

SPECIFICATION FOR APPROVAL

Customer : _____

Model NO. : _____ JF0602512HB _____

Part NO. : _____ DC FAN 6025 12V _____

Date : _____ 2024-12-9 _____

Revision : _____ X00 _____

Customer	Approved		
	Date :		
	Approve	Check	Prepare
	Hero	Landy	Chenjuan

1. SCOPE

This document is a specification defining the electrical and mechanical characteristics of the DC Brushless Axial Fan.

2. GENERAL SPECIFICATION

No.	Item	Specification	Test Condition
1	Rated Voltage	12V	DC power supply
2	Operating Voltage Range	9.6~14.4V	DC power supply
3	Starting Voltage	6V	DC power supply
4	Rated Current	0.25A	At rated voltage
6	Rated Power	3.00W	At rated voltage
8	Speed(D)	5200±10% RPM	At rated voltage , Measured at 5 minutes after starting under 25°C 65%RH ambient
9	Air Flow	26.8CFM	At zero static pressure; rated voltage
10	Static Pressure	0.31in-H ₂ O	At zero airflow; rated voltage
11	Acoustical Noise	36.5dB(A)	Measured at typical speed with an acoustic microphone 1 meter away from the fan intake in a test chamber with background noise level below 20dB(A)
12	Insulation Resistance	10 MΩ (Min.)	Between frame and positive terminal at 500VDC
13	Dielectric strength	5 mA (Max.)	Between frame and positive terminal at 500VAC/60Hz for 1 minutes.
14	Insulated Type	UL: Class A (105°C)	——

3. MECHANICAL

1	Frame	Thermoplastic PBT , Black , UL94-V0
2	Impeller	Thermoplastic PBT , Black , UL94-V0
3	Weight	~55grams
4	Direction of rotation	Clockwise view from name plat side
5	Bearing Type	DUAL BALL Bearing

4. ENVIRONMENTAL

4.1. Operating Temperature	-----	-10 ~ +70 °C
4.2. Storage Temperature	-----	-20 ~ +75 °C
4.3. Operating Humidity	-----	35% ~ 85%RH
4.4. Storage Humidity	-----	35% ~ 85%RH

5. MEAN TIME BETWEEN FAILURE

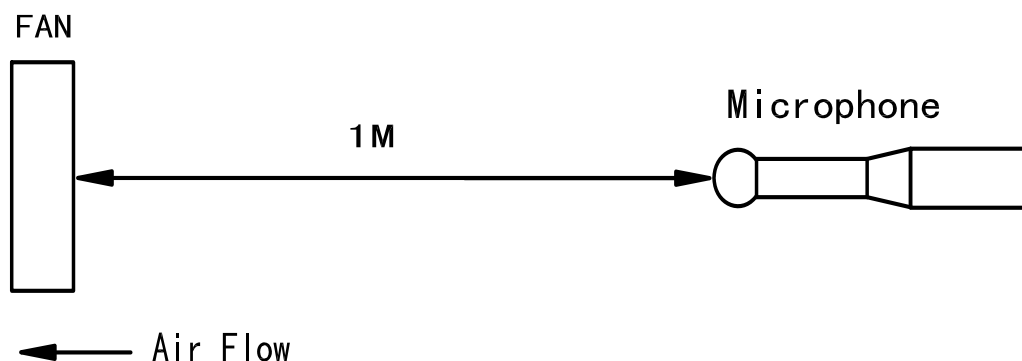
At a common operating condition of +25°C, the expected reliability (expressed as Mean Time Between Failure) of fans are evaluated under the MIL-STD-781 Documentation Standard as below :

LIFE EXPECTANCY:

- ☐ Sleeve: Copper bearing and Steel axes : 30,000 hrs continuous operating under 25°C 65%RH
- ☐ One ball and one sleeve : 40,000 hrs continuous operating under 25°C 65%RH
- ☒ Dual Ball Bearing : 50,000 hrs continuous operating under 25°C 65%RH

6. ACOUSTICAL NOISE : Refer to GB/T6881.3-2002/ISO3743-2:1994 as shown below:

Testing Condition: Fan is hanged in anechoic chamber, Noise is measured at rated voltage in anechoic chamber with microphone at a distance of one meter from the air intake ;



7 . PERFORMANCE CURVE

7.1. The performance including air flow and air pressure measured in Double Chamber is measured according to AMCA210 -99 standard

7.2. Measurement must according to appointed air flow direction and speed, Please reference to P-Q curve

8. PROTECTION

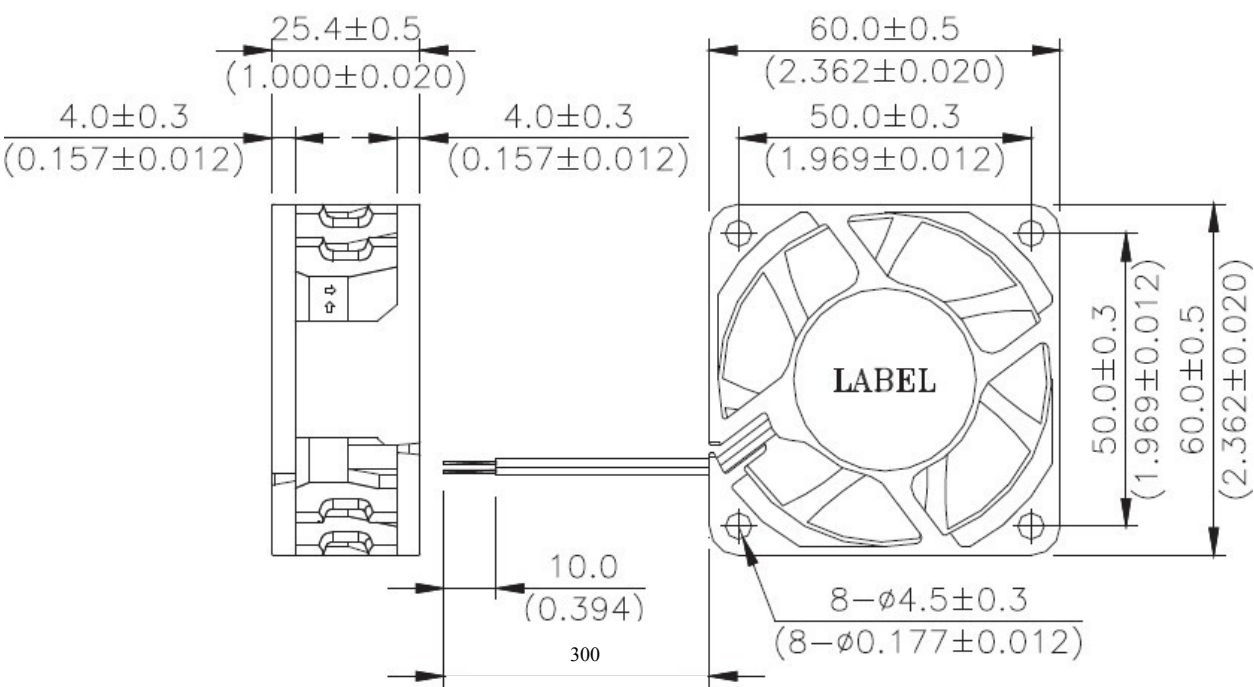
8.1. Polarity Protection

Be capable of withstanding 1 minutes will not cause damage if reverse connection for positive and negative leads ;

9. RELIABILITY

NO.	Item	Specification	Test Condition
1	Balance Test	No protruding beyond the circle within 10 seconds	The fan runs in a circle, scaled by fan radius plus 10mm, on a perfectly smooth plate for 10 seconds
2	Drop Test	All specified characteristics remain unchanged	Free drop in minimum package to an oak board of 10mm thickness at 30cm below. Individual X, Y, Z face tested
3	Vibration Test	All specified characteristics remain unchanged	Ambient temp.: 25 °C ± 5 °C with 12V power supply Amplitude: 0.4-2.5 mm Acceleration: 14.7 S/m2 Frequency: 10HZ-60HZ Sweeping period: 1 min 10HZ-60HZ: 30 seconds 60HZ-10HZ: 30 seconds Total: 10 cycles
4	High/Low Temperature Cycling	All specified characteristics remain unchanged	20 minutes slew rate +70 °C (1 hr) , -10 °C (1 hr) Total: 36 cycles
5	Low Temp Storage	All specified characteristics remain unchanged	Tested under -10 °C for 500 hrs without power supply
6	High Temp. Storage	All specified characteristics remain unchanged	Tested under +70 °C for 500 hrs without power supply

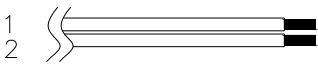
10.DIMENSION DRAWING



Unit: mm (inch)

General Dimension.Tolerances (Unit:mm)	
0-3	± 0.3
3-30	± 0.4
31-60	± 0.5
61-100	± 0.6
101-and Over	± 0.6

11. HOUSING AND LEAD WIRE

Housing Mode:	Drawing	L(mm)
Two wires		L=300±20
Lead Wire NO.	Specification	
1	Red: UL 1007 24AWG (+)	
2	Black: UL 1007 24AWG (-)	