



力臻股份有限公司
LJ DEVICE CO., LTD.

零件規格書 / 承認書
SPECIFICATION FOR APPROVAL

CUSTOMER : _____

DESCRIPTION : _____ VIBRATOR _____

MODEL : _____ :; !NMP% % % %7 _____

CUSTOMER PART NO : _____

APPROVED SIGNATURES

| | | | |
|--|--|--|--|
| | | | |
|--|--|--|--|

| Rev | Date | Description | Designed | Checked | Approved |
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| A | 2023/1/4 | Release | | Po Chen | |
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马达出厂规格

Model No. :FG-ZY15181511C

DWG No. :FUGE-1511C

SO# :FG190402-26A

Date : 2019-04-02

1. Motor Type (马达类型):

Small PMDC motor (微型永磁直流马达)

2. Standard Operating Conditions (标准运行环境):

2-1 Rated Voltage (额定电压):

5.0V DC constant between motor terminals.

马达端子间用5.0V 恒定电压

2-2 Direction of Rotation (旋转方向):

CW when viewed from output shaft side.

从马达输出端看是 CW (顺时针).

3.Measuring Conditions (测试条件):

3-1 Motor Position (摆放姿势):

Motor to be held with shaft horizontally.

马达水平放置

3-2 Power Supply (电源):

Regulated power supply which assures unquestionable measurement.

稳压直流电源

3-3 Environment Temperature and Humidity:

The test is made in principle at a temperature between

20°C and 25°C and at a relative humidity RH85%

测试温度为20°C ~ 25°C, 相对湿度是RH85%以下;

温度与湿度

4.Electrical Characteristics(at initial stage after 30 seconds run-in): 电气性能 (运行30S后的状态)

4-1 No Load Current (空载电流):

80 mA max

4-2 No Load Speed (空载转速):

15800±10% rpm

4-3 Rated load (额定负载):

Fan load with 30*16equivalent to torque 8.8 g-cm

负载模拟风叶:30*16_mm

4-4 Starting Voltage at rated load:

1.0V DC MAX

启动电压

4-5 Rated Load Current (额定负载电流):

380 mA max

4-6 Rated Load Speed (额定负载转速):

10300±10% rpm

4-7 Blocked Torque (堵转力距)

≥20g. cm

4-8 Reference Characteristic Curve (参考特征曲线):

See DWG No. HX-190222-01A-002

5. Mechanical Characteristics (机械性能):

5-1 External Appearance (外形):

See DWG No. HX-190222-01A-003

5-2 Shaft End Play (虚位):

0.02~0.50 mm

5-3 Runout of Shaft Extension (轴端跳动):

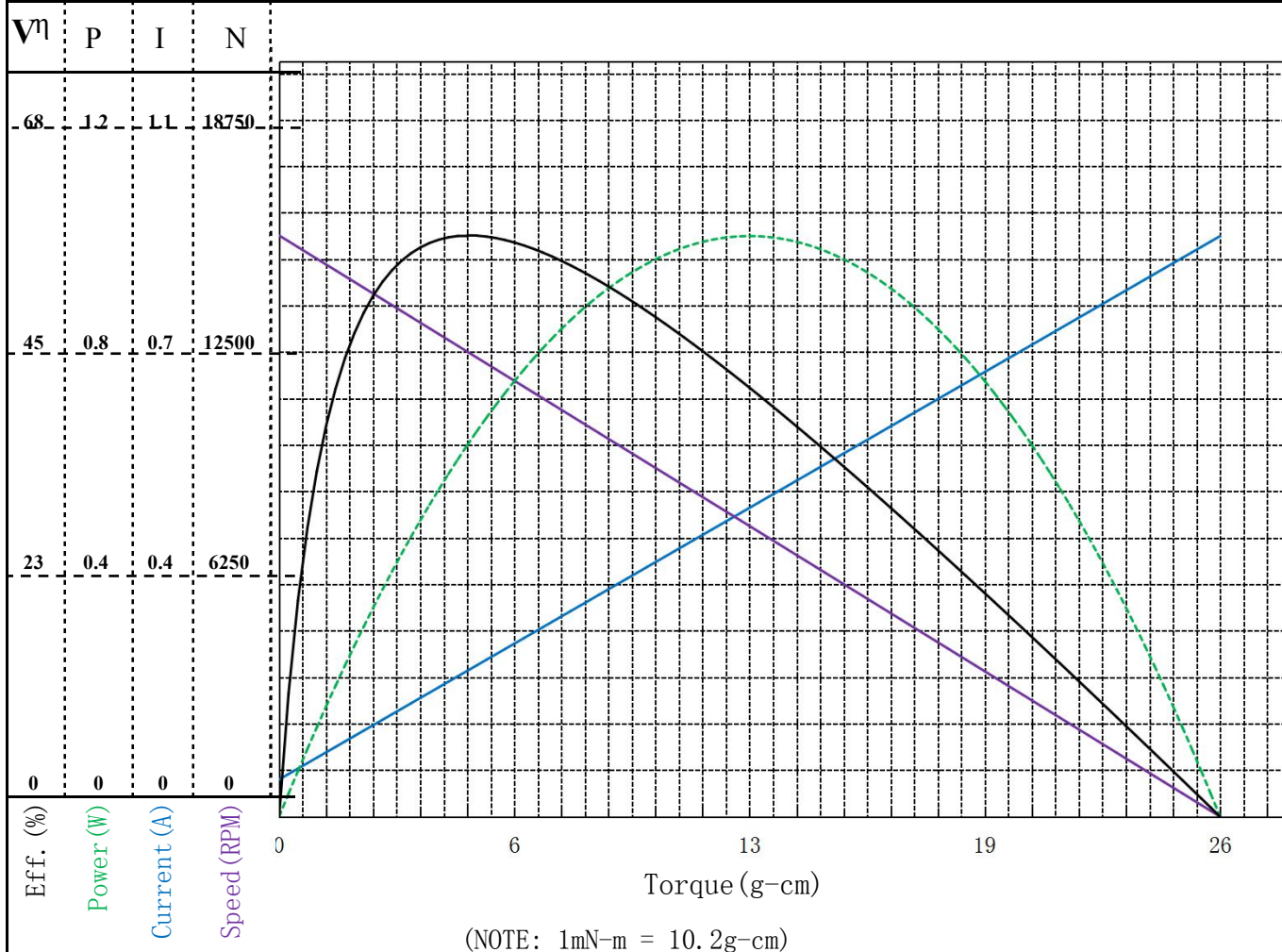
0.05 mm max

6-1 Weight (单重):

9.65g (Approx) 大约

Sample No: FG190402-26A Customer: _____ Date: 2019/04/02
 Model: FG-ZY15181511C DWG NO: FUGE-1511C Efficiency Power output

NOTE: Performance (in an ambient temperature of 20-25°C)
 Motor tested rapidly to prevent significant temperature rise.



Constant voltage : **5.0 VDC**
 Direction: **CW**

At No Load
 Speed: **15640 rpm**
 Current: **0.059 A**

At stall (Extrapolated)
 Torque: **25.6 g-cm**
 Current: **0.92 A**

At maximum efficiency
 Efficiency: **56.9 %**
 Torque: **5.1 g-cm**
 Speed: **12528 rpm**
 Current: **0.23 A**
 Output: **0.66 W**

At maximum Power output
 Output: **1.03 W**
 Torque: **12.8 g-cm**
 Speed: **7820 rpm**
 Current: **0.49 A**

Issued by **QA Reliability Testing Center**

COMPUTER PRINT-OUT
 NOMINAL MOTOR CURVES

Performance and characteristics are measured based on limited motor samples only

Prepared by:

Checked by:

Approved by:

Date:

版次:A1

| 未注公差 | | | 圆角半径和倒角高度 | | |
|-------|------|--------|-----------|------|------|
| 0~6 | 6~30 | 30~120 | 0~3 | 3~6 | 6~30 |
| ±0.06 | ±0.1 | ±0.2 | ±0.2 | ±0.5 | ±0.8 |

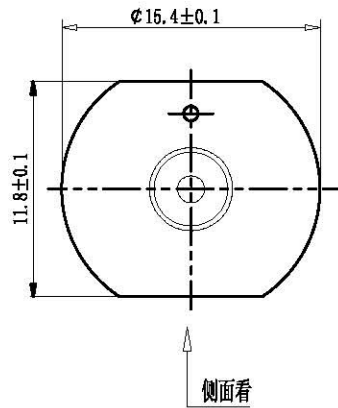
单位:Unit(mm)

D
C
B
A

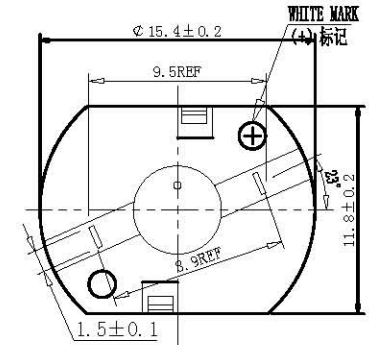
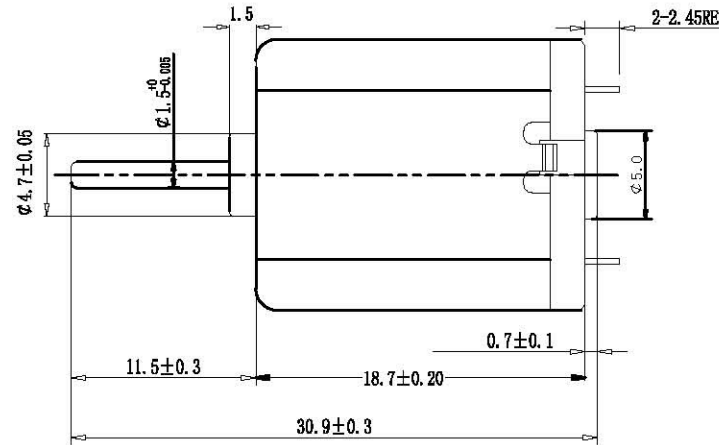
D
C
B
A

DIRECTION OF ROTATION

转向

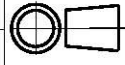


侧面视图



NOTE:

1. 电机轴芯 (shaft length): 30.0 ± 0.1mm
2. 额定电压 (Rated Voltage): 5.0VDC
3. 前端轴突 (the length of front shaft): 11.5 ± 0.3mm
4. 电机轴转向 (direction of rotation): CW

| | | |
|------------------------|---|-----------|
| TITLE: 电机外形图 | A4 | DRAWER: |
| MATERIAL: |  | CHECKER: |
| MODEL: FG-ZY15181511C | | APPROVER: |
| DRAWING NO: FUGE-1511C | | |

1 2 3 4 5 6

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|-------------------------------------|---------------------------------|-------------|---------------------------------|-------------|-----------------------------|---------------|-------------------------|---------------------|-----------------------------------|----------------|------------------|-------------|-------------------|-----------------------------|--|
| | | | | | 温度 Temperature | 20℃-25℃ | | 湿度 Humidity | | RH70% | | | | | |
| 样板数量 Sample QTY | 10 PCS | | | | 样品报告编号 Sample report No. | | | FG190402-26A | | | | | | | |
| 测试日期 Test Date | 2019/04/02 | | | | 客户名称 (代码) Customer Name | | | | | | | | | | |
| 测试项目 Test project | 额定工作电压 Rated working voltage | | 5.0V DC | | | | | | | | | | | | |
| | 空载特性 No Load | | 负载模拟风叶:30*16 Load the blades | | 堵转 Blocked | | 转向 Motor Rotation | 噪音 Noise | 振动 (手感) handle vibration | 波形 waveform | 外观 Appearance | 轴突 Shaft | 虚位 End Play | 启动电压 Starting Voltage | |
| | 电流 current | 转速 Speed | 电流 current | 转速 Speed | 力矩 Torque | 电流 current | | | | | | | | | |
| 单位 Unit | mA | rpm | mA | rpm | g.cm | A | CCW/CW | dB/cm | | | | mm | mm | V | |
| 规格 specification | 80MAX | 15800±10% | 380 MAX | 10300±10% | ≥20 | ≤1.2 | CW | 距30cm 处 ≤60db | | | | 11.5±0.3 | 0.02-0.50 | ≤0.8 | |
| 1 | 62 | 15760 | 322 | 10330 | 26 | 0.92 | CW | ok | ok | ok | ok | 11.40 | 0.25 | 0.32 | |
| 2 | 58 | 15400 | 323 | 10260 | 25 | 0.93 | CW | ok | ok | ok | ok | 11.41 | 0.25 | 0.35 | |
| 3 | 59 | 16000 | 328 | 10340 | 25 | 0.93 | CW | ok | ok | ok | ok | 11.40 | 0.23 | 0.37 | |
| 4 | 59 | 15760 | 331 | 10300 | 26 | 0.93 | CW | ok | ok | ok | ok | 11.39 | 0.25 | 0.33 | |
| 5 | 58 | 15450 | 321 | 10270 | 25 | 0.92 | CW | ok | ok | ok | ok | 11.44 | 0.22 | 0.35 | |
| 6 | 61 | 15750 | 322 | 10230 | 26 | 0.93 | CW | ok | ok | ok | ok | 11.38 | 0.24 | 0.34 | |
| 7 | 60 | 15500 | 329 | 10280 | 25 | 0.93 | CW | ok | ok | ok | ok | 11.39 | 0.26 | 0.35 | |
| 8 | 58 | 15660 | 331 | 10220 | 25 | 0.92 | CW | ok | ok | ok | ok | 11.40 | 0.26 | 0.36 | |
| 9 | 57 | 15550 | 323 | 10300 | 26 | 0.93 | CW | ok | ok | ok | ok | 11.38 | 0.26 | 0.37 | |
| 10 | 59 | 15600 | 320 | 10240 | 26 | 0.92 | CW | ok | ok | ok | ok | 11.40 | 0.20 | 0.35 | |
| MAX | 62 | 16000 | 331 | 10340 | 26 | 0.93 | | | | | | 11.44 | 0.26 | 0.37 | |
| MIN | 57 | 15400 | 320 | 10220 | 25 | 0.92 | | | | | | 11.38 | 0.20 | 0.32 | |
| MEAN | 59.1 | 15643.0 | 325.0 | 10277.0 | 25.5 | 0.93 | | | | | | 11.40 | 0.24 | 0.35 | |
| 备注: (塑磁) 负载30*16风叶≈8.8g.cm 样机标记 (1) | | | | | | | | | | | | | | | |

Prepared By:

Checked By:

Approved By: