



产品承认书 / SPECIFICATION FOR APPROVAL

客户名称/CUSTOMER : Ozdisan
 客户料号/CUSTOMER P/N. :
 样品编号/SAMPLE NO. : YP201903432
 产品型号/MODEL NO. : DA08025B12LG
 详细描述/DESCRIPTION. : 80×80×25mm
 制作日期/ISSUE DATE. : 2019-03-28



客户确认签名 / CUSTOMER'S AUTHORIZED SIGNATURE:

签名/SIGNATURE
 时间/TIME

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版本记录 / REVISED RECORD

版本/REV	修改描述/REVISION DESCRIPTION	日期/TIME
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DRAWN.BY	CHECKED.BY ENG	APPROVED.BY VM	

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参数规格(PRODUCT SPECIFICATION)

A.一般规格(General Specification)

项目/ITEM		规格.条件/Specification Condition	
01	型 号 / Part No.	DA08025B12LG	
02	外型尺寸 / Dimension	80×80×25mm	
03	额定电压 / Rated Voltage	12VDC	
04	启动电压 / Start-up Voltage	8VDC	25°C Switch power ON/OFF
05	操作电压 / Operating Voltage	8.0~13.8VDC	
06	额定转速 / Rated Speed	2500rpm	±15%
07	额定电流 / Rated Current	0.08A	±0.01
08	额定功率 / Rated Power	0.96W	±10%
09	安规电流 / Safety Current	0.20A	
10	额定风量 / Rated Airflow	35.67	CFM
		1.01	m ³ /min
11	额定静压 / Rated Static Pressure	0.11	Inch-H ₂ O
		2.79	mm-H ₂ O
12	寿命预估 / Life Expectancy	70000hrs at 40°C	
13	噪音测试/Noise Level	25.0dB Max	
14	马达极数/ No. of Pole	4 极/Poles	
15	回转方向/ Rotating Direction	顺时针/Clockwise (从标签面看/From Label side)	

B.电气规格(Electrical Specification)

项目/ITEM		规格.条件/Specification. Condition	
01	锁定扇叶保护功能 Locked Rotor Protection	<input type="checkbox"/>	安规条件/ Safety Condition
		<input checked="" type="checkbox"/>	额定电压, 锁住扇叶 1 秒, 自动断电后, 2~6 秒后尝试重新启动/Auto power off after locked at rated voltage for 1sec After auto power off ,circuit attempt restart in 2 to 6sec
02	极性保护 Polarity Protection	<input checked="" type="checkbox"/>	Vcc 与 GND 反接时, 不导通 Open circuit when Vcc&GND are exchanged
		<input type="checkbox"/>	Vcc 与 GND 反接时, 5 秒内不烧毁 / Circuit won't be burned within 5 seconds when Vcc &GND are exchanged
		<input type="checkbox"/>	无反接保护 No Polarity Protection
03	绝缘阻抗 Insulation Resistance	10MΩ 裸线与外框间测量, 500VDC/min 10MΩ Between unshielded wire and frame at 500VDC/min	
04	绝缘耐压 Dielectric Strength	5mA Max/ 裸线与外框间测量, 500VAC/min 5mA Max/ Measured b/w lead wire(+)and frame at 500VAC/min	
05	特殊功能 Special Function	<input type="checkbox"/> 限流/Current Limiter <input type="checkbox"/> 软启动/Soft Start <input type="checkbox"/> 转速缓升/Speed up	

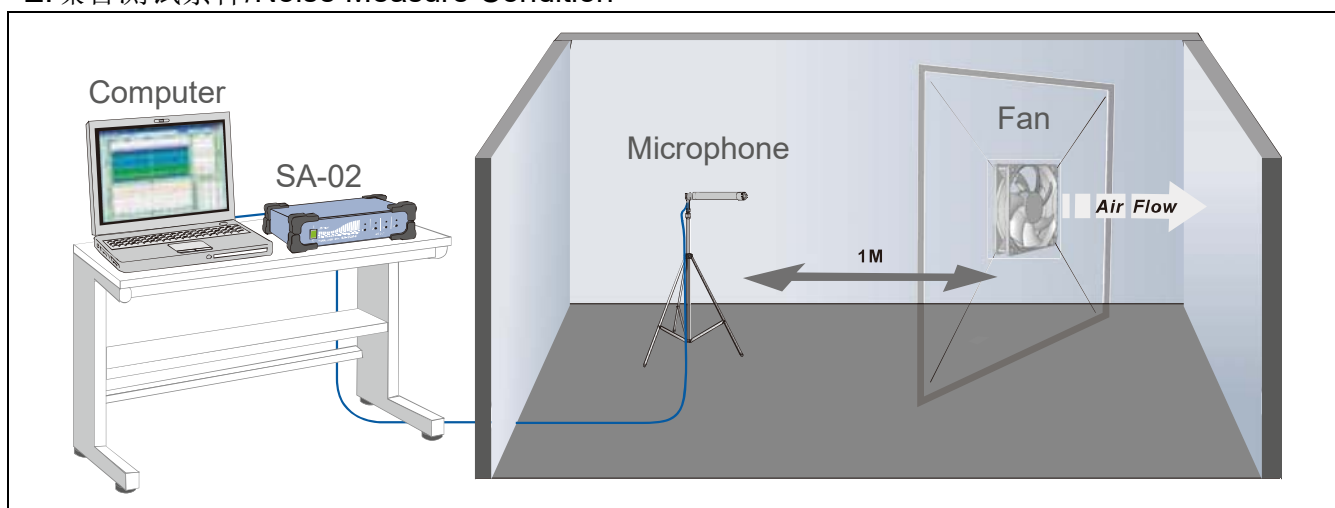
C.主要材料,零件规格(Main Materials, Parts Specification)

01	轴 承/Bearing	<input checked="" type="checkbox"/> 双滚珠轴承 (Dual Ball Bearing)	<input type="checkbox"/> 含油轴承 (Sleeve Bearing)		
02	外框材质/Frame	<input checked="" type="checkbox"/> PBT of UL94V-0.	<input type="checkbox"/> Die-cast Aluminum Alloy		
03	扇叶材质/Impeller	<input checked="" type="checkbox"/> PBT of UL94V-0.	<input type="checkbox"/> Steel		
04	绝缘套/Bobbin	<input checked="" type="checkbox"/> PBT of UL94V-0.			
05	导线/Lead Wire	<input checked="" type="checkbox"/> Red(+)	<input checked="" type="checkbox"/> Black(-)	<input checked="" type="checkbox"/> Blue (PWM)	UL1007 26#
		<input checked="" type="checkbox"/> Yellow(FG)	<input type="checkbox"/> White(RD)	4 wires 300±10mm	
06	端子/Connector	无/No			
07	套管/Tube	无/No			
08	防护处理/ IP level	无/No	IPXX protection verification is focused on motor and PCB, not for power connector and pin housing		

D.环境测试/Environmental Specification

项目/ITEM		规格.条件/Specification. Condition	
01	运转温度、湿度范围 Operating Temp. Range	温度/Temperature	: -40 °C ~70°C
		湿度/Humidity	:15%~ 90% RH (Frost Eliminated)
02	保存温度、湿度范围 Storage Temp. Range	温度/Temperature	: -40 °C ~70°C
		湿度/Humidity	:15%~ 90% RH (Frost Eliminated)


E.噪音测试条件/Noise Measure Condition



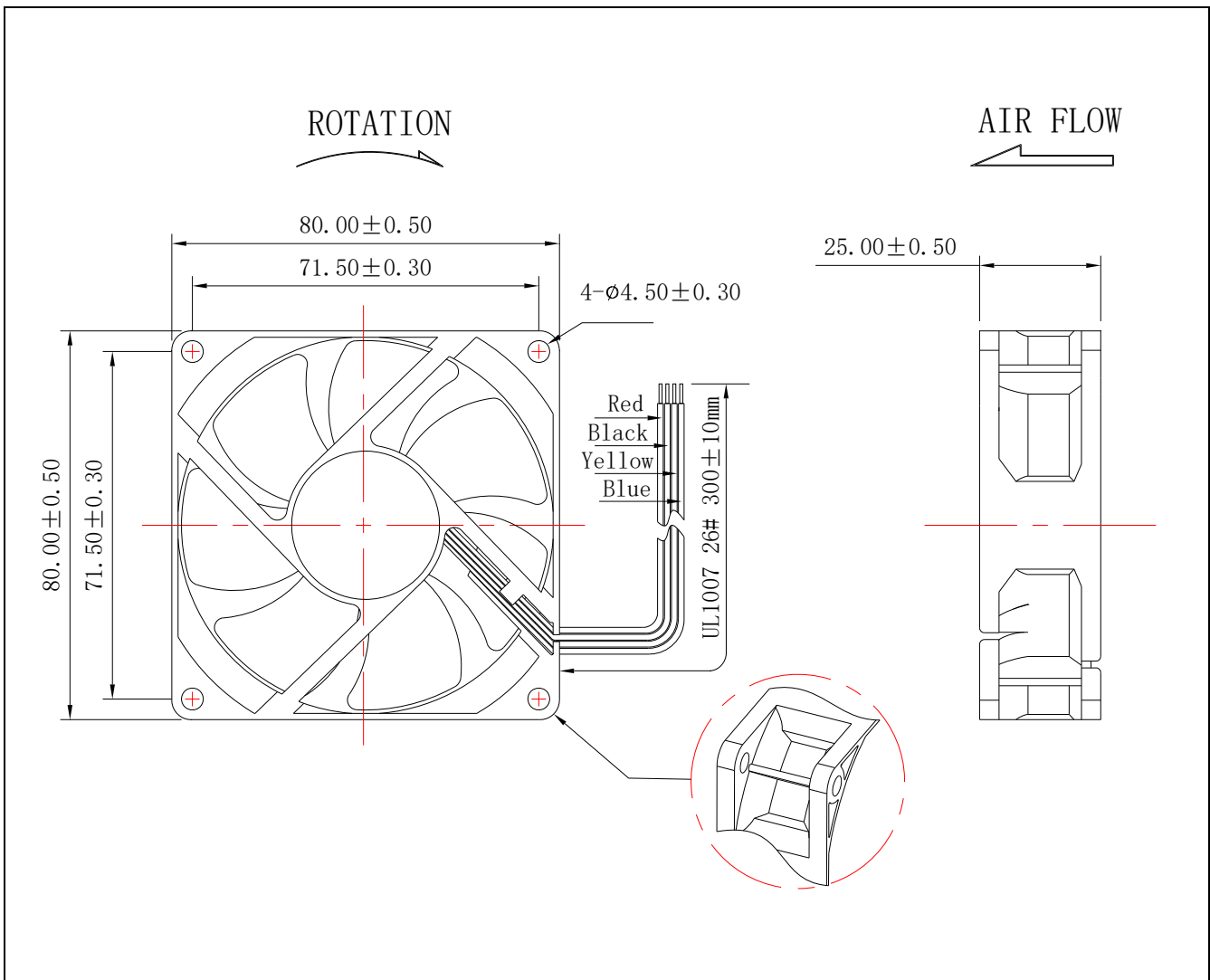
测量系统/Measurement Systems

1. ANECHOIC Room Noise Measurement System
2. Rion SA-02 4-Channel Signal Analyzer, U-57 Microphone
3. Specifications:CNS8753/ISO3744 ,ISO 7779
4. Background Noise:< 16dB(A)

F.商标 (Label Marking)

	型号/Model No.	DA08025B12LG
	额定电压/Rated Voltage	12VDC
	安规电流/Safety Current	0.20A
	标签尺寸/Label Size	Φ30 mm
	商标颜色/Label Color	绿色/Green
	安规/Safety Approval	UL CE TUV
	附加码/Appendix Code	无/No

G.外形尺寸 (Outline Dimension)



H. Frequency Generator

Output of rotary Signal

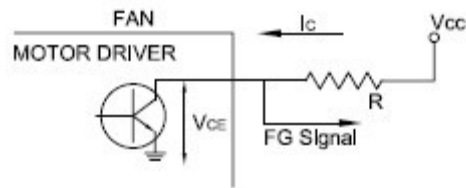
1. Output method-open collector method
2. Circuit Specification

2-1. Specification:

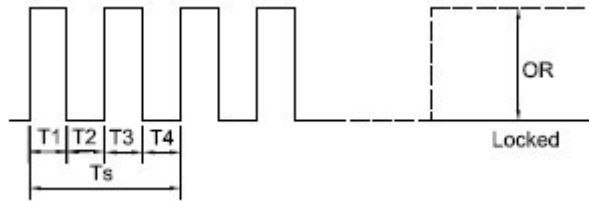
$V_{cc} = 13.8V \text{ MAX}$

$I_c \leq 5mA \text{ MAX}$

$R \geq V_{cc}/I_c$



2-2. Frequency Generator Waveform



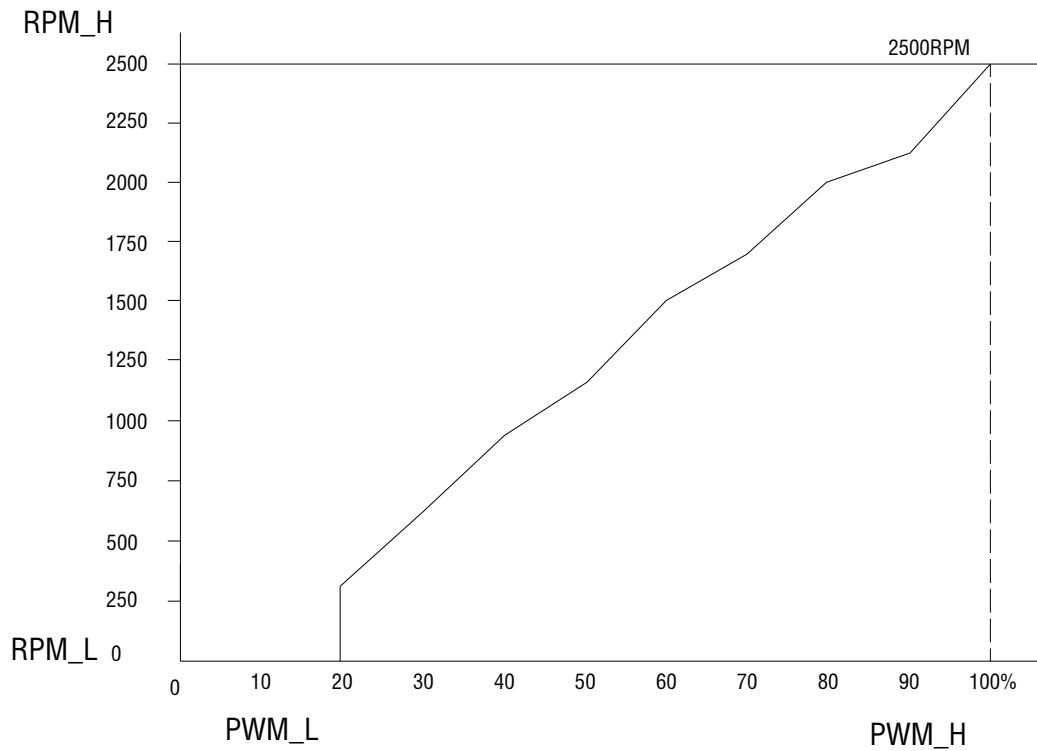
One Fan Rotation

N: Revolution per Minute(rpm)

$T1 \sim T4 \approx 1/4Ts = 60/4N(\text{sec})$

Pulse width Duty = $T1 \div (T1 + T2) = 50 \pm 5\%$

I.PWM- curve graph

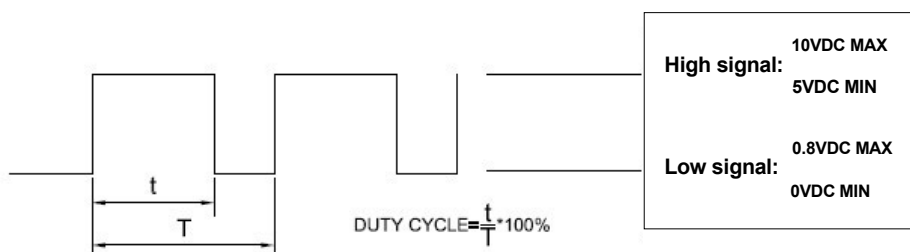


SPEED VS PWM CONTROL SIGNAL (At 12V) :

DUTY CYCLE(%)	0~10	20	30	40	50	60	70	80	90	100
SPEED R.P.M	0	300	600	900	1200	1500	1700	2000	2100	2500

When Duty Cycle is 100%, The Rated Speed is 2500±10% RPM

I.PWM Signal:



- a: The frequency shall be able to accept 25KHz
- b: At 0%~10% duty cycle, the rotor will spin at stop
- c: At 20% duty cycle, the rotor will spin at 300RPM.
- d: At 100% duty cycle, the rotor will spin at Maximum speed
- e: With control signal lead disconnected, the fan will spin at Maximum speed.

注意事项/Note:

1. 我们提供的产品应在规格书指定的条件内使用，如果您的应用超出规格极限，我们对此不保证产品质量。
Our products should be used within the specification appointed condition, so we will not guarantee this product quality if your application exceeds the limitations outlined in this specification.
2. 除非事先通知我们所需求参数，否则出货产品与此份规格书一致，未在此份规格书中指定的参数与贵公司最终承认的样品相同。Product will be shipped in accordance with this specification unless we has been previously notified of parameters requiring exception, if parameters which are not specified in this specification.
3. 不适当的安装可能产生刺耳的共振，振动和噪音，安装时，请不要在安装点用力过度或用力不均以免造成振动或噪音。在安装点装置减振器，可有效降低噪音及振动。Improper mounting may cause harsh resonance, vibration and noise. Please mount this fan motor properly without applying excessive or uneven force at the mounting points to avoid vibration and noise. Dampers at the mounting points can reduce noise and vibrations greatly.
4. 建议安装风扇保护罩，以免对人员造成意外伤害。Please use fan guards to avoid personal accidental injuries.
5. 除非IP等级中有特殊说明，否则该款风扇只能在正常环境下操作。Unless this fan motor is specified for use in abnormal environments designated by IP rating level, this fan is designed to operate under normal environmental conditions.
6. 请避免将M-FAN系列产品接触有毒物质 如：（有机物、氰、福尔马林、苯酚等）。以及在腐蚀性气体环境中使用 如：（硫化氢、二氧化硫、二氧化氮等）。Please avoid operating M-FAN's products in poisonous material(organic, cyanogens, formalin, phenol, etc.)or corrosive gas environment(H₂S, SO₂, NO₂,etc.)
7. 当风扇在灰尘环境中使用时，请在风扇进风口处安装过滤装置以延长风扇使用寿命。Please use filters to clean the air-intake in very dusty air environments for extended fan life.
8. 在保证产品性能及寿命不变，或者得以提升的条件下。除非事先约定，我们保留使用同等规格多种来源零件的权利，原材料和结构的变更不做预先通知。Unless prior agreement, We reserve the right to use components with equivalent specifications from multiple sources, so material and construction are subject to change without advance notice.
9. 请确保风扇在规定的温湿度储存环境中，如果风扇存储6个月以上，我们建议客户测试风扇功能后再使用。Always ensure that fans are stored according to the storage temperatures specified. Do not store in a high humidity environment. If the fans are stored for more than 6 months, we recommend functional testing before using.
10. 确定在连接和断开连接器之前关掉电源，避免产生电子零件短路。Make sure to turn off the power before connection or disconnecting the connectors. This may cause short of electronic parts.