imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



SUNON

SPECIFICATION FOR APPROVAL

CUSTOMER	•
MOTOR TYPE	Fan & Blower by SUNON
DESCRIPTION	: MagLev Motor Fan
DIMENSIONS	: 60X60X25 mm
MODEL	: MA1062-HVL
P/N	: GN
SUNON SPEC. NO	: A06000010G-00
APPROVAL NO.	:
APPROVED BY	
(AUTHORIZED)	

						SPEC.NO	A06000010G-00		
	41:00		Kiddy			ISSUE DATE	02.15.2006		
DRAWN	Alice 1/28	CHECKED	Kiddy Cindy	APPROVED	Jacky	EDITION	1		
	1/20		Cindy					REVISION DATE	01.28.2011
						E.SPEC	EM60248		
建準電機	幾工業股份	有限公司							
SUNON	WEALTH	ELECTE	RIC MACHIN	INDUS	FRY CO., I	L TD.			
NO. 30,	LN. 296, X	INYA RD	., QIANZHEN	N DIST.,	TEL:886-7-8	8135888			
KAOHS	SIUNG CIT	'Y 80673, '	TAIWAN (R.	D.C)	FAX:886-7-8	8230505/8230606	/8231010 ^{- ¥}		
URL:ht	tp://www.su	unon.com]	E -mail: suno	n@email.sunon.	cowith 發部		
							2011.02.18		

發

们

貢

發行章

AXIAL AC FAN MODEL : MA1062-HVL P/N : GN

CHARACTERISTICS

1. Motor Design	: 2 phases, 4-poles Brushless DC motor.
2. Insulation Resistance	: 10Megohms mininmum at 500 VDC.
3. Dielectric Strength	: 1500 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	: ±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.

建準電機工業股份有限公司	SPEC.NO	A06000010G-00	REVISION DA	TE 91,28.2011
SUNONWEALTH ELECTRIC	ISSUE DATE	02. 15. 2006	ΕΟΙΤΙΟΝ	
MACHINE INDUSTRY CO., LTD.	PAGE	2 OF 9		微研發部 2
				2011.02.18

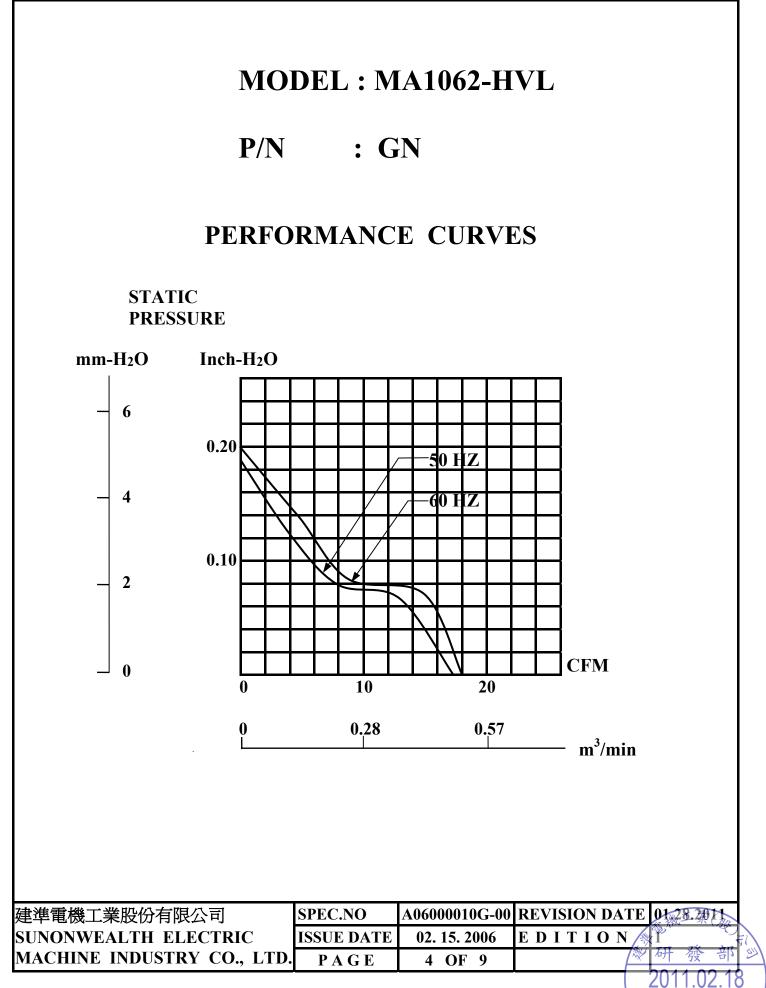
SUNON

發行章

SPECIFICATIONS

MODEL: MA1062-HVL P/N : GN

1-1. Rated Voltage	: 115 VAC	50 Hz	115 VAC 60	Hz
1-2. Operating Voltage Range	: 75~125 V	AC		
1-3. Starting Voltage	: 75 VAC (2	25 deg. C POW	/ER ON/OFF))
1-4. Rated Speed	: 4100 RPM	1 ± 15%	4200 RPM ±	15%
1-5. Air Delivery	: 17.5 CFM	[18 CFM	
1-6. Static Pressure	: 0.19 Inch-	-H2O	0.20 Inch-H2	0
1-7. Rated Current	: 191 mA		185 mA	
1-8. Input Power	: 3.6 WAT	ГS	3.6 WATTS	
1-9. Noise Level	: 30 dB(A)		31 dB(A)	
1-10. Direction of Rotation	: Counter-o	clockwis viewe	d from front o	f fan blade
1-11. Operating Temperature	: -10 to +70	deg. C		
1-12. Storage Temperature	: -40 to +70	deg. C		
1-13. Bearing System	: Vapo bea	ring system		
1-14. Weight	: 81 g			
1-15. Safety	: UL/CUR/	TUV Approva	ls	
1-16. Protection	Note: In a s electricity i temporarily automatical	tic Restart Ca situation where the fa is on, an increase in cu turning off the elect lly restart when the lo Protection	n is locked by an extended by an extende	be prevented by ptor. The fan will
建準電機工業股份有限公司	SPEC.NO	1	REVISION DA	TE 01,28.2011
SUNONWEALTH ELECTRIC	ISSUE DATE		EDITION	AND TO AN
MACHINE INDUSTRY CO., LTD.	PAGE	3 OF 9		一般 研發部 当
				2011.02.18



發行

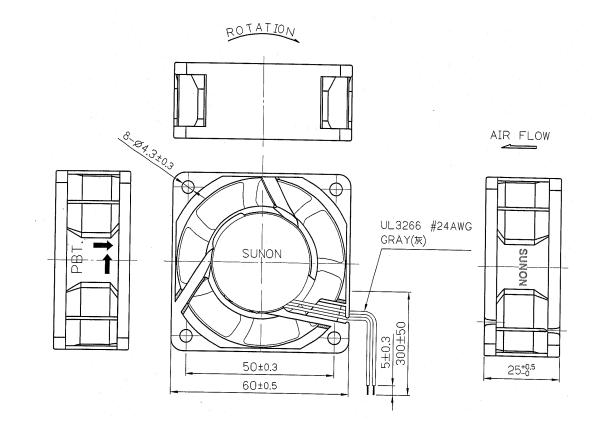
童

MATERIAL

- 2. Material
- 2-1. Frame
- 2-2. Impeller
- 2-3. Lead Wire

Thermoplastic PBT of UL 94V-0 Thermoplastic PBT of UL 94V-0 UL3266, 24 awg, GRAY





:

:

:

- **1. Air Flow Direction: Label side.**
- 2. Best Mounting Direction: Any orientation.

UNITS : mm

發

建準電機工業股份有限公司	SPEC.NO	A06000010G-00	REVISION DATE	01.28.2011
SUNONWEALTH ELECTRIC	ISSUE DATE	02. 15. 2006	EDITION	藏機上茶 (報)
MACHINE INDUSTRY CO., LTD.	PAGE	5 OF 9		研發部
				2011.02.18

Notes

I .SAFETY

- 1. DO NOT use or operate this fan in excess of the limitations set forth in this specification. SUNON is not be responsible for the non-performance of this fan and/or any damages resulting from its use, if it is not used or operated in accordance with the specifications.
- 2. SUNON recommends adding a protection circuit to the product or application in which this fan is installed, such as a thermo-fuse, or current-fuse or thermoprotector. The failure to use such a device may result in smoke, fire, electric shock by insulation degradation in cases of motor lock, motor lead short circuit, overload, or over voltage, and/or other failure.
- 3. SUNON recommends installing a protection device to the product or application in which this fan is installed if there is a possibility of reverse-connection between VDC (+) and GND (-). The failure to install such a device may result in smoke, fire, and/or destruction, although these conditions may not manifest immediately.
- 4. This fan must be installed and used in compliance with all applicable safety standards and regulations.
- 5. Use proper care when handling and/or installing this fan. Improper handling or installation of this fan may cause damage that could result in unsafe conditions.
- 6. Use proper care during installation and/or wiring. Failure to use proper care may cause damage to certain components of the fan including, but not limited to, the coil and lead wires, which could result in smoke and/or fire.
- 7. DO NOT use power or ground PWM to control the fan speed. If the fan speed needs to be adjusted, please contact Sunon to customize the product design for your application.
- 8. For critical or extreme environments, including non stop operation, please contact Sunon and we will gladly provide assistance with your product selection to ensure an appropriate cooling product for your application.

建準電機工業股份有限公司	SPEC.NO	A06000010G-00	REVISION DA	TE 1128.2012
SUNONWEALTH ELECTRIC	ISSUE DATE	02. 15. 2006	ΕΟΙΤΙΟΝ	新發部
MACHINE INDUSTRY CO., LTD.	PAGE	6 OF 9		

Notes

II. SPECIFICATION MODIFICATION

- 1. SUNON offers engineering assistance on fan installation and cooling system design.
- 2. All changes, modifications and/or revisions to the specifications, if any, are incorporated in the attached specifications.
- 3. No changes, modifications and/or revisions to these specifications are effective absent agreement, by both Sunon and the customer, in writing.
- 4. This fan will be shipped in accordance with the attached specification unless SUNON and the customer have agreed otherwise, in writing, as specficied in Paragraph 3, above.

III. OTHER

- 1. When building your device, please examine thoroughly any variation of EMC, temperature rise, life data, quality, etc. of this product by shock/drop/vibration testing, etc. If there are any problems or accidents in connection with this product, it should be mutually discussed and examined.
- 2. Use proper care when handling this fan. Components such as fan holders or bearings may be damaged, if touched with fingers or other objects. Additionally, static electricity (ESD) may damage the internal circuits of the fan.
- **3.** DO NOT operate this fan in proximity to hazardous materials such as organic silicon, cyanogens, formalin, phenol, or corrosive gas environments including, but not limited to, H₂S, SO₂, NO₂, or Cl₂.
- 4. SUNON recommends that you protect this fan from exposure to outside elements such as dust, condensation, humidity or insects. Exposure of this fan to outside elements such as dust, condensation, humidity or insects may affect its performance and may cause safety hazards. SUNON does not warrant against damage to the product caused by outside elements.

建準電機工業股份有限公司	SPEC.NO	A06000010G-00	REVISION DA	TE 1128.201	
SUNONWEALTH ELECTRIC	ISSUE DATE	02. 15. 2006	ΕΟΙΤΙΟΝ	新發部	;/\
MACHINE INDUSTRY CO., LTD.	PAGE	7 OF 9			5

Notes

- 5. This fan must be installed properly and securely. Improper mounting may cause harsh resonance, vibration, and noise.
- 6. Fan guards may prevent injury during handling or installation of the fan and are available for sale with this fan.
- 7. Unless otherwise noted, all testing of this fan is conducted at 25°C ambient temperature and sixty-five percent (65%) relative humidity.
- 8. DO NOT store this fan in an environment with high humidity. This fan must be stored in accordance with the attached specifications regarding storage temperature. If this fan is stored for more than 6 months, SUNON recommends functional testing before using.
- 9. SUNON reserves the right to use components from multiple sources at its discretion. The use of components from other sources will not affect the specfications as described herein.
- 10. The "Life Expectancy" of this fan has not been evaluated for use in combination with any end application. Therefore, the Life Expectancy Test Reports (L10 and MTTF Report) that relate to this fan are only for reference.

VI. WARRANTY

This fan is warranted against all defects which are proved to be fault in our workmanship and material for one year from the date of our delivery. The sole responsibility under the warranty shall be limited to the repair of the fan or the replacement thereof, at SUNON's sole discretion. SUNON will not be responsible for the failures of its fans due to improper handing, misuse or the failure to follow specifications or instructions for use. In the event of warranty claim, the customer shall immediately notify SUNON for verification. SUNON will not be responsible for any consequential damage to the customer's equipment as a result of any fans proven to be defective.

建準電機工業股份有限公司	SPEC.NO	A06000010G-00	REVISION DA	TE	01.2	8.201	
SUNONWEALTH ELECTRIC	ISSUE DATE	02. 15. 2006	ΕΟΙΤΙΟΝ		1	<u>添</u> 立[
MACHINE INDUSTRY CO., LTD.	PAGE	8 OF 9			۳۳ 011	贺 	
						1.UZ.TC	5

2011.02.18

發

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	CFCs & HCFCs (ozone depleti	ng substances)	Forbidden
2	Chlorinated Organic Solvent	Forbidden	
		Plastic (Frame, Impeller, wire harness, etc.)	<100ppm
		Solder	<1000ppm
3	Lead and its compounds	Steel alloy	<3500ppm
		Aluminium alloy	<4000ppm
		Copper alloy	<4wt%
		Solder	<20ppm
4	Cadmium and its compounds	Parts composed of metals containing zinc (e.g. brass, zinc for die casting)	<100ppm
		Plastic	<5ppm
5	PBBs and PBDEs		Forbidden
6	PCB and PCT		Forbidden
7	CP, Short-chain Chlorinated pa	Forbidden	
8	Mirex	Forbidden	
9	PCN		Forbidden
10	Hexavalent Chromium compou	ınds	<100ppm
11	Mercury and its compounds		Forbidden
12	Asbestos		Forbidden
13	Organic Tin compounds		Forbidden
14	Azo compounds	Forbidden	
15	TBBP-A in external case plasti	c parts of products (PCB is exempted)	<1000ppm
16	Nickel in external case parts, whic	h are likely to result in prolonged skin exposure	<1000ppm

建準電機工業股份有限公司	SPEC.NO	A06000010G-00	REVISION DATE 01.28.2	011
SUNONWEALTH ELECTRIC	ISSUE DATE	02. 15. 2006		
MACHINE INDUSTRY CO., LTD.	PAGE	9 OF 9	愛研 發	· 部