



**ENGINEERING DATA
SHEET**

JARO FAN PART NUMBER # **AB6812MB-GC6S-LF**
SAFETY APPROVAL : **CE**



SPECIFICATIONS	
ITEM	SPECIFICATION / CONDITION
DIMENSIONS	60 X 68 X 10 MM
BEARING TYPE	HYPRO
RATED VOLTAGE	12.0 VDC
OPERATING VOLTAGE RANGE	10.8 VDC – 13.2 VDC
START-UP VOLTAGE	9.0 VDC, NOMINAL
RATED CURRENT	0.090 AMP + 10% MAX.
RATED POWER	1.08 WATT
RATED SPEED	5700 RPM \pm 10%
AIR FLOW	3.7 CFM
STATIC AIR PRESSURE	0.185 INCH WATER
NOISE LEVEL	28.5 dB \pm 10%
MOTOR PROTECTION	BY IMPEDENCE
CONNECTION LEAD TYPE	WIRE, AWG # 28
LIFE EXPECTANCY	50000 HOURS @ 25°C
NET WEIGHT	58 GRAM
PACKING	250 PIECES PER CARTON





AB6812MB-GC6S-LF

1.0 SCOPE

This documentation defines the mechanical and electrical characteristics of DC brushless fans.

2.0 MATERIAL

2.1 Housing: UL94V-0 Glass Filled Polyester (P.B.T.)

2.2 Fan Blade UL94V-0 Glass Filled Polyester (P.B.T.)

2.3 Bearing System [] Sleeve, oil impregnated.
[] Two Ball Bearing
[X] one Ball one Sleeve
[] Hypro Bearing

2.4 Lead Free YES

3.0 DIMENSIONS AND CONSTRUCTION

All dimensions, direction of rotation, and air flow specified as per drawing attached.

4.0 CHARACTERISTICS AND DEFINITION

4.1 All rated characteristics were specified as per data sheet enclosed.

4.2 Rated Current: Rated current shall be measured after 3 minutes of continuous rotation at rated voltage.

4.3 Rated Speed: Rated speed shall be measured after 3 minutes of continuous rotation at rated voltage.

4.4 Starting Voltage: The voltage which is able to start the fan to operate by suddenly switching "ON".

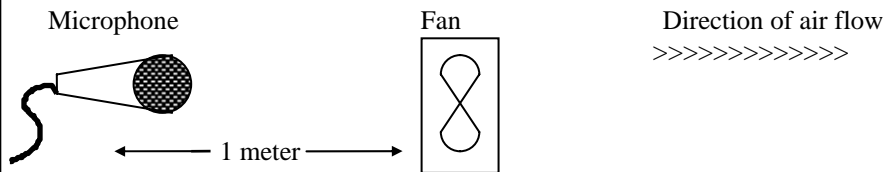
4.5 Input Power: Input power shall be measured after 3 minutes of continuous rotation at rated voltage.

4.6 Locked Rotor Current: Locked current shall be measured within one minute of rotor lock, after 3 minutes of continuous rotation at rated voltage in clear air.

4.7 Air Flow and Static Pressure: The air flow data and static pressures should be determined in accordance with AMCA standard or DIN24163 specification in a double-chamber testing with intake - side measurement.

4.8 Noise Level: The measurement of noise level is carried out with reference to DIN45635 in an anechoic chamber with a microphone positioned 1 meter from the air intake. Testing fan shall be hung in clean air.

NOISE LEVEL MEASUREMENT





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5.0 MECHANICAL INSPECTION

5.1 Rotation Direction

Clockwise with label side facing up. The same direction also indicated by an arrow mark on one side of the housing.

5.2 Protection

All fans have integrated protection against locked rotor condition so there will be no damage to winding or any electronic component. Restarting is automatic as soon as any constraint to rotation has been released. Fan was placed at dead angle position, and switch was turned to "on". Restarting was automatic and operated normal proving that this fan is good.

5.3 Locked Rotor Protection

No damage shall be found after 72 hours of continuous locked rotor condition. Restarting is automatic as soon as constraint to running has been released.

5.4 Avoid damage, Check correct voltage and proper polarity before connecting to power.

5.5 Free Drop Shock

In minute package condition, the fan should withstand drops on any of three faces from a height of 30cm onto a wood board of 10 mm thick.

5.6 Please do not put grease and/or oil to the fan blade housing or blade.

6.0 ELECTRICAL INSPECTION

6.1 Insulation Resistance

Not less than 10M ohm between housing and positive end of lead wire (red) at 500VDC>

6.2 Dielectric Strength

No damage should be found at 1,500 VAC for 60 sec., measured with 5mA trip current between housing and positive end of lead wire.

6.3 Life expectancy

The continuous duty life at given temperature after which, 90% of testing units shall still be running.

7.0 ENVIRONMENTAL

7.1 Operating Temperature

-10°C to +70°C at 65% +/- 20% RH

7.2 Storage Temperature

All functions shall be normal after 500 hours storage at -40°C to +70°C with a 24 hour recovery period at room temperature.

7.3 Humidity

After 96 hours, 95% RH, 40± 2°C per MIL-STD-202F, method 103B humidity test, the measured data on insulation resistance and dielectric strength shall meet the specification.

7.4 Improper use such as disassembling the fan, being covered by dust, or dipping the fan into water that results in defective fan is not covered in the warranty. Do not use the fan in the environment with corrosive air or liquid.



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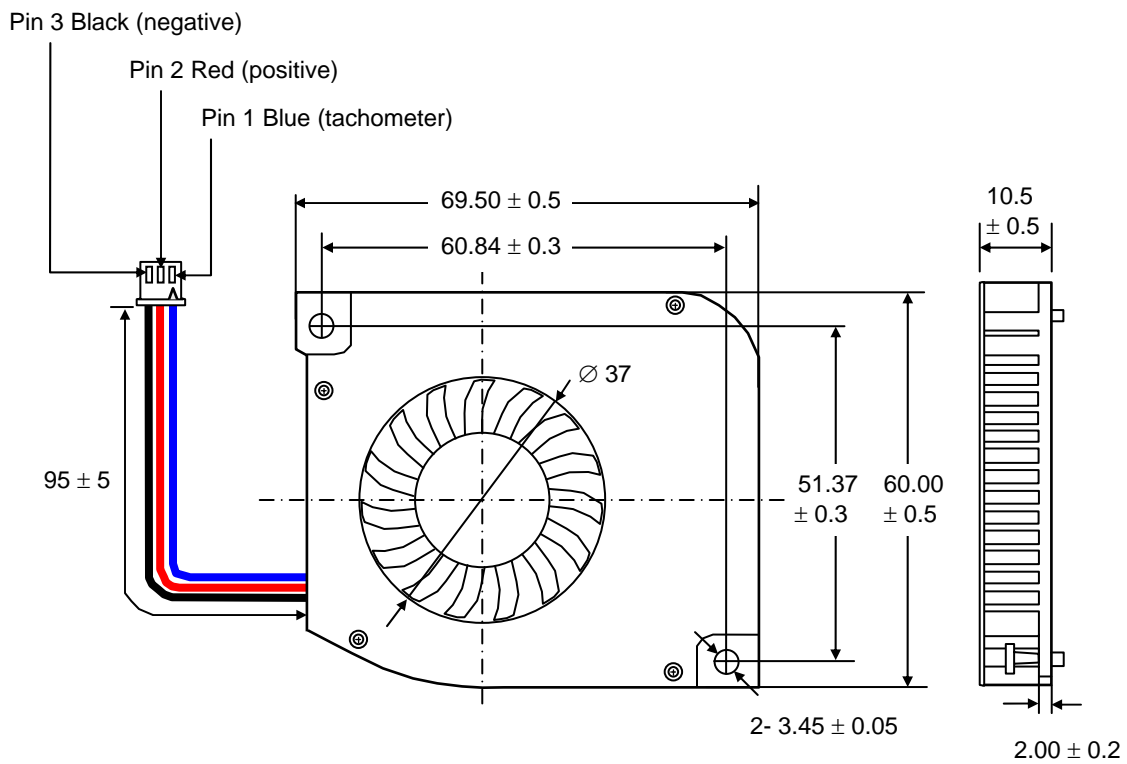
8.0 REMARKS

- 8.1 Material and construction are subject to change without advance notice. The changes should be within specification.
- 8.2 All fans shall meet the quality inspection under sampling plan MIL-STD-105D as follows:

Critical	0.25%
Major	1.00%
Minor	2.50%

Dimensions in millimeters

9.0 OUTLINE STYLING AND DIMENSIONS



To prevent damage to fan blade and ball bearing please do not touch or push fan blade with fingers or other objects.

Lead wires: UL1571 AWG#28 130 +/- 5 mm
Red = positive; Black = negative; Blue = Tachometer output
JST connector XHP-3
JST contacts SXH001T-P0.6