

SPECIFICATION FOR APPROVAL

客 戶

CUSTOMER:

客 戶 料 號

CUSTOMER PARTS NO.:

品 名

DC BRUSHLESS FAN

DESCRIPTION:

機種

BP802512M-02

MODEL NO.:

檔案序號

D802512MB-A0

FILE NO.:

核示	研發	品保	版數
ISSUE	R&D	QA	REVISION

客 戶 承 認

CUSTOMER APPROVAL

BI-SONIC TECHNOLOGY CO., LTD

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PERFORMANCE SPECIFICATION

PRODUCT TITLE : DC BRUSHLESS FAN

MODEL NO : BP802512M-02

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	12	
2	OPERATION VOLTAGE	VOLTS	V	10.2~13.8	
3	INPUT CURRENT	AMP	A	0.16MAX	AT RATED VOLTAGE
4	INPUT POWER	WATTS	W	1.92MAX	AT RATED VOLTAGE
5	ROTATION SPEED	RPM	RPM	2700± 10%	AT RATED VOLTAGE FREE AIR
6	ACOUSTICAL NOISE (AVG)	dB(A)	dB(A)	29± 10%	DETAILS SEE ATTACHED PAGE.
7	MAX. AIR-FLOW	CFM	Q	33± 10%	TWO-CHAMBER METHODS DETAILS SEE ATTACHED PAGE.
8	MAX. AIR-PRESSURE	mmH ₂ O	P	3± 10%	TWO-CHAMBER METHODS DETAILS SEE ATTACHED PAGE.
9	STARTING VOLTAGE	VOLTS	V	7	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

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REVISIONS：

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 ----- PLASTIC PBT UL : 94V-0 RATING + FIBRE GLASS.
- 3-3. FAN BLADE----- PLASTIC PBT UL : 94V-0 RATING + FIBRE GLASS.
- 3-4. BEARING SYSTEM ----- BALL BEARING
- 3-5. WEIGHT----- 100 GRAMS
- 3-6. LEAD WIRE----- 1007 AWG # 24
 - + POSITIVERED
 - NEGATIVE.....BLUE

4 、 ENVIRONMENTAL :

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

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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

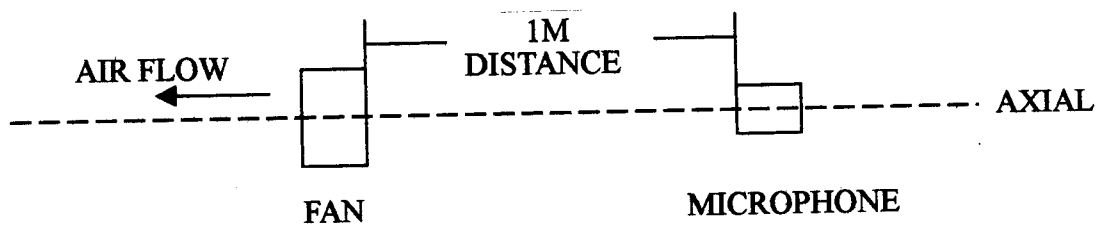
BUILT-IN ELECTRONIC CIRCUIT PROTECTS THE FAN AGAINST REVERSE CONNECTION OF POSITIVE AND REVERSE LEADS .

5-2. LOCKED ROTOR PROTECTION

IMPEDANCE OF MOTOR COIL WINDING PROTECTS MOTOR FROM FLAMING IN THE CONDITION OF 72 Hrs LOCKED ROTOR AT RATED VOLTAGE .

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 SPECTRUM ANALYZER .

6-5. NOISE DISTRIBUTION CURVE SEE ATTACHED PAGE .

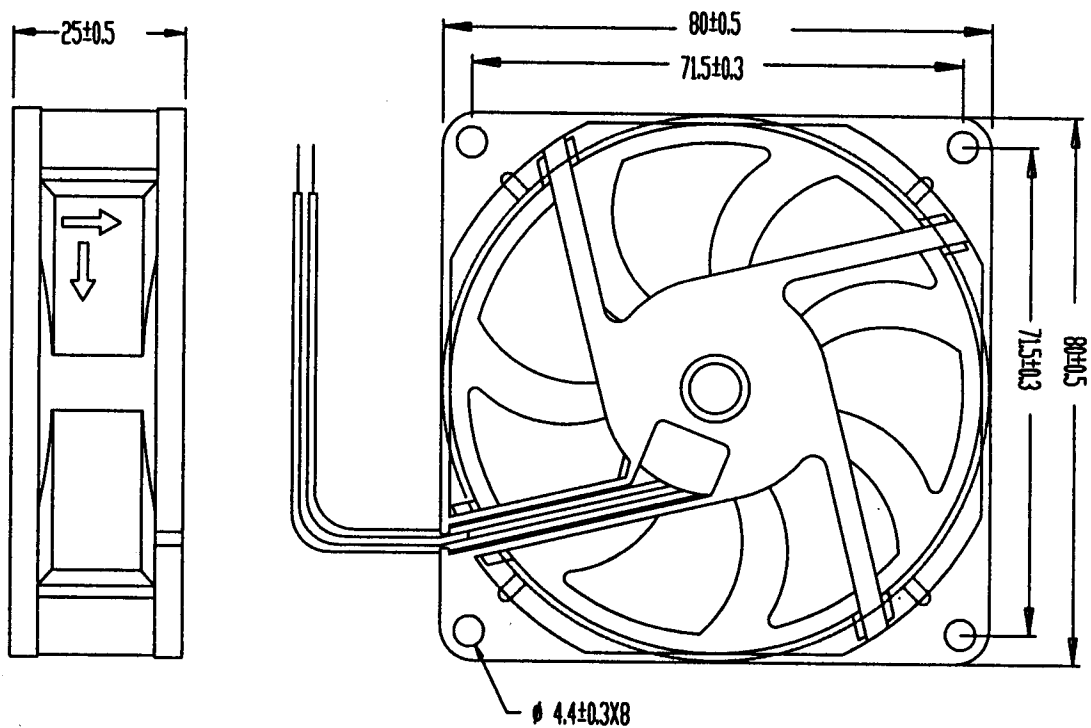
7 . STATICS PRESSURE VS AIR FLOW CURVE :

MEASURED PER TWO CHAMBER METHOD .

DATA-CURVE SEE ATTACHED PAGE .

8、DIMENSIONS DRAWING：

UNIT:mm



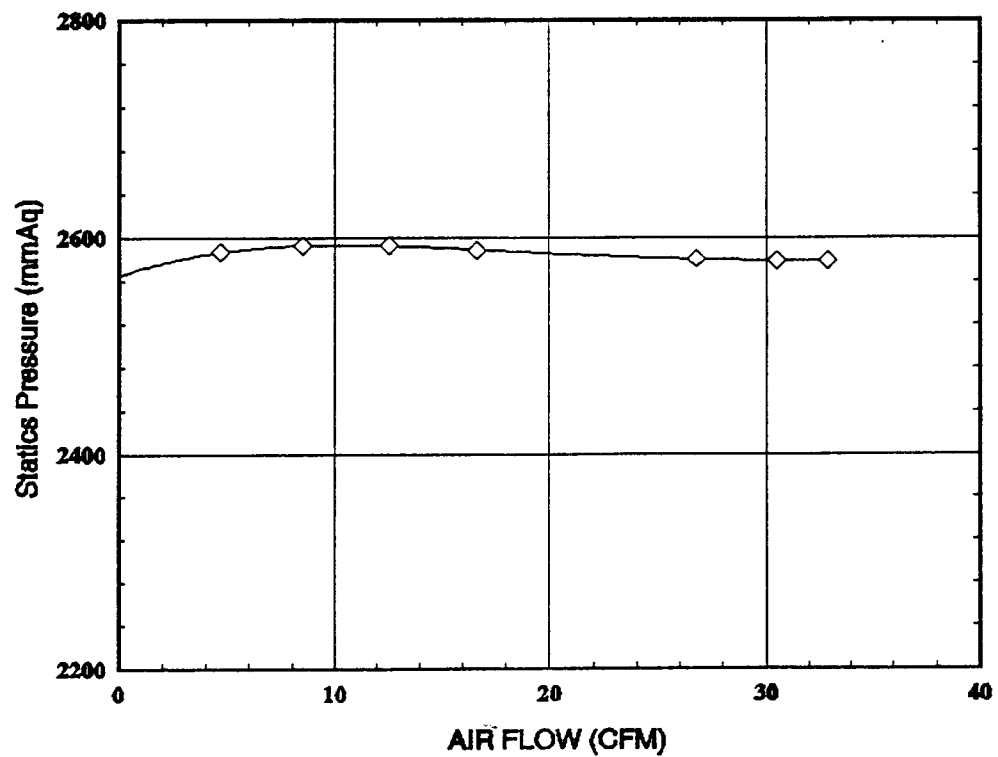
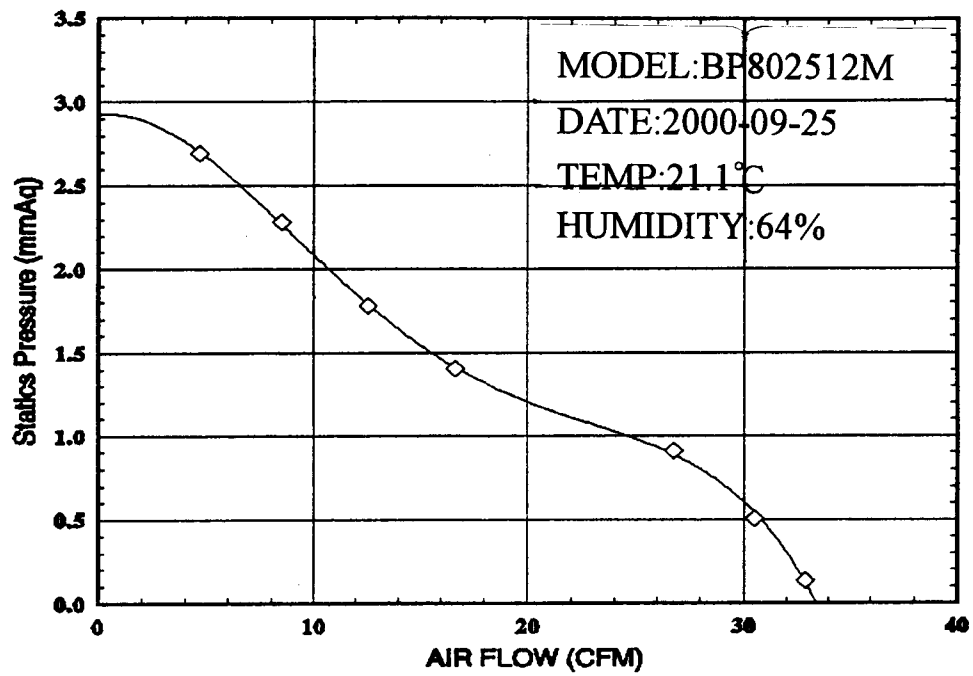
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REVISIONS：

BI-SONIC FAN PERFORMANCE CURVES



BI-SONIC FAN PERFORMANCE DATA SHEET

Customer: Fan Model:8025-12M Testing Method: Constant Voltage Testing Voltage: DC 12 V, 0Hz Barometric Pressure (cmHg): Dry Bulb Temperature (C):21.1 Relative Humidity (%)64 File Name:8025-12M	Test No: 8025-12M System Setup:outlet Chamber Testing Date: 09-25-2000 Barometric Density (kg/m3):1.14 Testing Engineer:Hsieh Hsin Yuan Remark:
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No	CFM	mmAq	inAq	A	RPM	Watt	
1	32.92	0.135	0.005	0.13	2578	1.56	
2	30.49	0.503	0.019	0.13	2578	1.56	
3	26.79	0.909	0.035	0.131	2580	1.58	
4	16.68	1.405	0.055	0.12	2588	1.5	
5	12.52	1.779	0.07	0.12	2592	1.51	
6	8.51	2.28	0.089	0.13	2592	1.58	
7	4.65	2.69	0.105	0.13	2586	1.62	
8	0	3.01	0.118	0.13	2520	1.62	

BI-SONIC TECHNOLOGY CORP NOISE TEST REPORT

測試機種: 8025-M

測試目的: ☐ Evaluation 評估

工 令: _____

☐ IPQC

取 樣: _____ pcs

☐ QA

資料代碼:

8025-M

測試頻率:

10KHz

測試感度:

8dB

觸發感度:

0/128

觸發位置:

100點

Y軸上限:

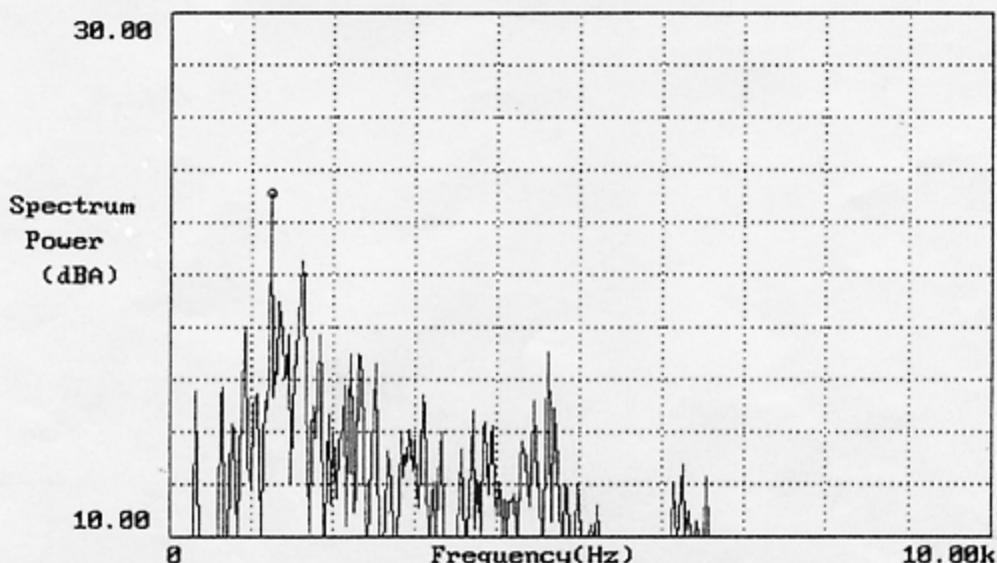
30.00

Y軸下限:

10.00

平均次數:

3次



OU. AL	————	29.12940dB	MAXIM	1.225kHz	23.07312dB
LEFT	5.000kHz	11.26526dB	MINIM	0.0000Hz	-289.418dB

結果分析: _____

(1) Background Noise : 17dBA

(2) FFT Analyzer

(3) Sound Pressure Level Meter

No. RR01.04A

Reporter: _____

Date : 2000-09-25

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

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[BP802512M-02 W-G](#)