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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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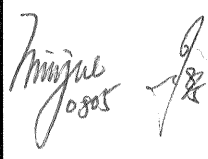
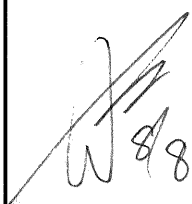
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



# SUNON

## SPECIFICATION FOR APPROVAL

CUSTOMER :  
DESCRIPTION : AXIAL AC FAN  
DIMENSIONS : 120X120X38 mm  
MODEL : SP103A  
P/N : 1123LST.GN  
SUNON SPEC. NO. : A12004230G-00  
APPROVAL NO. :  
APPROVED BY :  
(AUTHORIZED)

DRAWN	Apple 8/5	CHECKED		APPROVED		SPEC.NO	A12004230G-00
						ISSUE DATE	08.05.2005
						EDITION	0
						REVISION DATE	
						E.SPEC	EA12145

建準電機工業股份有限公司

SUNONWEALTH ELECTRIC MACHINE INDUSTRY CO., LTD.

12FL., 120 CHUNG CHENG 1ST RD.,

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## AXIAL AC FAN

MODEL : SP103A

P/N : 1123LST.GN

## CHARACTERISTICS

1. Motor Design : Reliable Shaded-Pole Motor Contraction.
2. Insulation Resistance : 500 Megohms minimum at 500 VDC.
3. Dielectric Strength : 1800 VAC for one second.
4. Motor Protection : Impedance protected.
5. Noise Level : Measured in a semi-anechoic chamber  
with background noise level below 15  
dB(A). The fan is running in free air with the  
microphone at a distance of one meter  
from the fan intake.
6. Tolerance :  $\pm 15\%$  on rated power and current.
7. Air Performance : Measured by a double chamber. The values  
are recorded when the fan speed has stabilized  
at rated voltage.

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**SPECIFICATIONS**

**MODEL : SP103A**

**P/N : 1123LST.GN**

- 1-1. Rated Voltage : 115 VAC 50/60 Hz**
- 1-2. Operating Voltage Range : 85-125 VAC**
- 1-3. Starting Voltage : 85 VAC (25 deg. C POWER ON/OFF)**
- 1-4. Rated Speed : 2200/2000 RPM ± 10%**
- 1-5. Air Delivery : 76/70 CFM**
- 1-6. Static Pressure : 0.12/0.08 Inch-H<sub>2</sub>O**
- 1-7. Rated Current : 0.11/0.13 AMP**
- 1-8. Rated Power : 11/11 WATTS**
- 1-9. Noise Level : 38/36 dB(A)**
- 1-10. Direction of Rotation : Counter-clockwise viewed from front of fan blade**
- 1-11. Operating Temperature : -10 to +70 deg. C**
- 1-12. Storage Temperature : -40 to +70 deg. C**
- 1-13. Bearing System : Lubricated sleeve bearing system.**
- 1-14. Weight : 550 g**
- 1-15. Safety : UL/CUR/TUV/CE Approvals**
- 1-16. Vibration : Vibration of acceleration 1.5G and frequency 5~50~5Hz is applied in all 3 directions(X,Y,Z), in cycles of 1 minute each, for a total vibration time of 30 minutes.**

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<b>E D I T I O N</b>	

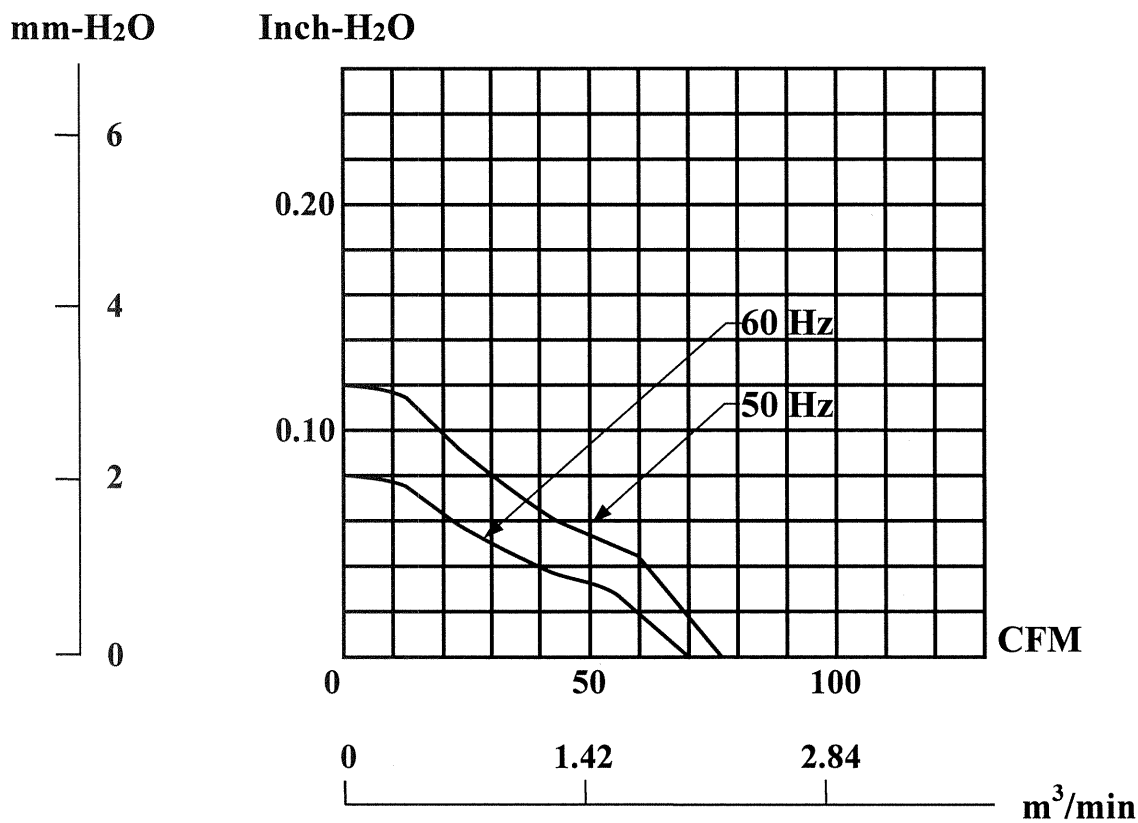


**MODEL : SP103A**

**P/N : 1123LST.GN**

**PERFORMANCE CURVES**

**STATIC  
PRESSURE**



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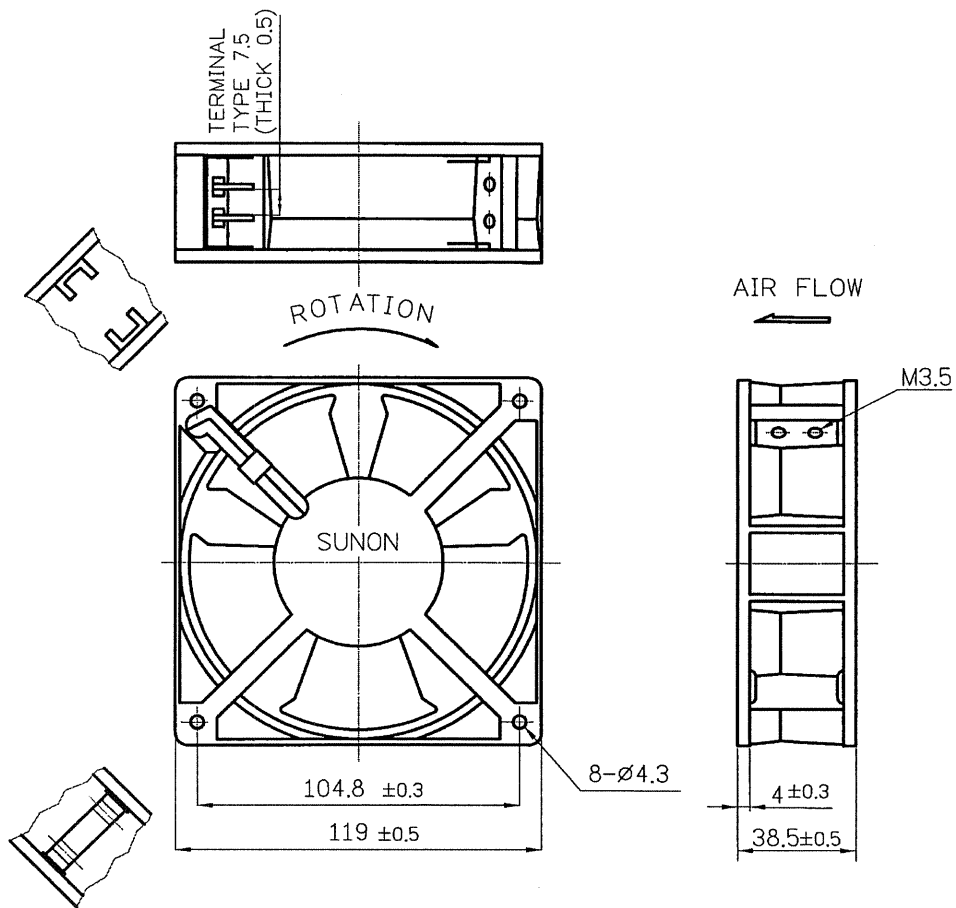
**MATERIAL**

2. Material

2-1. Frame : DIE-CAST ALUMINUM

2-2. Impeller : Thermoplastic PBT of UL 94V-0

**DIMENSIONS**



**Air Flow Direction: Toward Label side.**

**UNITS : mm**

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## Notes

### I . Safety

- 1.SUNON will not guarantee this product if your application exceeds the limitations outlined in this specification.
- 2.There is no thermo-protector installed in this product, such as thermo-fuse, or current-fuse or thermo-protector. There may be smoking, ignition, or electric shock by insulation degradation in cases of motor lock, motor lead short circuit, overload, over voltage, and/or other failure. Please add the protection circuit to your product.
- 3.There is no reverse-connection prevention diode of VDC ( + ) and GND ( - ) installed in this product. Therefore, if VDC( + ) and GND( - ) are reverse connected, it may cause smoking, ignition, and/or destruction, although these conditions may not manifest immediately. We recommend that a protection device be installed on your product when there is a possibility of reverse-connection.
- 4.Please verify that this product is being installed and used in compliance with all safety standards. Please inform SUNON of any safety concerns prior to releasing your product to production.
- 5.Please handle and install this product carefully. Hitting or dropping this product may cause damage.
- 6.Please do not damage this product including coil and lead wires while installing or wiring. There may be smoking or fire.

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## Notes

### II . Specification modification

- 1.SUNON offers engineering assistance on fan installation and cooling system design.
- 2.Any change to the parameters specified in this document will be determined by mutual agreement between both parties. Parameters which are not specified in this specification will be identical to the final sample which has been approved by your company.
- 3.Product will be shipped in accordance with this specification unless Sunon has been previously notified of parameters requiring exception.
- 4.Parameters modified by mutual consent will be incorporated in this specification.
- 5.Please notify SUNON in advance of any modification to your product or new application for this fan which may require a review of this specification.

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## Declaration of RoHS

Control declaration of environment- related substances/ materials

1. In accordance with the Restriction of Hazardous Substances (RoHS) Directive, Sunon product with P/N: GN models have complied with law and discipline not to employ the forbidden substances, and restrict the allowable concentration of some limited substances deliberately in our components.

No	Substance		Criteria
1	Halogens & its compounds (Substances depleting the ozone layer)		Forbidden
2	Chlorinated Organic Solvent		Forbidden
3	Lead and its compounds	Plastic (Frame, Impeller, wire harness, etc.)	<100ppm
		Solder	<1000ppm
		Iron Alloy	<3500ppm
		Aluminium Alloy	<4000ppm
		Copper Alloy	<4wt%
4	Cadmium and its compounds	Solder	<20ppm
		Cadmium Alloy	<100ppm
		Plastic	<5ppm
5	PBB and PBDE Category		Forbidden
6	PCB and PCT Category		Forbidden
7	CP		Forbidden
8	Mirex		Forbidden
9	PCN category		Forbidden
10	Hexavalent Chromium Compounds		<100ppm
11	Mercury and its compounds		Forbidden
12	Asbestos		Forbidden
13	Organic Tin Compounds		Forbidden
14	Azo Compounds		Forbidden