PERFORMANCE SPECIFICATION

PRODUCT TITLE： DC BRUSHLESS FAN

MODEL NO： BP402012H

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. SPEED MEASURED AFTER CONTINUOUS 10 MINUTE OPERATION AT RATED VOLTAGE IN CLEAN AIR.

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	0.16 MAX	AT RATED VOLTAGE
4	INPUT POWER	WATTS	W	1.92 MAX	AT RATED VOLTAGE
5	ROTATION SPEED	RPM	RPM	7000±10%	AT RATED VOLTAGE FREE AIR
6	ACOUSTICAL NOISE (AVG)	dB(A)	dB(A)	31±10%	DETAILS SEE ATTACHED PAGE.
7	MAX. AIR-FLOW	CFM	Q	7.77±10%	TWO-CHAMBER METHODS DETAILS SEE ATTACHED PAGE.
8	MAX. AIR-PRESSURE	mmH_2O	P	3.8±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 (+)LEADWIRE.
11	DIELECTRIC STRENGTH	MILLI-AMP	mA	5mA MAX. AT 500V AC 60Hz. FOR 1 MINUTE	BETWEEN FRAME AND (+)LEADWIRE.

ITEM	DESCRIPTION	SPEC.	
12	ROTATION	CW VIEW FROM NAME PLATE SIDE	
13	AIR-FLOW DIRECTION	AIR INTAKE OVER THE STRUTS	
14	INSULATION RANK	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 ---------- 40 GRAMS
3-6. LEAD WIRE---------- 1007 AWG # 26
＋ POSITIVE ..... RED
－ NEGATIVE ..... BLUE

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

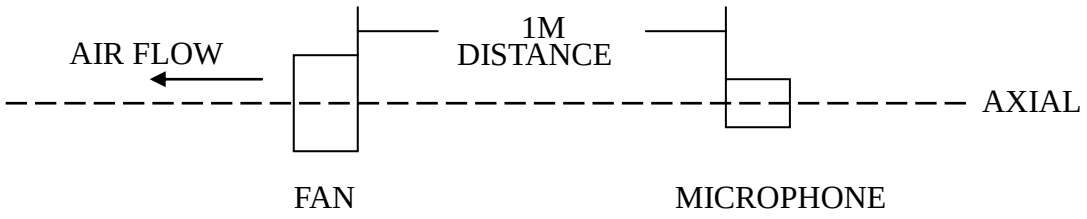
BUILT-IN ELECTRONIC CIRCUIT PROTECTS THE FAN AGAINST REVERSE CONNECTION OF POSITIVE AND REVERSE LEADS·

5-2. LOCKED ROTOR PROTECTION

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 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