

# 产品规格书/SPECIFICATION

产品名称/ Item: 直流无铁芯振动电机/DC Coreless Vibration Motor

产品型号/Model: 0610RN01-0-94MP1C

版本/REV.NO. : 1.0

页 码/ Page : 1/7

客户名称 Customer Name	
客户确认 Customer Signature	

批准 APPROVED	审核 CHECKED	作成 WREITTEN
		

2008/09/03

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代码/NO. : 01	<b>SPECIFICATIONS</b> <b>产品规格书</b>	页码 / PAGE: 2/7
型号/ MODEL: 0610RN01-0-94MP1C		版本 / REV. NO.: 1.0
		日期 / DATE: 2008/09/03

变更记录/REVISION RECORD

版本 REV. NO	更改原因/ REVISION DESCRIPTION	拟制 WRITTEN	审核 CHECKED	日期/DATE
1.0	产品颁布/ First Submit for Approval			2008/09/03

代码/ NO. : 01	<b>SPECIFICATIONS</b> <b>产品规格书</b>	页码 / PAGE: 3/7
型号/ MODEL: 0610RN01-0-94MP1C		版本 / REV. NO.: 1.0
		日期 / DATE: 2008/09/03

1. General/适用范围

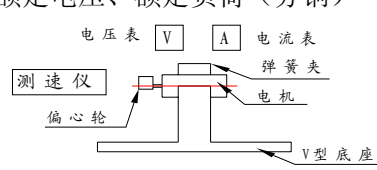
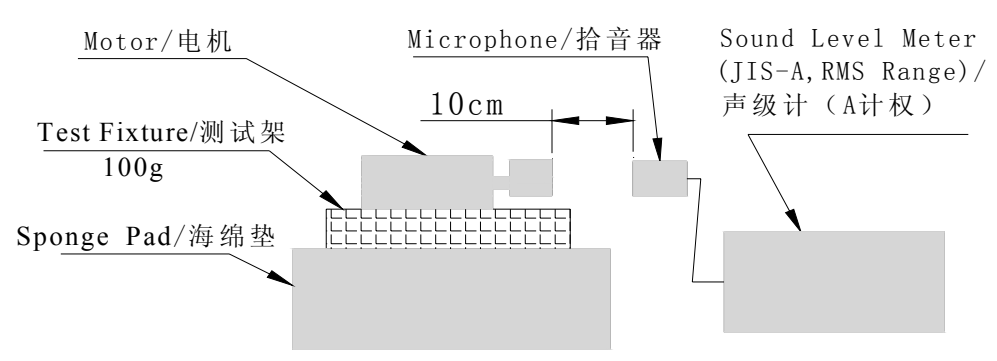
This specification applies to 0610RN01-0-94MP1C DC coreless vibration motor.  
本规格书适用于 0610RN01-0-94MP1C 直流无铁芯振动马达。

2. Operating condition /使用条件

NO./ 序号	Item/项目	Specification/规格
2-1	Rated voltage 额定电压	3.0VDC
2-2	Rated speed 额定转速	13500rpm (Type/代表值)
2-3	Rated current 额定电流	80mA (Type/代表值)
2-4	Rotating direction 旋转方向	CW (As seen from counter weight) 从偏心轮端观察为顺时针方向旋转
2-5	Operating voltage 使用电压范围	1.5-3.4V DC
2-6	Temperature Range 使用温度范围	1) Working temperature: -10°C~50°C 工作温度 2) Storage temperature: -20°C~60°C 保存温度
2-7	Measuring condition 测定条件	Measure al normal temperature and humidity if there is any doubt about judgement , measurements shall be made within 20±3°C 60±5%RH 在常温常湿下测试,若对结果有任何疑议,均以 20±3°C,相对湿度 60±5%环境下的测试数据为准。
2-8	Appearance 外观	There shall be no evidence of mechanical damage, and shall not have inadequate corrosion and so on. 目视无机械损伤、无锈蚀。

代码/ NO. : 01	<b>SPECIFICATIONS</b> 产品规格书	页码 / PAGE: 4/7
型号/ MODEL: 0610RN01-0-94MP1C		版本 / REV. NO.: 1.0
		日期 / DATE: 2008/09/03

### 3. Electrical characteristics/电特性

NO./ 序号	Item/项目	Specification/规格	Type/代表值	Condition-Remark/条件-备注
3-1	Rated speed 额定转速	13500±2500rpm	13500rpm	At rated voltage and rated load (vibration weight) 额定电压、额定负荷（分铜） 
3-2	Rated current 额定电流	120mA Max	80mA	
3-3	Stall current 堵转电流	250mA Max	140mA	
3-4	Starting voltage 起动电压	1.0V DC Max	0.8VDC	Minimum Voltage for starting (ON/OFF Test) 能起动的最低电压（起、停测试）
3-5	Terminal resistance 端电阻	22.8Ω±15%	22.8Ω	Measure between terminals 端子间电阻
3-6	Insulation resistance 绝缘电阻	10MΩ Min		At 50V DC between motor terminal and case 直流电压 50V，测电机端子与机壳间绝缘阻抗
3-7	Mechanical Noise 机械噪音	50dB(A)Max	45dB(A)	At rated voltage and rated load (vibration weight) 额定电压、额定负荷（偏心轮） Back ground noise/背景噪音：23dB(A)MAX Lock the motor in a test fixture of 100g 电机固定在一 100 g 测试架上 

代码/NO. : 01	<b>SPECIFICATIONS</b> 产品规格书	页码 / PAGE: 5/7
型号/ MODEL: 0610RN01-0-94MP1C		版本 / REV. NO.: 1.0
		日期 / DATE: 2008/09/03

#### 4、Reliability/信赖性

NO./ 序号	Item/项目	Test condition/试验条件	Requirements/判定基准
4-1	Life 寿命	Voltage /电压:3.0V DC 1cycle /一个周期: 2sec ON 2sec OFF Number of cycles/ 循环次数 : 20000cycles	After the test ,motors shall be approved as specified in item 5-1 试验后, 马达能满足 5-1 的规定
4-2	Low temp exposure 低温放置	Temperature /温度: $-20 \pm 2^{\circ}\text{C}$ Time /时间: 96hours	After 2 hours exposure in ordinary temperature and humidity ,motors shall be approved as specified in item 5-2 常温常湿条件下放置 2 小时后, 马达满足 5-2 的规定
4-3	High temp exposure 高温放置	Temperature /温度: $60 \pm 2^{\circ}\text{C}$ Time /时间: 96hours	
4-4	Humidity exposure 湿度放置	Temperature /温度: $40 \pm 2^{\circ}\text{C}$ Humidity /湿度: $90 \pm 5\% \text{Rh}$ Time /时间: 96hours	
4-5	Thermal shock 热冲击	$70 \pm 2^{\circ}\text{C}$  $-30 \pm 2^{\circ}\text{C}$ 1h      1h 1cycle Test cycle/试验循环周期数: 5cycles	After 2hours exposure in ordinary temperature and humidity ,motors shall be approved as specified in item 5-3 常温常湿条件下放置 2 小时后, 马达满足 5-3 的规定
4-6	Vibration 振动	Displacement /全振幅: 1.5mm(p-p) Frequency /周波数: 10-55Hz Period /周期: 1minute,log sweep(10-55-10Hz) Direction /方向: X,Y,Z Time /时间: each 2.0 hours	After the test , motors shall be approved as specified in item 5-2 试验马达能满足 5-2 项的规定
4-7	Free fall 自然落下	Set the motor to the approximately 100g(include the motor)weight of block Drop the motor on the concrete floor 将马达放在一个重 100g 的盒子里跌落至混凝土地面上 Height /高度: 1.5m Direction /方向: x,y,z Number of times /次数: Each 3times	

代码/ NO. : 01	<b>SPECIFICATIONS</b> <b>产品规格书</b>	页码 / PAGE: 6/7
型号/ MODEL: 0610RN01-0-94MP1C		版本 / REV. NO.: 1.0
		日期 / DATE: 2008/09/03

### 5. Requirements/判定基准

NO./ 序号	Item/项目	Requirements/判定基准
5-1	TABLE A	1)Rated speed/额定转速: Initial data/初始值±50%Max 2)Rated current/额定电流: Initial data/初始值±50%Max 3)Insulation resistance/绝缘阻抗: IM Ω Min 4)Starting voltage/起动电压: 1.2V DC Max
5-2	TABLE B	1)Rated speed/额定转速: Initial data/初始值±30%Max 2)Rated current/额定电流: Initial data/初始值±30%Max
5-3	TABLE C	1)Rated speed/额定转速: Initial data/初始值±35%Max 2)Rated current/额定电流: Initial data/初始值±35%Max

### 6. mechanical characteristics/机械特性

No/序号	Item/项目	Specification /规格	Condition remark/条件备注
6-1	Configuration 外形尺寸	As specified in outline drawing 参照外形图	
6-2	Mass 质量	2.0g(Approx)	
6-3	Shaft end play 轴向间隙	0.3mm Max	
6-4	Pull-out strength of weight 偏心轮的脱落力	1.5Kgf Min	

### 7. Cautions/ 注意

7-1 Tests related to rated rpm and to rated current are to be measured holding the motor in a horizontal posture.  
额定数据的测试应在马达水平放置且被固定的状态下进行.

#### 7-2 Soldering/焊接

To avoid damaging terminals or lead wires, soldering time should be completed within 1-2 seconds.  
焊接应在 1-2 秒内完成,以免损坏端子或导线.

#### 7-3 Storage/储存

Avoid storing in high temperature, high humidity and corrosive gas environment. Not to be stored without running  
应避免存放在高温,高湿腐蚀性气体的环境中,连续存放不应超过 6 个月.

### 8. Remark/备注

8-1. Important when sample approved, Please sign and returned by Fax before place order in order to fulfill our ISO requirement.

为本公司 ISO 程序的执行, 样品确认后, 请务必签章回传。

8-2. In event of no sign back, We will undertake P.O as acceptance to sample approval.

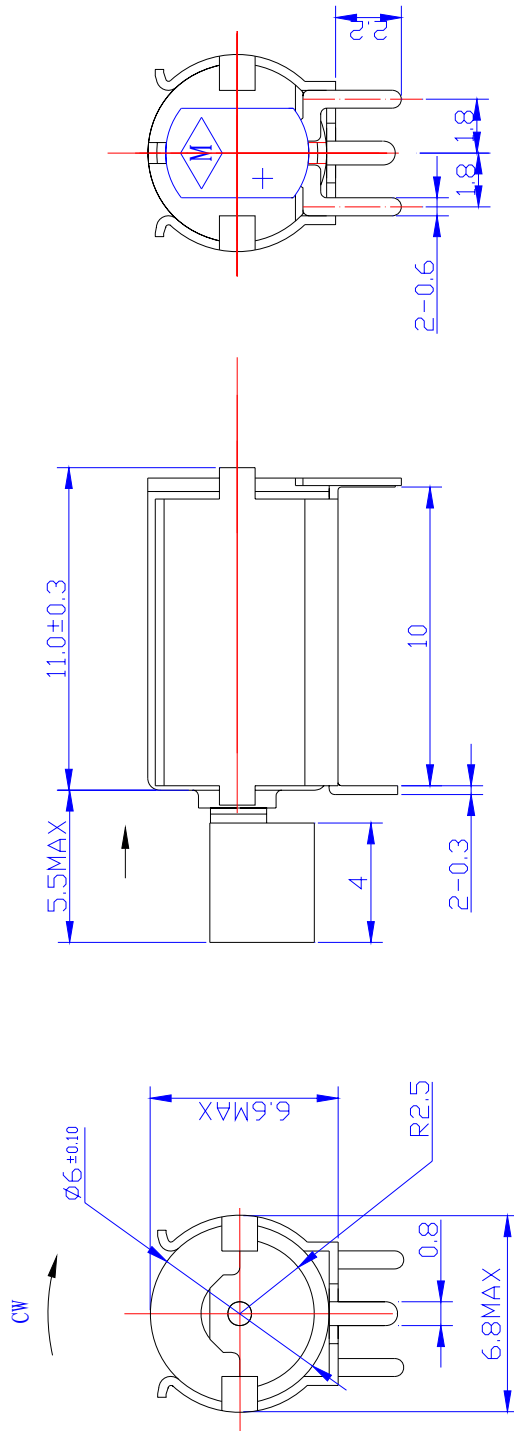
如样品确认后未签章回传, 则以用户下订单为样品通过确认。

OUTLINE DRAWING

MODEL: 0610RN01-0-94MP1C

UNIT: MM

ROTATION: CW



PART NAME	MATERIAL	SYM	REVISION	DATE	IN CHARGE	APPROVED
PART NUMBER	SCALE 5:1			2008/09/03		DESIGNED
						DRAWN