

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°C 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

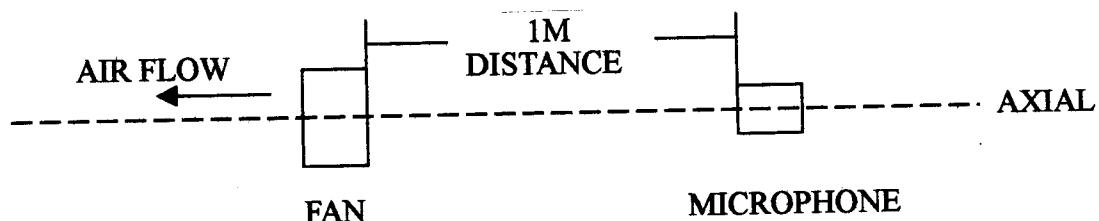
BUILT-IN ELECTRONIC CIRCUIT PROTECTS THE FAN AGAINST REVERSE CONNECTION OF POSITIVE AND REVERSE LEADS.

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 .

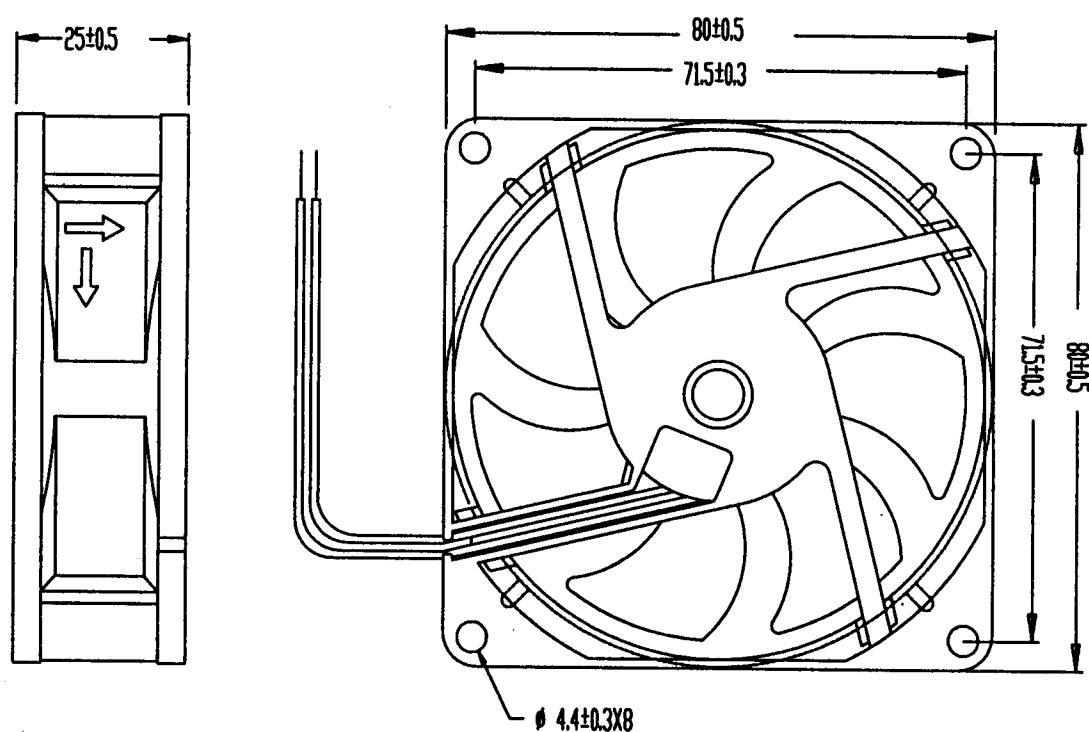
7 . STATICS PRESSURE VS AIR FLOW CURVE :

MEASURED PER TWO CHAMBER METHOD .

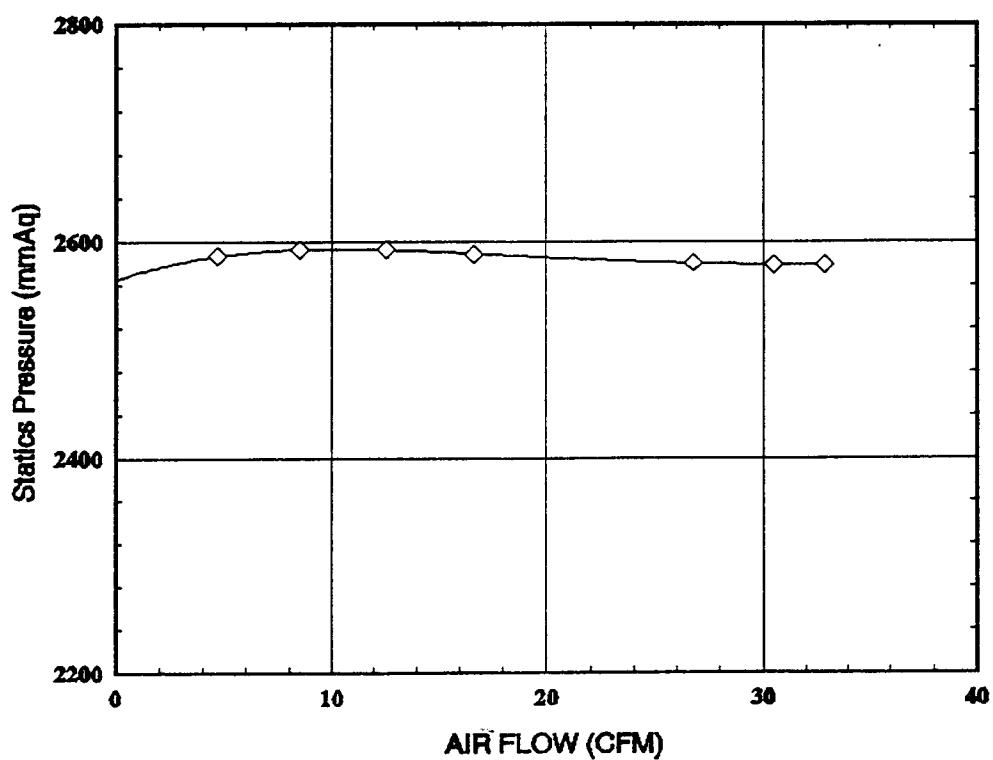
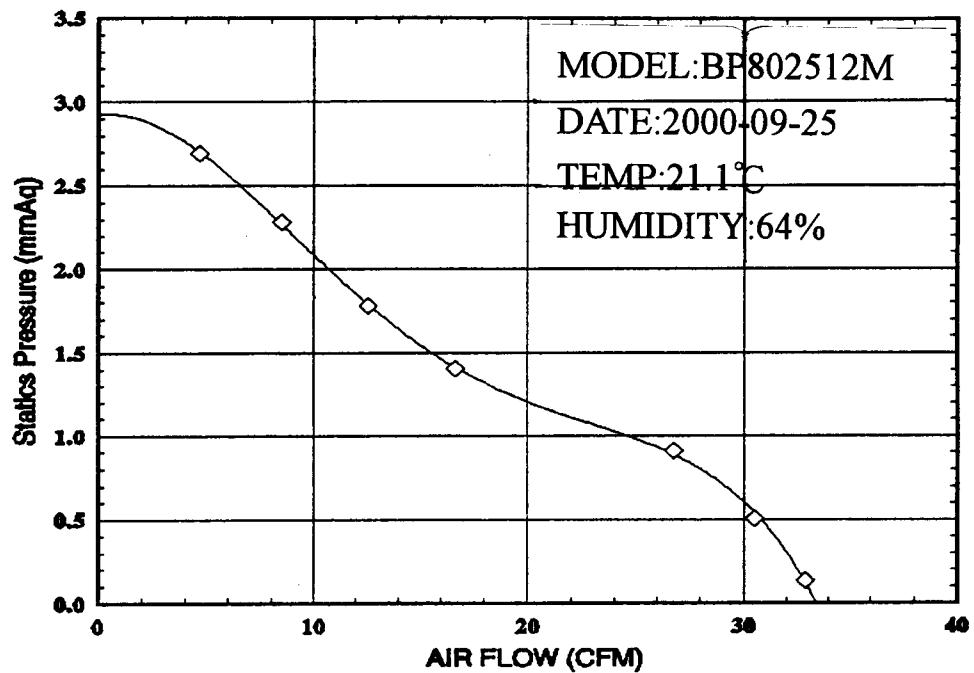
DATA-CURVE SEE ATTACHED PAGE .

8、DIMENSIONS DRAWING :

UNIT:mm



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

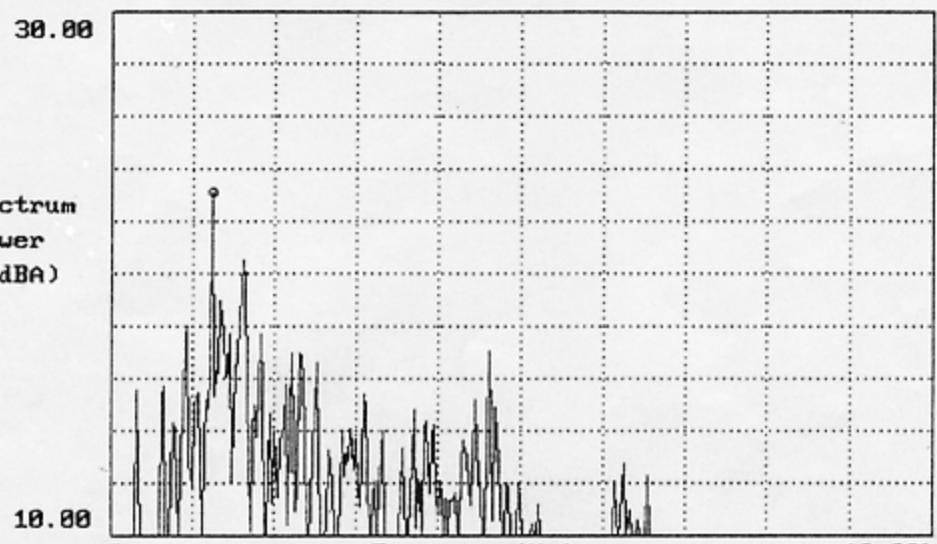
測試目的: Evaluation 評估

工 令: _____

IPQC

取 樣: _____ pcs

QA



資料代碼：

8825-M

測試頻率：

10KHz

測試感度：

8dB

觸發感度：

8/128

觸發位置：

100點

Y軸上限：

30.00

Y軸下限：

10.00

均次數：

三六

結果分析：

(1) Background Noise : 17dBA
(2) FFT Analyzer
(3) Sound Pressure Level Meter
No.RR01.04A

Mouser Electronics

Authorized Distributor

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

Bi-Sonic:

[BP802512M-02 W-G](#)