SPECIFICATION FOR APPROVAL

客　　戶
CUSTOMER:

客　戶　料　號
CUSTOMER PARTS NO.:

品　　名
DESCRIPTION: DC BRUSHLESS FAN

機種
MODEL NO.: BP17251 24H

檔案序號
FILE NO.: D1725124HB-A1

核示 ISSUE	研發 R&D	品保 QA	版數 REVISION

客　戶　承　認
CUSTOMER APPROVAL

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PERFORMANCE SPECIFICATION

PRODUCT TITLE： DC BRUSHLESS FAN

MODEL NO： BP17251 24H

1、SCOPE：

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

2、ELECTRICAL CHARACTERISTICS：

ALL MEASUREMENTS PERFORMED AT 20-30℃ ROOM TEMPERATURE & 50-70% R.H. UNLESS OTHERWISE SPECIFIED·

ITEM	DESCRIPTION	UNIT	SYMBOL	SPEC.	CONDITION
1	RATED VOLTAGE	VOLTS	V	24	
2	OPERATION VOLTAGE	VOLTS	V	12~30	
3	INPUT CURRENT	AMP	A	0.80 MAX	AT RATED VOLTAGE
4	INPUT POWER	WATTS	W	19.2 MAX	AT RATED VOLTAGE
5	ROTATION SPEED	RPM	RPM	3400 ±10%	AT RATED VOLTAGE FREE AIR
6	ACOUSTICAL NOISE (AVG)	dB(A)	dB(A)	59.1 ±10%	DETAILS SEE ATTACHED PAGE.
7	MAX. AIR-FLOW	CFM	Q	215.9 ±10%	TWO-CHAMBER METHODS DETAILS SEE ATTACHED PAGE.
8	MAX. AIR-PRESSURE	mmH_2O	P	15.7 ±10%	TWO-CHAMBER METHODS DETAILS SEE ATTACHED PAGE.
9	STARTING VOLTAGE	VOLTS	V	12	AT RATED VOLTAGE
10	INSULATION RESISTANCE	MEG. OHM	MΩ	10MΩ MIN. AT 500V DC	BETWEEN FRAME AND (+)LEAD WIRE.
11	DIELECTRIC STRENGTH	MILLI-AMP	mA	5mA MAX. AT 500V AC 60Hz. FOR 1 MINUTE	BETWEEN FRAME AND (+)LEAD WIRE.

ITEM	DESCRIPTION	SPEC.	
12	ROTATION	CW VIEW FROM NAME PLATE SIDE	
13	AIR-FLOW DIRECTION	AIR INTAKE OVER THE STRUTS	
14	INSULATION RANK	UL : CLASS A	
15	LIFE EXPECTANCY	50000 HOURS CONTINUOUS	□

□ LIFE IS DEFINED AS THE TIME MOTOR SPEED DECREASED MORE THAN 30% COMPARED WITH INITIAL VALUE·

3、MECHANICAL

3-1. DIMENSIONS---------- SEE SECTION 8

3-2. FRAME..... METAL CONSTRUCTION WITH ALUMINUM DIE-CASTING.

3-3. IMPELLER..... PLASTIC PBT MATERIAL PEINFORCED WITH FIBREGLASS.

3-4. CONTING..... CED (CATHONIC ELECTRODEPOSITION COATING WITH EPOXY) COATING ON METAL SURFACE BE CAPABLE OF IMPACT RESISTANT AND ABRASION RESISTANT.

3-5. BEARING SYSTEM -------- BALL BEARING

3-6. WEIGHT---------- 730 GRAMS

3-7. LEAD WIRE---------- 1007 AWG # 24

\+ POSITIVE.....RED

— NEGATIVE.....BLACK

4、ENVIRONMENTAL :

4-1. OPERATING TEMPERATURE---------- -10 TO +70℃

4-2. STORAGE TEMPERATURE ---------- -40 TO +75℃

4-3. DROP TEST

IN MINIMUM PACKAGING CONDITION FAN WITHSTANDS EACH ONE DROP OF THREE FACES FROM 30CM DISTANCE HEIGHT ONTO 10mm THICKNESS OF WOODEN BOARD·

4-4. VIBRATION TEST

FREQUENCY：10－55Hz　　AMPLITUDE：4MM

X , Y , Z　DIRECTION EACH FOR 1 HR·

4-5. SHOCK TEST

APPLY PEAK ACCELERATION 50g AND KEEP DURATION OF THE PULSE FOR 11ms (HALF SINE WAVE) ·

5、PROTECTION：

5-1. POLARITY PROTECTION

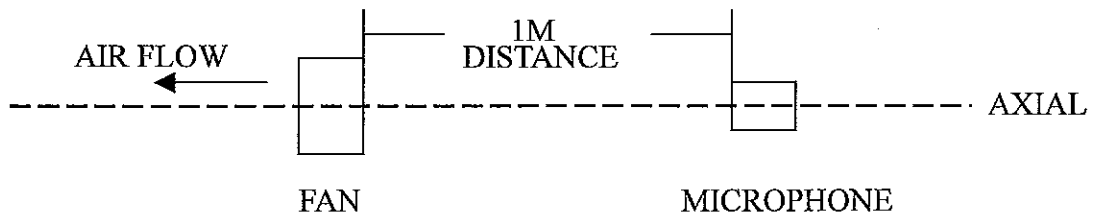
BUILT-IN ELECTRONIC CIRCUIT PROTECTS THE FAN AGAINST REVERSE CONNECTION OF POSITIVE AND REVERSE LEADS·

5-2. LOCKED ROTOR PROTECTION

THE CURRENT SHUT-DOWN CHARACTER PROVIDE A MINIMUN 72Hrs SAFETY PROTECTION FOR FAN MOTOR WHILE LOCKED ROTOR OCCURED·

6、ACOUSTICAL NOISE：

6-1. MEASUREMENT SET-UP



6-2. MEASUREMENT PERFORMED IN ANECHOIC TEST CHAMBER UNDER FREE AIR CONDITION ·

6-3. CHAMBER BACKGROUND NOISE 17dB MAX ·

6-4. READING TAKEN FROM SPECTRUN ANALYZER ·

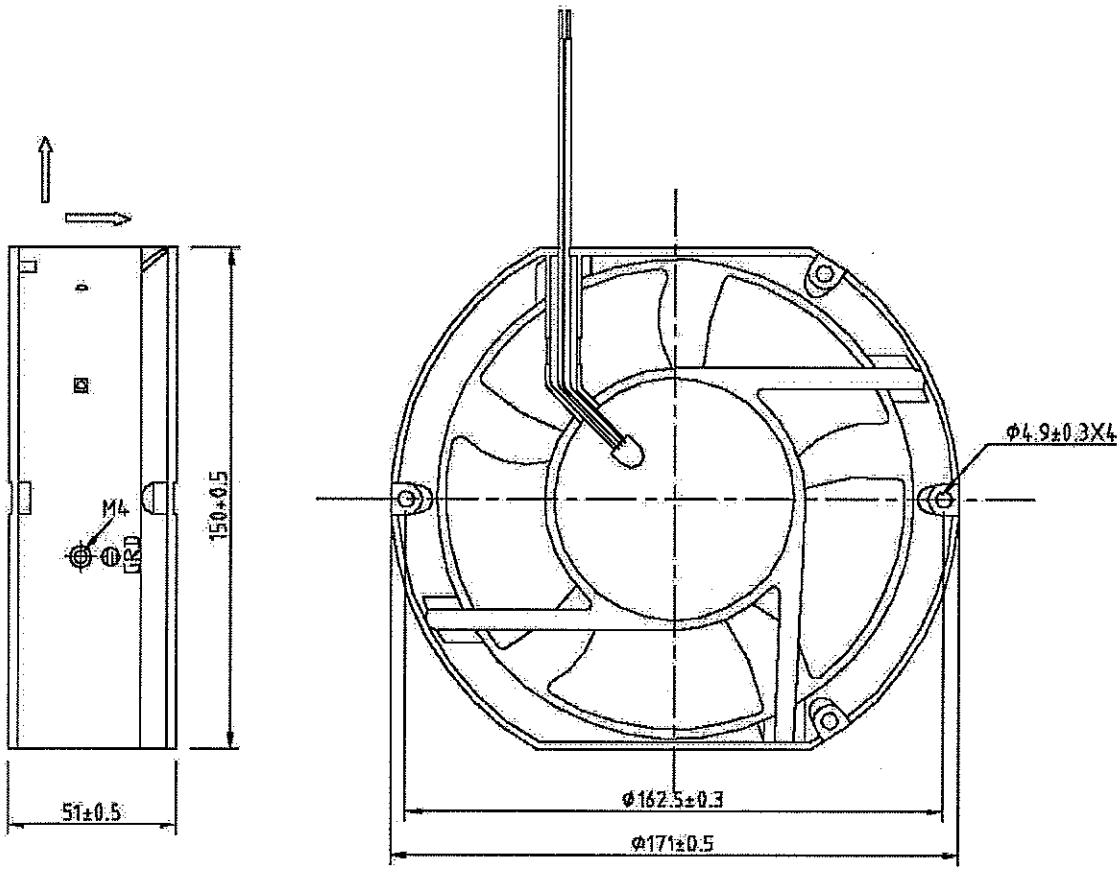
6-5. NOISE DISTRIBUTION CURVE SEE ATTACHED PAGE ·

7、STATICS PRESSURE VS AIR FLOW CURVE：

MEASURED PER TWO CHAMBER METHOD ·

DATA-CURVE SEE ATTACHED PAGE ·

8、DIMENSIONS DRAWING：　　UNIT: mm



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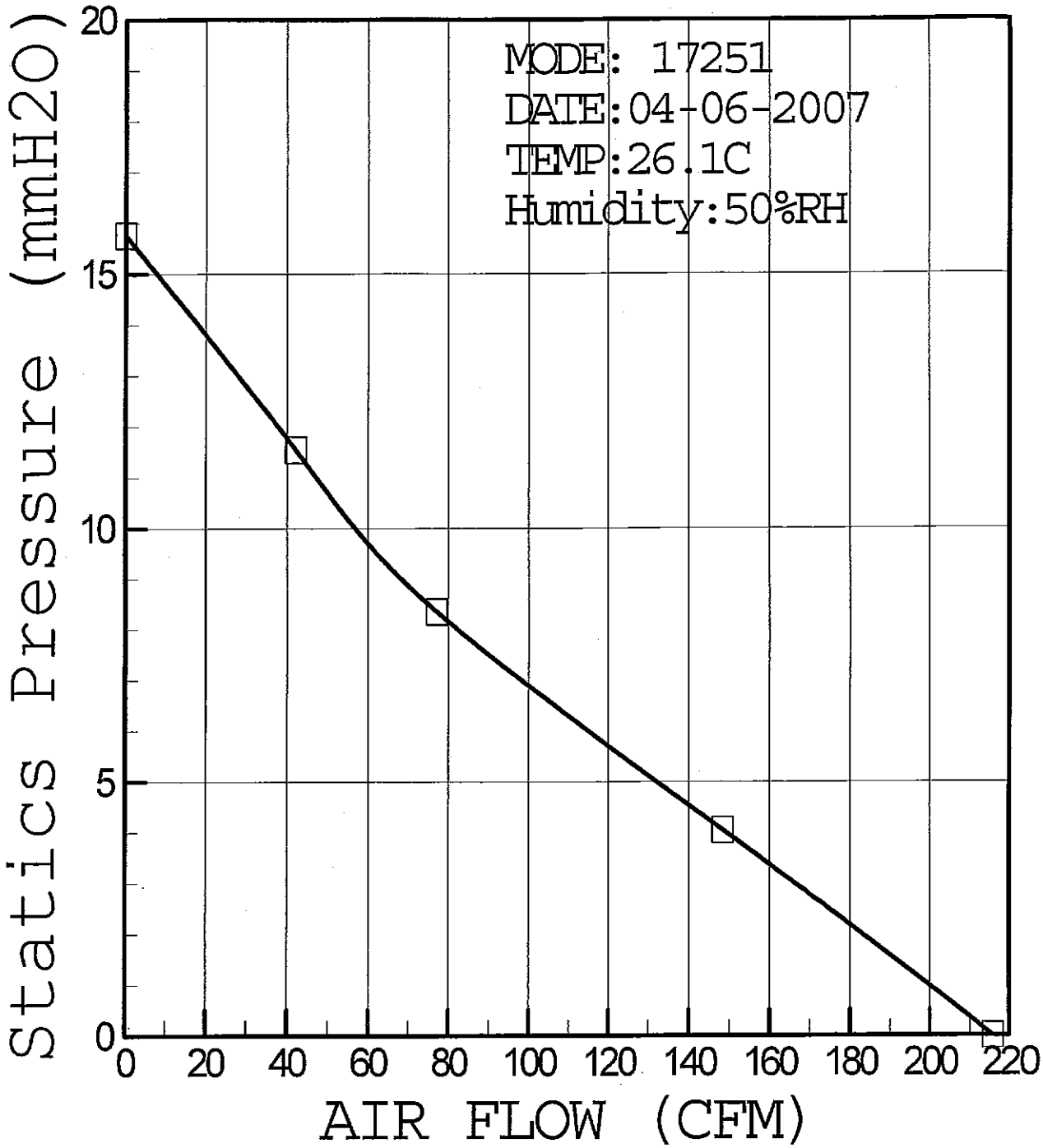

MODE: 17251
DATE:04-06-2007
TEMP:26.1C
Humidity:50%RH
Statics Pressure (mmH2O)
20
15
10
5
0
0
20
40
60
80
100
120
140
160
180
200
220
AIR FLOW (CFM)

BI-SONIC FAN PERFORMANCE DATA SHEET

Customer:

Fan Model::17251

Testing Method: Constant Voltage

Testing Voltage: DC 24V, 0Hz

Barometric Pressure (cmHg):

Dry Bulb Temperature (C):24

Relative Humidity (%)50

File Name:17251

Test No:17251

System Setup:outlet Chamber

Testing Date:04-06-2007

Barometric Density (kg/m3):1.14

Testing Engineer:FION

Remark:

No.	CFM	mmAq	inAq	A	RPM	Watt	
1	0	15.76	0.6207864	0.93	2840	36.642	
2	42.173	11.55	0.4549545	0.89	3005	35.066	
3	77.09	8.35	0.3289065	0.86	3090	33.884	
4	148.468	4.05	0.1595295	0.83	3205	32.702	
5	215.98	0	0	0.8	3395	31.52	

BI-SONIC TECHNOLOGY CORP NOISE TEST REPORT

MODEL: 1725/ - H

TEST PURPOSE: ☑ Evaluation

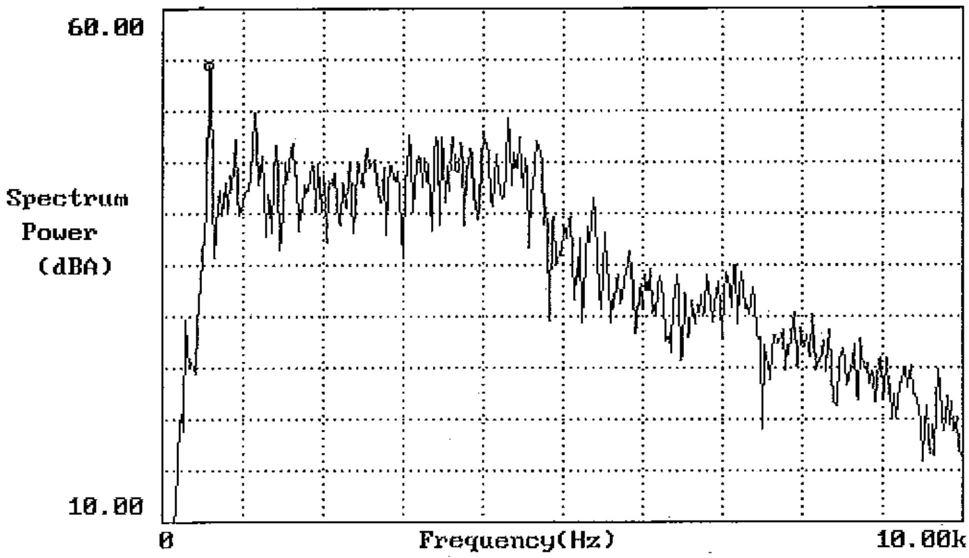
☐ IPQC

☐ QA

SAMPLING: / pcs

MODEL NO:

TEST FREQ
10KHz
TEST SENS
0dB
TRIG SENS
0/128
TRIG LOCA
100
Y AXIS UP
60.00
Y AXIS LW
10.00
AVERAGE
3



OV.AL	————	59.13916dB	MAXIM	550.00Hz	54.29016dB
LEFT	5.000kHz	38.58643dB	MINIM	0.0000Hz	-289.418dB

ANALYSIS:

(1) Background Noise : 17dBA
(2) FFT Analyzer
(3) Sound Pressure Level Meter
No.3400RPM

Reporter:
Date :2007/06/04