

Delta Electronics, Inc.
HeTianXia High-Tech Industrial Park.
Shi Jie Town, Dong Guan City.
Guangdong Province, China. P. R. C.

TEL : 86-769-86329008
FAX : 86-769-86631589

STATEMENT OF DEVIATION

NONE

DESCRIPTION :

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SPECIFICATION FOR APPROVAL

Customer: STD

 Description: DC FAN

 Customer P/N: REV:

 Delta Model NO.: AFB02505LA-CF00 Delta safety model NO.: AFB02505LA-C

 Sample Rev: 00 Issue NO:

 Sample Issue Date: JAN-7-2019 Quantity:

1. SCOPE:

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

2. CHARACTERS:

ITEM	DESCRIPTION
RATED VOLTAGE	5.0 VDC
OPERATION VOLTAGE	4.0 - 5.5 VDC
INPUT CURRENT	0.04 (MAX. 0.06) A SAFETY CURRENT ON LABEL : 0.06A
INPUT POWER	0.20 (MAX. 0.30) W
SPEED	5000±20% R.P.M.
MAX. AIR FLOW (AT ZERO STATIC PRESSURE)	0.024 (MIN. 0.019) M ³ /MIN. 0.85 (MIN. 0.67) CFM
MAX. AIR PRESSURE (AT ZERO AIRFLOW)	1.15 (MIN. 0.81) mmH ₂ O 0.045 (MIN. 0.032) inchH ₂ O
ACOUSTICAL NOISE (AVG.)	18.0 (MAX. 20.0) dB-A
INSULATION TYPE	UL: CLASS A

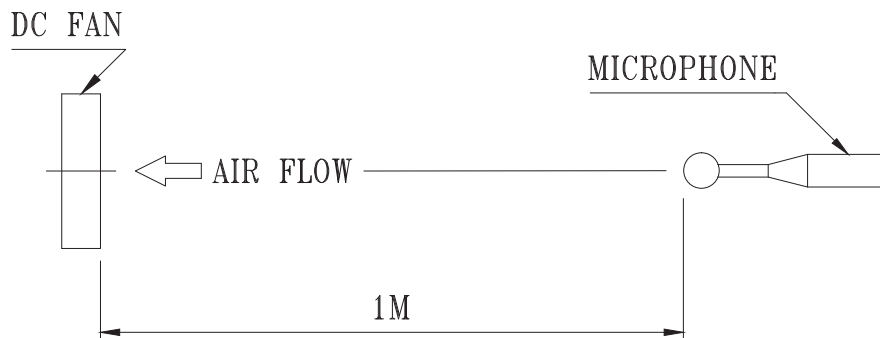
(continued)

PART NO:

DELTA MODEL: AFB02505LA-CF00

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)
LIFE EXPECTANCE (AT LABEL VOLTAGE)	30,000 HOURS CONTINUOUS OPERATION AT 40 °C WITH 15 ~ 65 %RH.
ROTATION	CLOCKWISE VIEW FROM NAME PLATE SIDE

- 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.

PART NO:

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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 _____ TWO BALL BEARINGS
- 3-5. WEIGHT _____ 8.0 GRAMS(REF)

4. ENVIRONMENTAL:

- 4-1. OPERATING TEMPERATURE _____ -10 TO +70 DEGREE C
- 4-2. STORAGE TEMPERATURE _____ -40 TO +75 DEGREE C
- 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. 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.

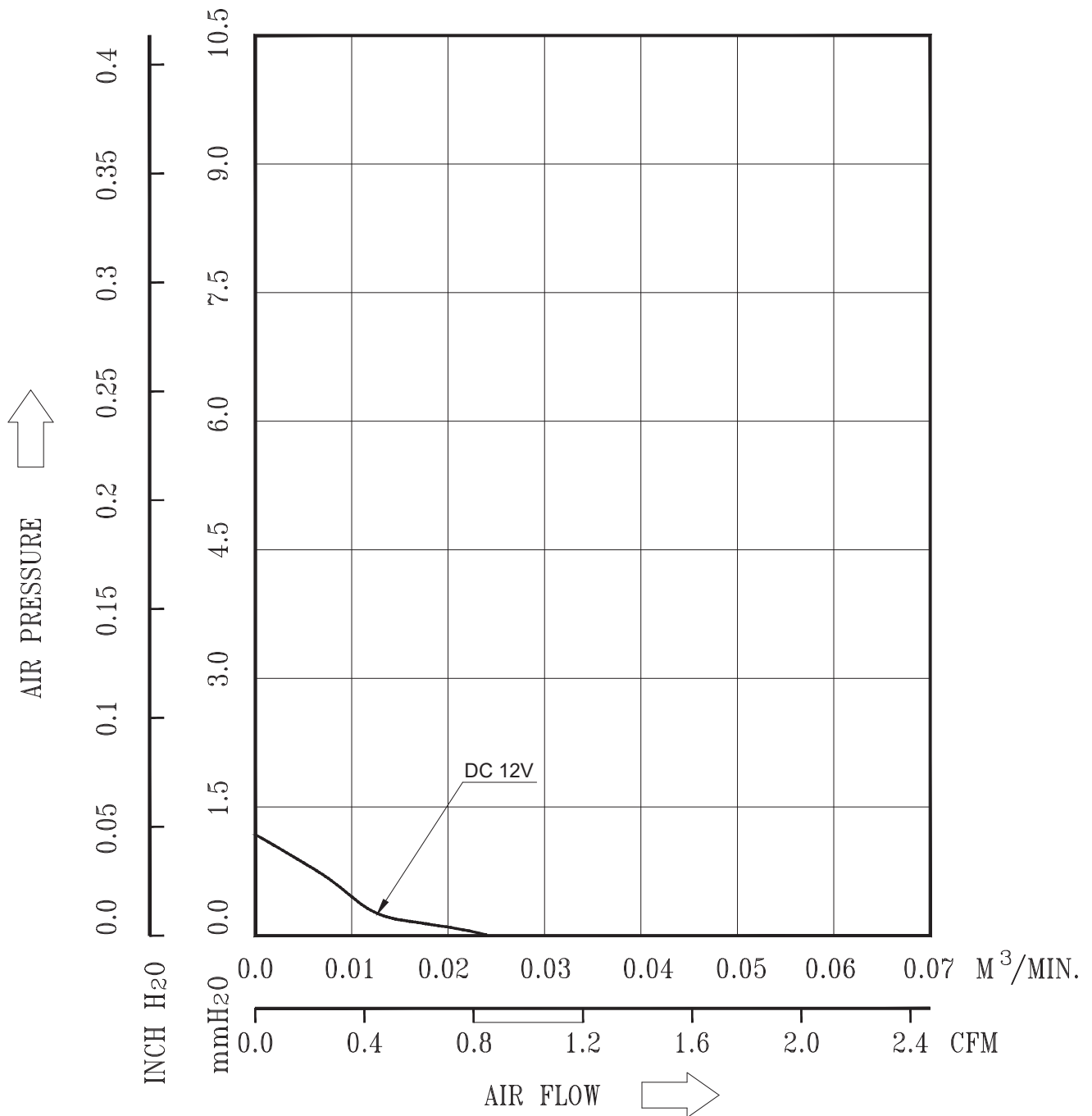
7. PRODUCTION LOCATION

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

PART NO:

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8. P & Q CURVE:



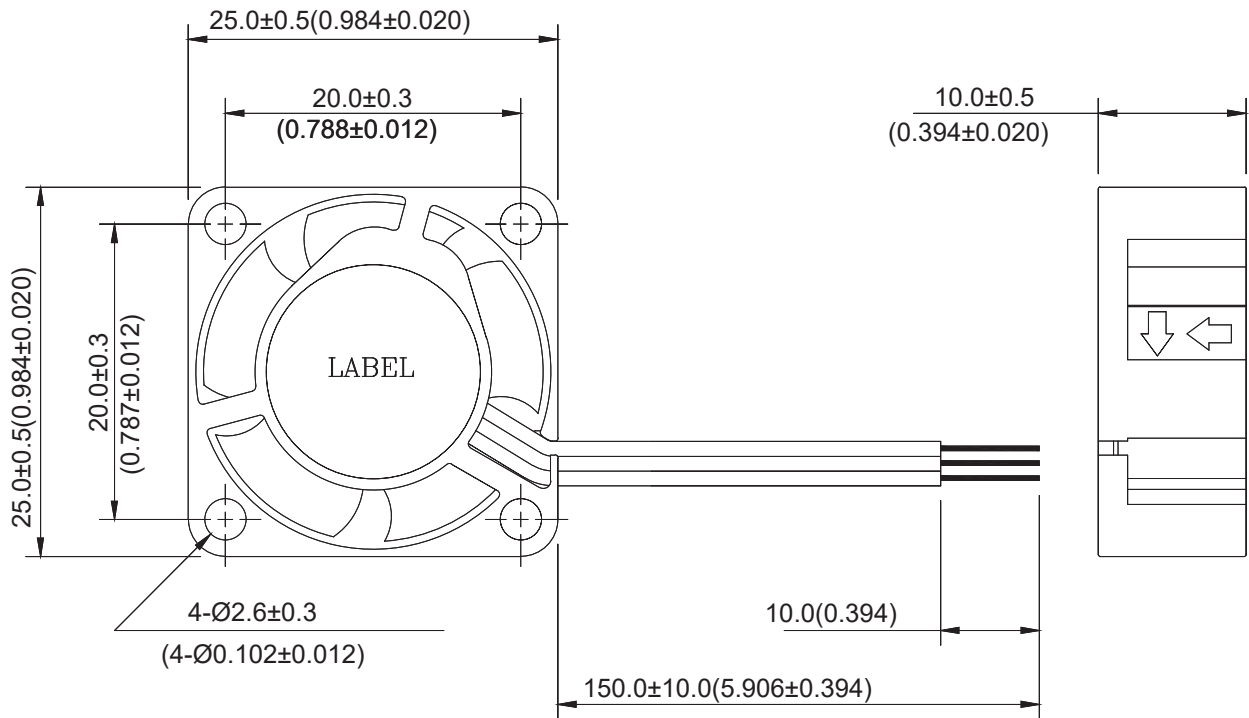
* TEST CONDITION: INPUT VOLTAGE — OPERATION VOLTAGE
TEMPERATURE — ROOM TEMPERATURE
HUMIDITY — 65%RH

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9. DIMENSION DRAWING:

LABEL:



NOTES:

1. LEAD WIRE: UL 1061 -F- AWG #28
BLACK WIRE NEGATIVE(-)
RED WIRE POSITIVE(+)
BLUE WIRE FREQUENCY(F00)
2. THIS PRODUCT IS RoHS COMPLIANT.

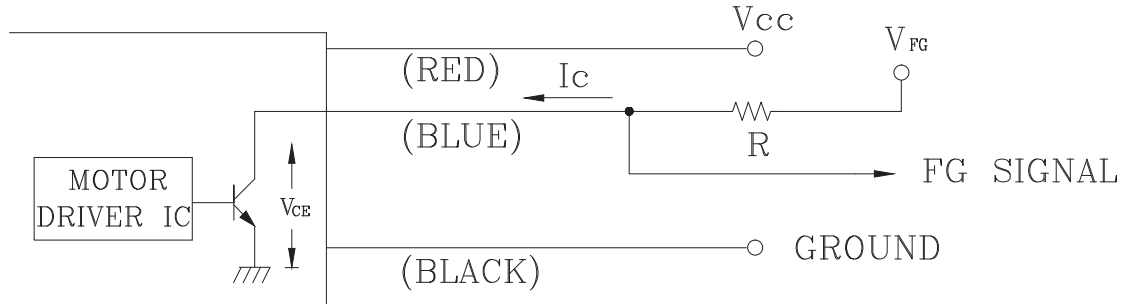
UNIE: mm(INCH)

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10. FREQUENCY GENERATOR (FG) SIGNAL:

10-1. OUTPUT CIRCUIT - OPEN COLLECTOR MODE:



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

10-2. SPECIFICATION:

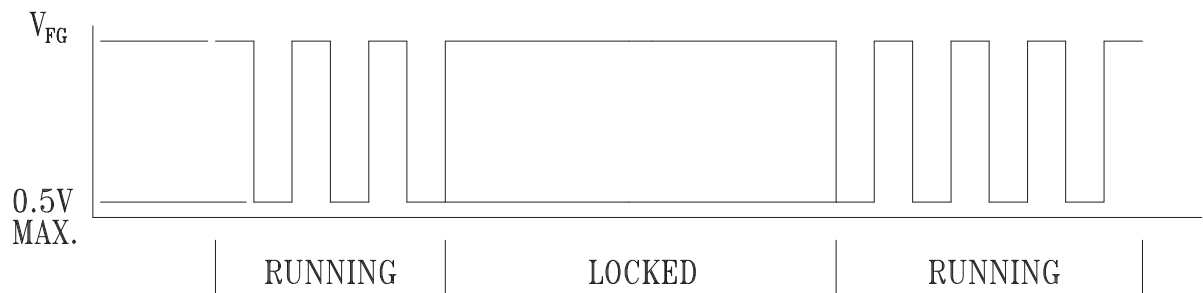
$$V_{CE}(\text{sat}) = 0.5\text{V MAX}$$

$$V_{FG} = 5.0\text{V TYP.}(V_{CC} \text{ MAX.})$$

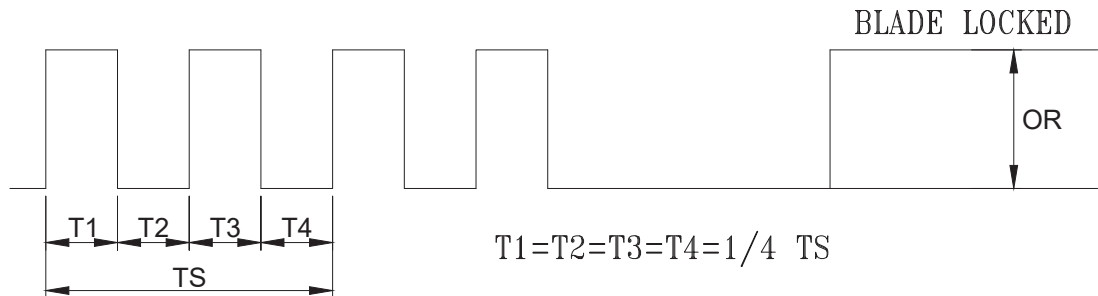
$$I_c = 5\text{mA MAX.}$$

$$R \geq V_{FG} / I_c$$

10-3. FREQUENCY GENERATOR WAVEFORM:



FAN RUNNING FOR 4 POLES



$$N = \text{R.P.M}$$

$$T_S = 60 / N (\text{SEC})$$

*VOLTAGE LEVEL AFTER BLADE LOCKED

*4 POLES