

# SPECIFICATION FOR APPROVAL

客 戶

CUSTOMER:

客 戶 料 號

CUSTOMER PARTS NO.:

品 名

DC BRUSHLESS FAN

DESCRIPTION:

機種

BP802524H-02

MODEL NO.:

檔案序號

D802524HB-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**

HEADQUARTER: 2F, NO. 137, LANE 235, PAO CHAIO RD.,

HSIN-TIEN CITY, TAIPEI HSIEN, 231, TAIWAN, R.O.C.

TEL:(02)89192168 FAX:(02)89192169

# PERFORMANCE SPECIFICATION

PRODUCT TITLE : DC BRUSHLESS FAN

MODEL NO : BP802524H-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	24	
2	OPERATION VOLTAGE	VOLTS	V	20.4~27.6	
3	INPUT CURRENT	AMP	A	0.13MAX	AT RATED VOLTAGE
4	INPUT POWER	WATTS	W	3.12MAX	AT RATED VOLTAGE
5	ROTATION SPEED	RPM	RPM	3200± 10%	AT RATED VOLTAGE FREE AIR
6	ACOUSTICAL NOISE (AVG)	dB(A)	dB(A)	34± 10%	DETAILS SEE ATTACHED PAGE.
7	MAX. AIR-FLOW	CFM	Q	38± 10%	TWO-CHAMBER METHODS DETAILS SEE ATTACHED PAGE.
8	MAX. AIR-PRESSURE	mmHzO	P	3.2± 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

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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	☆
16	SAFETY	UL CSA CE	

☆ 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
  - + POSITIVE .....RED
  - NEGATIVE.....BLACK

### 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

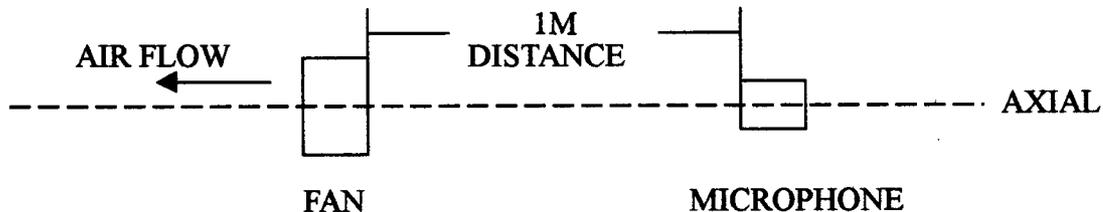
BUILT-IN ELECTRONIC CIRCUIT PROTECTS THE FAN AGAINST REVERSE CONNECTION OF POSITIVE AND REVERSE LEADS .

##### 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 .

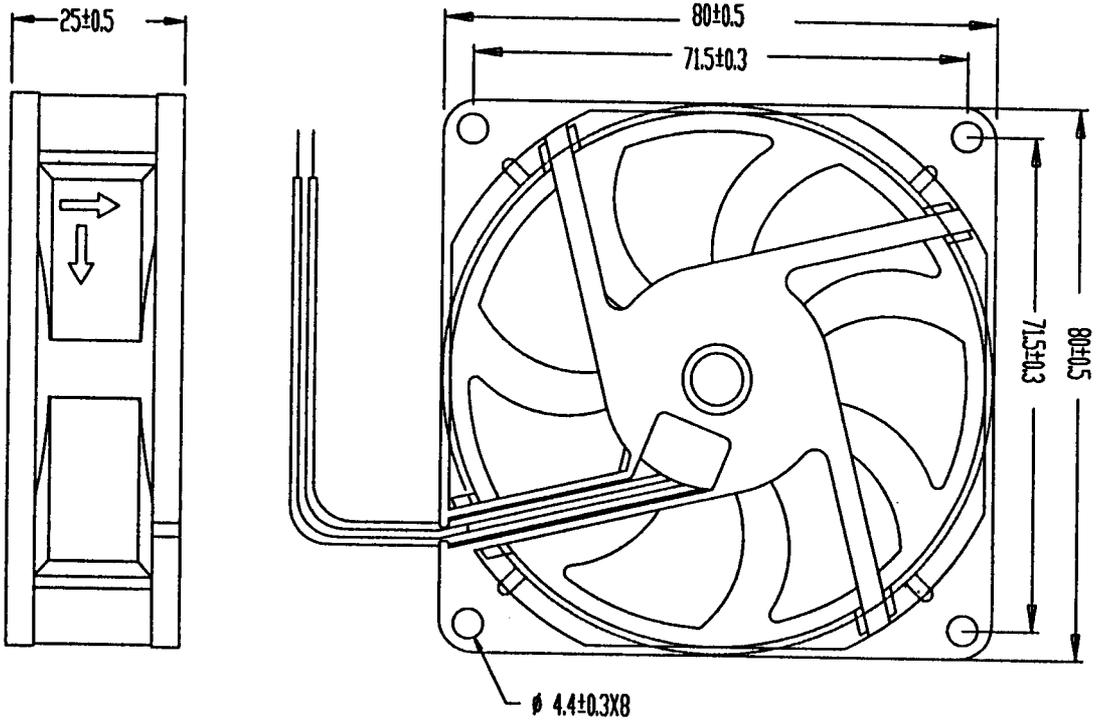
#### 7 . STATICS PRESSURE VS AIR FLOW CURVE :

MEASURED PER TWO CHAMBER METHOD .

DATA-CURVE SEE ATTACHED PAGE .

8、DIMENSIONS DRAWING：

UNIT:mm



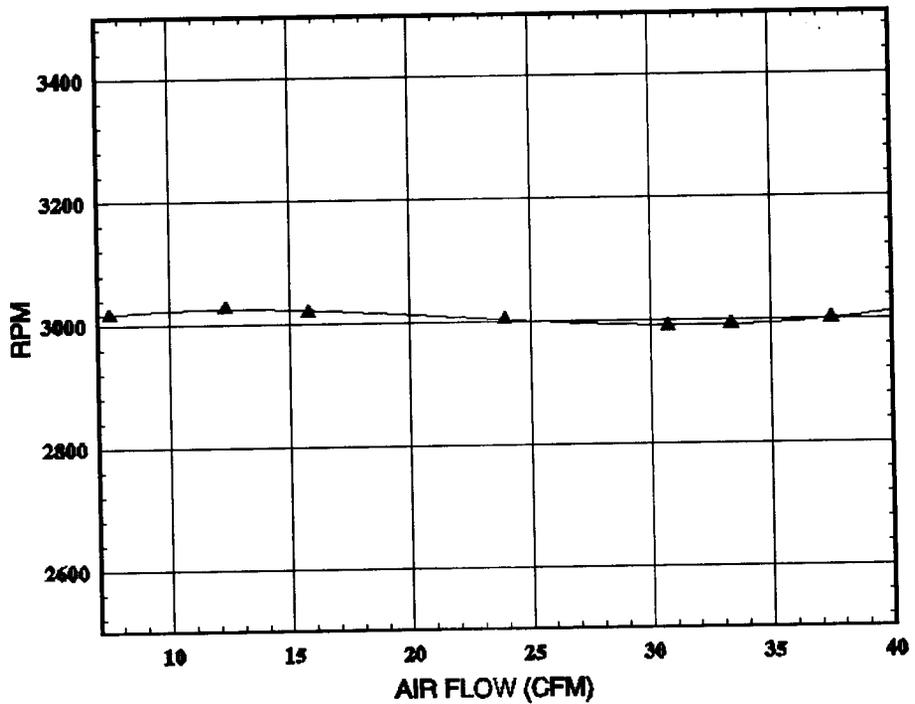
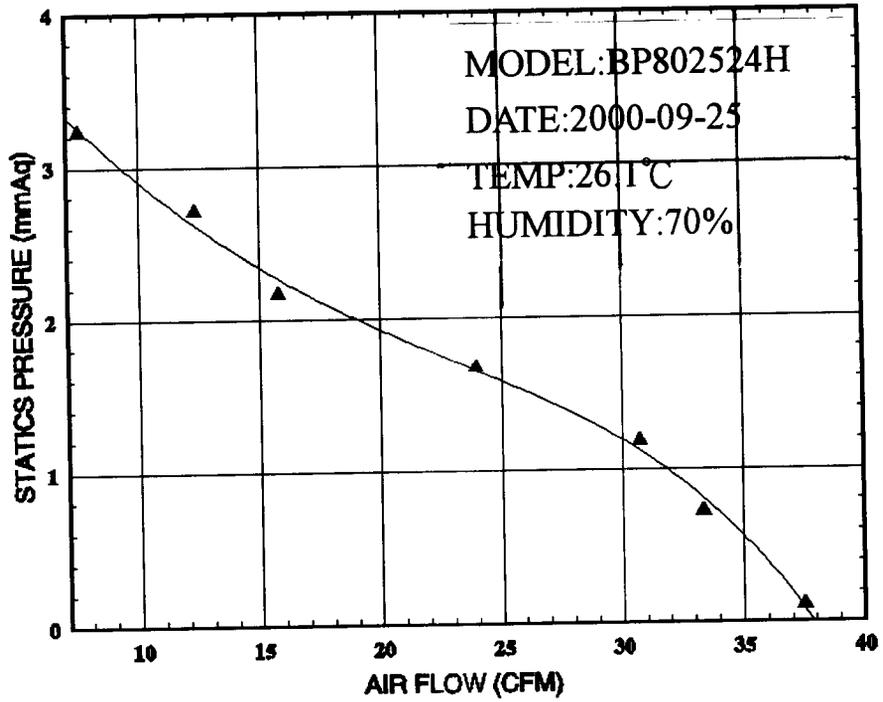
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REVISIONS :

# BI-SONIC FAN PERFORMANCE CURVES





# BI-SONIC TECHNOLOGY CORP NOISE TEST REPORT

測試機種: BP802524H

測試目的:  Evaluation 評估

工 令: \_\_\_\_\_

IPQC

取 樣: \_\_\_\_\_ pcs

QA

資料代碼:

8025-H

測試頻率:

10kHz

測試感度:

0dB

觸發感度:

0/128

觸發位置:

100點

Y軸上限:

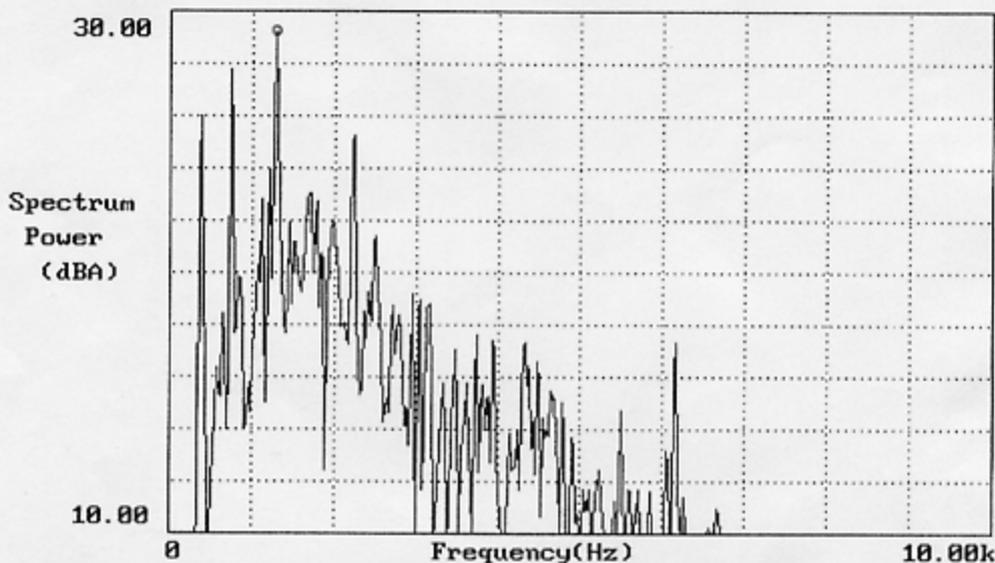
30.00

Y軸下限:

10.00

平均次數:

3次



OU. AL	———	33.89868dB	MAXIM	1.275kHz	29.21326dB
LEFT	5.000kHz	9.082646dB	MINIM	0.0000Hz	-289.418dB

結果分析: \_\_\_\_\_

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\_\_\_\_\_

\_\_\_\_\_

(1) Background Noise : 17dBA

(2) FFT Analyzer \_\_\_\_\_

Reporter: \_\_\_\_\_

(3) Sound Pressure Level Meter \_\_\_\_\_

Date : 2000-09-25

No. RR01.04A

# Mouser Electronics

Authorized Distributor

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

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[BP802524H-02 W-G](#)