

## **SPECIFICATION FOR APPROVAL**

Description : DC FAN		
Customer Part No	REV.:	
Delta Model No. : ASB01703HA3-00CAH	REV. :	03
Sample Issue No. :		
Sample Issue Date : OCT.07 2019		
PLEASE SEND ONE COPY OF THIS SPEC		
YOU SIGNED APPROVAL FOR PRODUCT	ON PRE-A	RRANGMENT.
APPROVED BY:		
ALLINOVED DT.		
DATE :		

DELTA ELECTRONICS, INC.

TAOYUAN PLANT

Customer STD

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. No.252, Shanying Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

# **STATEMENT OF DEVIATION**

TEL: 886-(0)3-3591968

FAX: 886-(0)3-3591991

■ NONE  □ DESCRIPTION:		

Delta Electronics, Inc.

No.252, Shanying Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

### **Specification For Approval**

TEL: 886-(0)3-3591968

FAX: 886-(0)3-3591991

Customer: STD			
Description : DC FAN			
Customer P/N :		rev.:	
Delta model no. : ASB0	1703HA3-00CAH	Delta Safety Model No.:	ASB01703HA3-00
Sample revision. :	03	Issue no.:	
Sample issue date : OC	T 07 2019	Quantity ·	

#### 1. SCOPE:

THIS SPECIFICATION DEFINES THE ELECTRICAL AND MECHANICAL CHARACTERISTICS OF THE DC BRUSHLESS AXIAL FLOW FAN.

#### 2. CHARACTERS:

ITEM	DESCRIPTION
RATED VOLTAGE	3.0V
OPERATION VOLTAGE	2.0 - 3.5 VDC
INPUT CURRENT(AVG.)#	0.06 (MAX 0.10) A SAFETY CURRENT ON LABBEL: 0.10A
INPUT POWER(AVG.)	0.18 (MAX 0.3) W
SPEED	12000±25%R.P.M.
MAX. AIR FLOW (AT ZERO STATIC PRESSURE)	0.014 (MIN. 0.011) M <sup>3</sup> /MIN. 0.510 (MIN. 0.383) CFM
MAX. AIR PRESSURE (AT ZERO AIRFLOW)	1.800 (MIN. 1.013) mmH <sub>2</sub> O 0.071 (MIN. 0.040) inchH <sub>2</sub> O
ACOUSTICAL NOISE (AVG.) TEST DISTANCE : 0.3M	30.0 (MAX. 36.0) dB-A
INSULATION TYPE	UL: CLASS A
INSULATION STRENGT	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)

# THE MAX VALUE OF CONSUMING CURRENT DOES NOT REPRESENT THE PEAK VALUE THE PEAK VALUE NEED MEASURE BY OSCILLOSCOPE.

(continued)

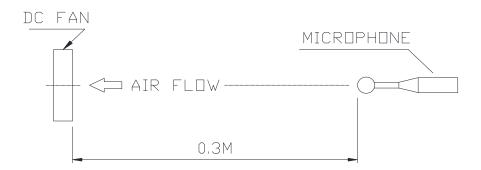
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DELTA MODEL: ASB01703HA3-00CAH

LIFE EXPECTANCE (L10) (AT LABEL VOLTAGE)	30,000 HOURS CONTINUOUS OPERATION AT 40 $^{\circ}$ C WITH 15 $\sim$ 65 %RH.
ROTATION	CLOCKWISE VIEW FROM NAME PLATE SIDE
LOCKED PROTECTION	THE FAN WILL SHUT DOWN WHEN LOCKED ROTOR.

#### NOTES:

- 1. ALL READINGS ARE MEASURED AFTER STABLY WARMING UP THROUGH 10 MINUTES.
- 2. STANDARD AIR PROPERTY IS AIR AT (Td) 25°C TEMPERATURE, (RH) 65% RELATIVE HUMIDITY, AND (Pb) 760 mmHg BAROMETRIC PRESSURE.
- 3. THE VALUES WRITTEN IN PARENS, ( ), ARE LIMITED SPEC.
- 4. 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.

#### 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 EDXETC)
3-3. PILLOW	PLASTIC UL: 94V-0
(THE CONTACT OF HALOGEN LESS	THAN 1500 PPM FOR USING EDXETC)
3-4. IMPELLER	PLASTIC UL: 94V-0
(THE CONTACT OF HALOGEN LESS	THAN 1500 PPM FOR USING EDXETC)
3-5. BEARING SYSTEM	SLEEVE BEARINGS
3-6. WEIGHT	1.7 GRAMS(REF.)

#### 4. ENVIRONMENTAL:

4-1. OPERATING TEMPERATURE	
4-2. STORAGE TEMPERATURE	
4-3. OPERATING HUMIDITY	5 TO 90 % 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. IP55 PROTECTION

#### 6. RE OZONE DEPLETING SUBSTANCES:

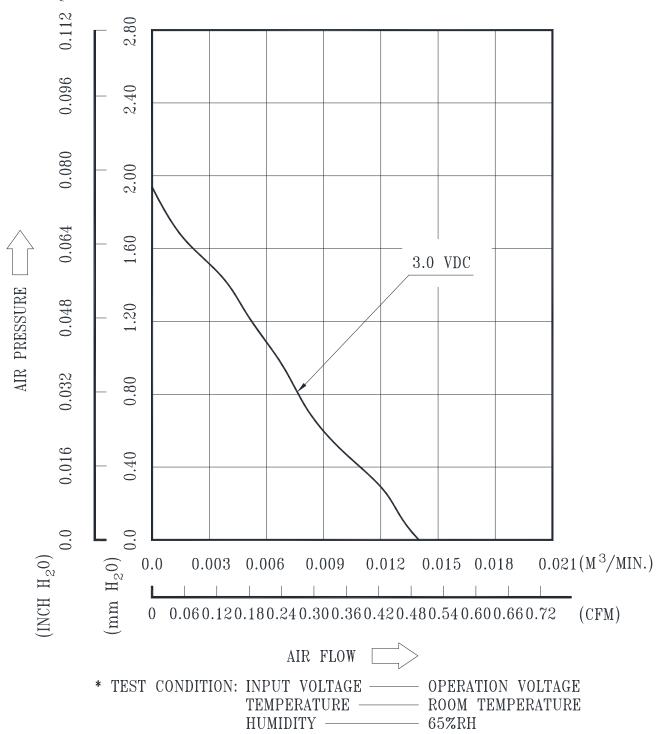
6-1. NO CONTAINING PBBs, PBBOs, CFCs, PBBEs, PBDPEs AND HCFCs.

#### 7. PRODUCTION LOCATION

7-1. PRODUCTS WILL BE PRODUCED IN CHINA OR THAILAND.

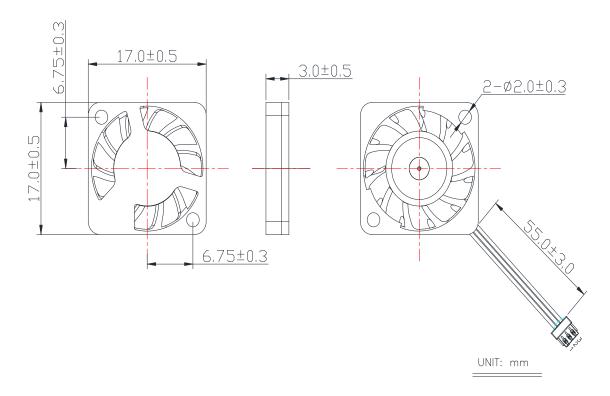
DELTA MODEL: ASB01703HA3-00CAH

### 8. P & Q CURVE:



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#### 9. DIMENSION DRAWING:



#### NOTES:

1. HOUSING: JST 03SUR-32S OR ACES 50375-00311-001 (OR EQUIVALENT)

LEAD WIRE: UL10064 AWG#32

PIN 1: RED WIRE---(+)

PIN 2: BLUE WIRE---(F00)

PIN 3: BLACK WIRE---(-)

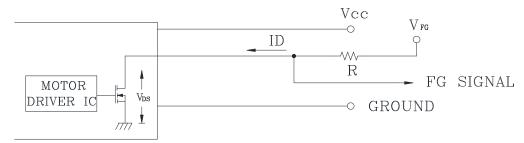
- 2. THIS PRODUCT IS ROHS COMPLIANT.
- 3. DELTA'S RESTRICTIONS ON HALOGEN APPLY ONLY TO BROMINATED AND CHLORINATED COMPOUNDS. NO OTHER HALOGEN IS RESTRICTED.

  SUBSTANCES RESTRICTIONS FOR HALOGEN-FREE(INCLUDE FAN PLASTIC PARTS, PWB BOARD, IC, ELECTRICAL MATERIALS & CABLE ASSY),
  - a. BROMINE(Br) < 900 PPM,
  - b. CHLORINE(C1) < 900 PPM
  - c. (Br) + (Cl) < 1500 PPM.

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#### 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:

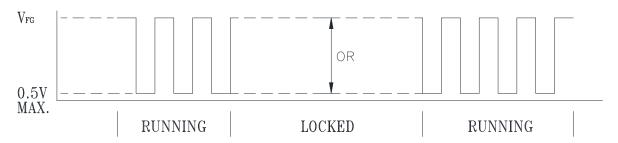
 $V_{FG} = 5.0 V TYP. (Vec MAX.)$ 

 $I_D = 5 \text{mA MAX}.$ 

 $R \ge V_{FG} / I_D$ 

THE RESISTOR R IS NOT INCLUDED IN FAN CIRCUIT AND NEEDS TO BE PROVIDED BY FAN USER.

#### 10−3. FREQUENCY GENERATOR WAVEFORM:



FAN RUNNING FOR 6 POLES

