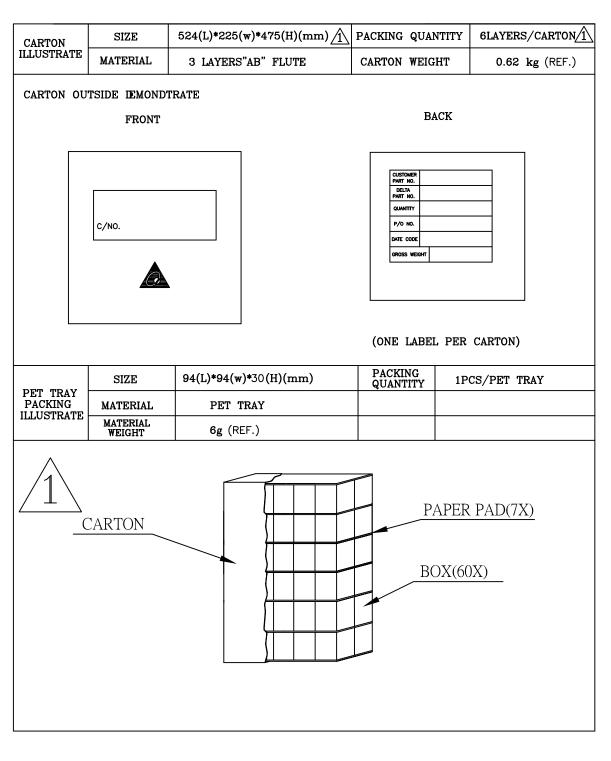




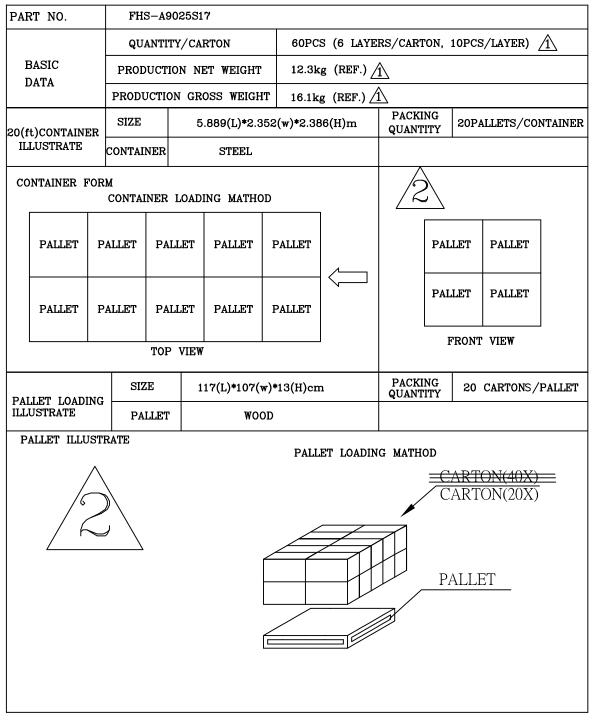
3. PACKING PLAN

Packing Specification

Form No.: tMP—D029 Form Rev.: 00



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BASIS FOR THE MANUFACTURE OR SELL OF APPARATUSES OR DEVICES WITHOUT PERMISSION.	CUSTOMER P/N:
DIMENSIONAL TOLERANCES HOLES: ±0.05 ANGLES: ±0.5° () () () () () () <\$0 ::±0.25 DECIMALS UP-100::±0.2 250~300:±0.4 UP-800 ::±1.5	Description: PRODUCTION SPEC. (PACKING ASSMEBLY)
>30~100 :±0.35 X :±0.3 100~150 :±0.25 300~350 :±0.45 600~900 :±2.4 >100~300 :±0.5	A4 Part No. FHS-A9025S17-PA REV.
SCALE UNIT mm USED ON COOLER	SIZE SHEET 1 OF 2 ISSUE DATE:



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BASIS FOR THE MANUFACTURE OR SELL OF APPARATUSES OR DEVICES WITHOUT PERMISSION.	CUSTOMER P/N:
DIMENSIONAL TOLERANCES HOLES: ±0.05 ANGLES: ±0.5° () () () () () () <80 ::±0.25 DECIMALS UP~100 ::±0.2 250~300:±0.4 UP~600 ::±1.5	Description: PRODUCTION SPEC. (PACKING ASSMEBLY)
>30~100 :±0.35 X :±0.3 100~150 :±0.25 300~350 :±0.45 600~900 :±2.4 >100~300 :±0.5	A4 Part No. FHS-A9025S17-PA REV.
SCALE UNIT mm USED ON COOLER	SIZE SHEET 2 OF 2 ISSUE DATE:



4. FAN

Fan Specification

Form No.: tMP-D029 Form Rev.: 00



SPECIFICATION FOR APPROVAL

Customer	IMP BU		
Description	DC FAN		
Part No		R E V	
Delta Model No	AUB0912M-8J29	REV.	00
Sample Issue No			
Sample Issue Da	te SEP.09.2008		
·			
BACK AFTER	ONE COPY OF THIS YOU SIGNED A 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 HSIEN 333, TAIWAN, R. O. C.

FAX : 886 - (0)3 - 3591991

SPECIFICATION FOR APPROVAL

TEL: 886-(0)3-3591968

Customer:	TMP_BU		
Description:	DC FAN		
Customer P/N:		REV:	
Delta Model NO.:	AUB0912M-8J29		
Sample Rev:	00	Issue NO:	
Sample Issue Date	: SEP.09.2008	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
START UP CURRENT	MAX. 1.2 A
INPUT CURRENT	0.09 (MAX. 0.20) A
INPUT POWER	1.08 (MAX. 2.40) W
SPEED (FAN ONLY)	2250±10% R.P.M.
SPEED (FAN ON SINK)	2200±10% R.P.M.
MAX. AIR FLOW (FAN ONLY) (AT ZERO STATIC PRESSURE)	0.619 (MIN. 0.557) M ³ /MIN. 21.86 (MIN. 19.67) CFM
MAX. AIR PRESSURE (FAN ONLY) (AT ZERO AIRFLOW)	1.86 (MIN. 1.51) mmH ₂ 0 0.073 (MIN. 0.059) inchH ₂ 0
ACOUSTICAL NOISE(ON SINK AVG.)	27.0 (MAX. 31.0) dB-A
INSULATION TYPE	UL: CLASS A

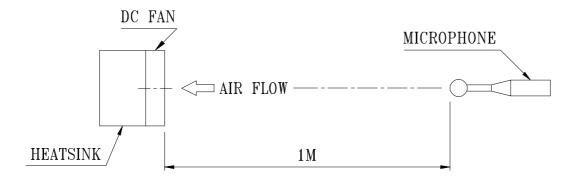
(continued)

page: 1

PART NO:	
DELTA MODEL:	AUB0912M-8J29

	<u> </u>
INSULATION STRENGTH	10 MEG OHM MIN. AT 500 VDC (BETWEEN FRAME AND (+) TERMINAL)
DIELECTRIC STRENGTH	5 mA MAX. AT 500 VAC 60 Hz ONE MINUTE, (BETWEEN FRAME AND (+) TERMINAL)
EXTERNAL COVER	OPEN TYPE
LIFE EXPECTANCE	50,000 HOURS CONTINUOUS OPERATION AT 40 °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 1430 -F- AWG #26 BLACK WIRE:NEGATIVE(-) YELLOW WIRE:POSITIVE(+) GREEN WIRE:TACHOMETER OUTPUT (F00)

- 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.

A00

PART NO:	
DELTA MODEL: AUB0912M-8J29	
3. MECHANICAL:	
3-1. DIMENSIONS	SEE DIMENSIONS DRAWING
3-2. FRAME	PLASTIC UL: 94V-0
3-3. IMPELLER	PLASTIC UL: 94V-0
3-4. BEARING SYSTEM	SUPERFLO BEARING
3-5. WEIGHT	82 GRAMS
4. ENVIRONMENTAL:	
4-1. OPERATING TEMPERATURE	10 TO +60 DEGREE C
4-2. STORAGE TEMPERATURE	40 TO +70 DEGREE C
4-3. OPERATING HUMIDITY	5 TO 95 % RH
4-4. STORAGE HUMIDITY	5 TO 95 % RH

5. PROTECTION:

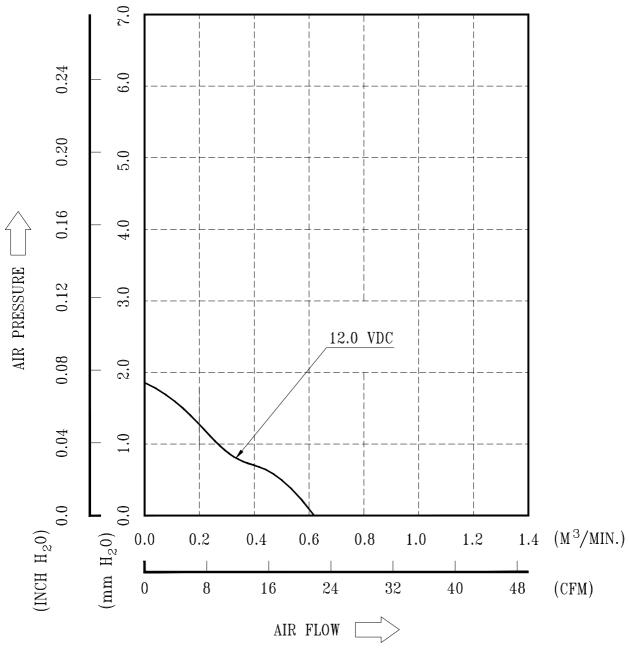
- 5-1. LOCKED ROTOR PROTECTION

 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 THAILAND OR TAIWAN.

PART NO:	
DELTA MODEL:	AUB0912M-8J29

8. P & Q CURVE:



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

page: 4 A00

PART NO:

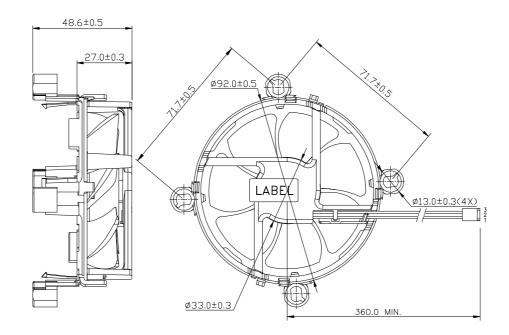
DELTA MODEL:

AUB0912M-8J29

9. DIMENSION DRAWING:

LABEL:

DELTA AUBO912M -8J29 yymmdd CHINA



UNIT: MM

NOTE:

1. LEAD WIRE: UL 1430 -F- AWG #26

PIN 1 : BLACK WIRE: NEGATIVE(-)
PIN 2 : YELLOW WIRE: POSITIVE(+)

PIN 3: GREEN WIRE: TACHOMETER OUTPUT (F00)

2. HOUSING: MOLEX 2695-03 22-01-3037 OR EQUIVALENT

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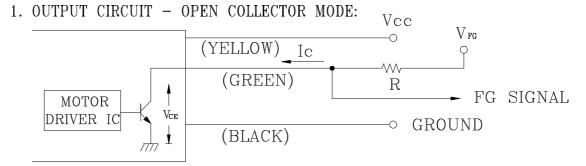
- 3. TERMINAL: MOLEX 2759T 08-50-0113 OR EQUIVALENT
- 4. THIS PRODUCT IS ROHS COMPLIANT

A00

PART NO:

DELTA MODEL: AUB0912M-8J29

10. FREQUENCY GENERATOR (FG) SIGNAL:



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

2. SPECIFICATION:

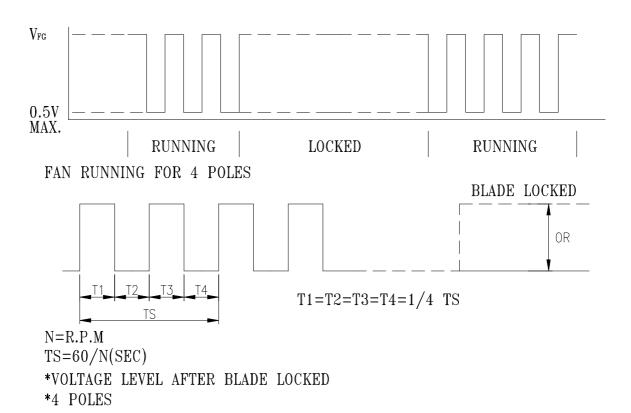
$$V_{CE}(sat) = 0.5V$$

 $V_{FG} = 5.0V$ TYP. (Vec MAX.)

 $I_c = 10 \text{mA}$ MAX.

 $R \ge V_{FG} / I_{C}$

3. FREQUENCY GENERATOR WAVEFORM:



A00



Descriptions:

- 1. Delta will not guarantee the performance of the products if the application condition falls outside the parameters set forth in the specification.
- 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 fans are 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, as there is no foolproof method to protect against such error.
- 7. Delta fans 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.
- 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 relative (ambient) temperature and humidity conditions of 25°C, 65%. The test value is only for fan performance itself.
- 13. Be certain to connect an "over $4.7\mu F$ " capacitor to the fan externally when the application calls for using multiple fans in parallel, to avoid any unstable power.