

SPECIFICATION
规格书

客户名称 (Customer Name) : _____

客户代号 (Customer Model) : _____

样品型号 (Product Model) : _____

样板单号 (Sample No.) : _____

板次 (REV) : _____

制作 (PREPARED BY) _____

确认 (CHECKED BY) _____

批准 (APPROVED BY) _____

客户确认及签名 (SIGNATURE FOR APPROVAL)

确认日期 (DATE OF APPROVAL)

1. 适用范围/ General:

本说明书适用于圆筒式永磁直流电机 SKU 1162064

This specification applies to cylindrical permanent-magnetic motors DC SKU 1162064

2. 使用条件/ Operating Condition:

项目/ Item	规格/ Specification	条件·备注/ Condition Remark
2-1 额定电压/ Rated Voltage	3.0V DC	
2-2 使用电压范围 Operating Voltage	2.4~3.6V DC	
2-3 额定负荷/ Rated Load	振子/Vibration Weight: R2.8*3.7	见外形图/See Outline Drawing
2-4 额定转/ Rated Speed	10000±2000rpm	
2-5 旋转方向/ Rotation	C.W.	
2-6 马达位置/ Motor Position	All position	
2-7 使用环境 Operating Environment	-20~+70℃ 10 ~90%	无水气凝结 No condensation of moisture
2-8 存放环境 Storage Environment	-40~+80℃ 5~95%RH	无水气凝结 No condensation of moisture

3. 测定条件/Measuring Condition:

项目/ Item	规格/ Specification	条件·备注/ Condition Remark
3-1 温度/ Temperature	20±2℃	
2-2 湿度/ Humidity	65±5%RH	
3-3 位置 Motor Position	轴向水平 Motor shaft horizontal	将马达固定在试验台上 Lock the motor in a test fixture

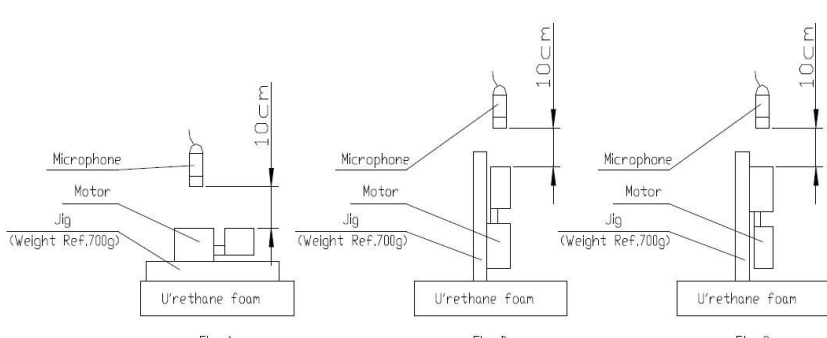
以上数据均在温度 20℃，湿度 65%的条件下测得；判定有异议时，请在温度 5~35℃、湿度 45~85%的范围内测定。

All data are based on the measurement under the temperature of 20℃ and humidity 65%RH. however. the ranges of temperature 5~35℃ and humidity 45~85%RH are to be applicable as long as no problems.

4. 机械要求/ Mechanical Specification

项目/ Item	规格/ Specification	条件·备注/ Condition Remark
4-1 结构 Configuration	见外形图 As specified in outline drawing	外形图编号 Outline drawing No: LZ--
4-2 外观 Appearance	不含有机机械损坏及不充分的侵蚀等 There shall be no mechanical damage and inadequate corrosion and so on	目测(容许范围根据样品外形) Visual examination (allowable extent is based on boundary sample.)
4-3 轴向间隙/ Shaft Play	0.1-0.3mm	
4-4 质量 Mass	Approx.	
4-5 振子固定力 Holding Strength of Vibrator weight	49N(5kgf)Min	

5. 性能特征/ Performance and characteristics:

项目/ Item	规格/ Specification	平均数/ Average	条件·备注/ Condition Remark
5-1 额定转数/Rated speed	10000±2000rpm	9800rpm	在额定电压和额定负载(振子) At rated voltage and rated Load (vibration weight).
5-2 额定电流/ Rated current	70mA Max.	36mA	
5-3 堵转电流/ Stall current	100mA Max.	84mA	在额定电压下/ At rated voltage
5-4 起动电压 Starting Voltage	0.8V Max	0.8V	在额定负载下电枢的任意位置 At rated load any position of rotor.
5-5 绝缘电阻 Insulation Resistance	1MΩ Min	1MΩ Min	在 100V 直流下端子和机壳间 At DC 100V between Terminal and Case.
5-6 端子阻抗 Terminal Resistance	33.5 ± 0.8Ω	33.5Ω	At 20°C.
5-7 机械噪音 Mechanical Noise	<50dB(A)	<45dB(A)	在额定电压、额定负载（振子）下。 At rated voltage and rated load (vibration weight). 背景噪音：不大于 28dB.A 计权/ Back ground noise 28dB(A) Max. 测试仪器：B&K/ Weasuring instruments: B&K 夹具重量：700G/ Weight of jig: 700G
			

6. 可靠性/ Reliability:

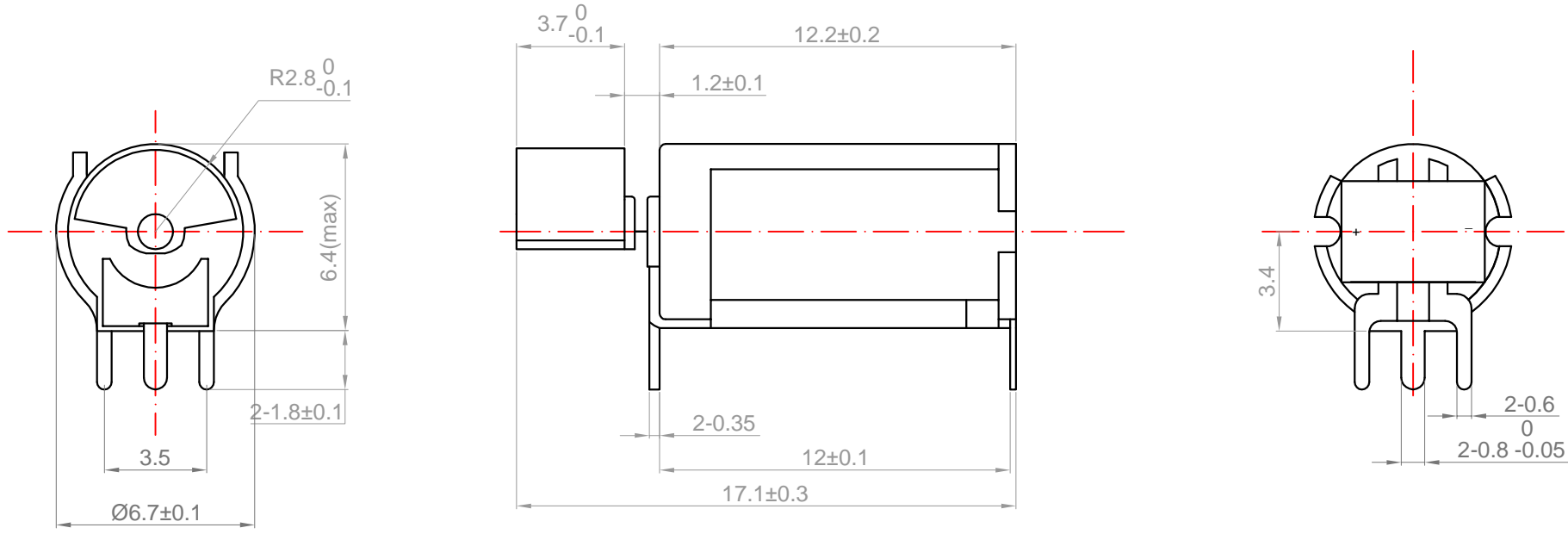
项目/ Item	规格/ Specification	判定基准/ Requirements
6-1 寿命 Life	位置/ Position: 轴水平/ Horizon 电压/ Voltage: 3.0V DC 温度/ Temperature: 20°C 湿度/ Humidity: 65% 寿命/ Life: 15000 cycles	在常温常湿下放置 2H 后, 马达应符合项 7-1 的要求 After 2 hours exposure in ordinary temperature and humidity, Motors shall be approved as specified in item 7-1.
	6-1-1 测试状态/ Test Mode: Continuous run (C.W.). 测试时间/ Test time: 100 hours	在常温常湿下放置 2H 后, 马达应符合项 7-2 的要求
	6-1-2 测试状态/ Test Mode: 8 seconds on (C.W.) then 8 seconds off 测试循环/ Test cycle: 15000 cycles.	在常温常湿下放置 2H 后, 马达应符合项 7-2 的要求 After 2 hours exposure in ordinary temperature and humidity, Motors shall be approved as specified in item 7-2.

项目/ Item		测试环境/ Test condition	判定基准/ Requirements
6-2	低温放置 Low Temperature	温度/ Temperature: -20±2℃ 时间/ Time: 96h.	在常温常湿下放置 2H 后, 马达应符合项 7-2 的要求 After 2 hours exposure in ordinary temperature and humidity, Motors shall be approved as specified in item 7-2
6-3	高温放置 High Temperature	温度/ Temperature: 60±2 ℃ 时间/ Time: 96h.	
6-4	湿度放置 Humidity Exposure	温度/ Temperature: 40±2 ℃ 湿度/ Humidity:65%±20%RH 时间/ Time: 96h. 无水气凝结/ No condensation of moisture.	
6-5	振动 Vibration	全振幅/ Displacement:1.5mm(p-p) 频率/ Frequency: 10 to 55 Hz 周期/ Period:2 Minutes log sweep (10-55-10Hz) Direction: x,y,z 时间/ Time: Each 2 hour	测试结果应符合项 7-2 的要求 After the test, motors shall be approved as specified in item 7-2.
6-6	自然跌落 Free Fall	将马达固定在约 75 克 (包括马达本身) 的物体上, 落向水泥地面。 Set the motor to the approximately 75g(including the motor) weight of block and drop the motor on the concrete floor. 高度/ Height: 1.2 meters. 方向/ Direction: ±x, ±y, ±z. 次数/ Number of times: Each 2 times.	测试结果应符合项 7-2 的要求 After the test, motors shall be approved as specified in item 7-2.

7. 要求/ Requirements

项目/ Item		判定基准 Requirements
7-1	表 A Table A	1) 额定转速/ Rated Speed : Data ± 30% Max. 2) 额定电流/ Rated Current : Data ± 30% Max 3) 绝缘电阻/ Insulation Resistance : 1MΩ Min. 4) 起动电压/ Starting Voltage : 0.8V
7-2	表 B Table B	1) 额定转数/ Rated Speed : Data ± 30% Max. 2) 额定电流/ Rated Current : Data ± 30% Max

Rev.	Description	Date
01	Release for Production	06/19/2012



Technical Requirements

- 1.Refers to GB/T 1804-m, if the dimension of tolerance is not indicated.
- 2.Refers to GB/T 1184-k,if the tolerance of form is not indicated.
- 3.Shaft play is between 0.1 to 0.3mm.

NO.	Item	Specification	NO.	Item	Specification
1	Rated Voltage	3.0VDC			
2	Operating Voltage	2.4~3.6 VDC			
3	Rated Current	70 mA Max			
4	Rated Speed	10000±20% RPM			
5	Vibrator Size	R2.8X3.7			
6					

Drawn	L	08/16/2016	Kysan Electronics www.kysanelectronics.com Email : info@kysanelectronics.com		
Checked					
Eng Appr.					
Mfg Appr.					
Q.A.					
SKU	1162064		Size : A4	Weight(Kg):	Unit: mm
			Scale: 10:1		Sheet 1of 1