



JS261102 圆柄 系列规格书

JS261102 Round shaft SERIES SPECIFICATION

1. 一般事项General

1-1. 适用规格 Scope

本规格书适用于强电流回路的电子设备，属26型摇臂开关。

This specification is for the 26mm rockerarm switch which applies to electronic devices of strong current circuit

1-2. 标准状态Standard atmospheric conditions

除另有规定外，测量应在以下状态下进行：

Unless otherwise specified, the standard range of atmospheric conditions for making measurements and test is as following limits:

温度 Ambient temperature : 15°C to 35°C

相对湿度 Relative humidity : 25% to 85%

气压 Air pressure :86kpa to 106kpa

如果对在上述所提到的条件中所做的实测值有疑问的话，应使用以下条件进行测量：

If doubt arises on the decision based on the measured values under the above-mentioned conditions, the following conditions shall be employed:

温度 Ambient temperature : 20±1°C

相对湿度 Relative humidity : 63% to 67%

气压 Air pressure :86kpa to 106kpa

1-3. 使用温度范围

Operating temperature range :-40°C to 90°C

1-4. 保存温度范围

Storage temperature range :-40°C to 90°C

2. 构造Construction

2-1. 尺寸 Dimensions

见所附成品图 Refer to attached drawing

3. 额定值 Rating

3-1. 额定电压

Rated voltage: DC 16V

3-2. 最大额定电流 (阻抗负载)

Maximum operating current (resistive load)

各相导线 Each lead: 5A (Max 25A;Min 5A)

公共导线Common lead: 15A(Max 25A;Min 15A)

4. 使用上的事项Application Notes

4-1. a. 产品以交货时的状态在常温、常湿，不受阳光直射照射，不产生腐蚀性气体的场所保管，自交货起6个月内使用为佳。

a. Please store it within the normal temperature、normal humidity、without the direct sunlight irradiation no corrosive gas place、and use it within the 6 month from the delivery date would be better.

b. 包装被打开后未使用完的产品使用聚乙烯袋与空气隔断（例如：使用密封袋将其密封）请在a环境下保管与尽快使用。

b. Once opened, the unused products should be packed by the polyethylene bag, and keep away from the air (eg. Use the sealing bag to seal it), please store it under the environment a, and use it ASAP.

5. 电气性能 Electrical Characteristics

项目 ITEM	条件 CONDITIONS	规格 SPECIFICATIONS
5-1. 额定功率 Rated Power		负载: DC 12~24V 5A 过电流: DC 12V 25A 10 Minute
5-2. 初期接触电阻 Initial Contact Resistance	出力信号处于ON时安定状态条件下测定. Measurement shall be stable condition which a output signal is ON.	30mΩ Max
5-3. 绝缘阻抗 Insulation resistance	在端子和支架间施加电压 500V DC. Measurement shall be made under the condition which a voltage of 500V DC is applied between individual terminals and frame.	100MΩ 以上 100MΩ Min
5-4. 耐电压 Dielectric strength	在端子和支架间施加AC 500V电压1分钟 A voltage of 500V AC shall be applied for 1 minute between individual terminals and frame.	不得有绝缘破坏 Without arcing or breakdown.

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6. 机械性能 Mechanical Characteristics		
项目 ITEM	条件 CONDITIONS	规格 SPECIFICATIONS
6-1. 开关电路 接点数 Switch circuit and number of pulse		单极单投(按压ON) Single pole and single throw (push ON)
6-2. 开关动作力 Operation fore of switch		650±165gf
6-3. 开关全行程 Total Travel of switch		≤2.0mm
6-4. 接触行程 Travel for electrical contact	在轴端, 沿轴向施加的按压力. Push static load to the shaft in the axial direction	1.2±0.3 mm
6-5. 回弹力 Back to the spring		≥100gf
6-6. 手感系数 Handle coefficient		36%±11%
6-7. 轴的推拉强度 Push-pull strength of shaft	在轴端, 沿轴向施加 8Kgf 的静负荷力推和拉各10秒钟 (产品焊锡固定在PCB上。) Push and pull static load of 8Kgf shall be applied to the shaft in the axial direction for 10s. (After soldering of the PC board)	轴向虚位间隙0.3mm以内 Shaft play in axial direction 0.3mm Max
6-8. 端子强度 Terminal strength	在端子的先端施加500gf的力1分钟。 A static load of 500gf be applied to the tip of terminals for 1 minute in any direction.	端子无损坏, 无过度的松动. 允许变形. Without damage or excessive looseness of terminals. terminal bend is permitted.
6-9. 轴向间隙 Shaft play in axial direction	在轴向方向施加400gf力。 When 400gf force is applied axially.	0.4mm 以下 0.4mm Max
6-10. 轴摆动 Shaft wobble	在距离轴心顶端3mm处施加300gf力。 when a load 300gf is applied at 3mm from tip of shaft.	0.3mm 以下 0.3mm Max
6-11. 耐振性 Vibration Resistance	开关采用常规的安装方法牢固地安装在试验设备上, 并在下述 参数条件下进行试验: (1)典型的随机振动条件: 扫引周期频率: (8.3±1)Hz→(200± 4)Hz→(8.3±1)Hz 扫引对数的方法: 最大速度43.2m/s ² ; 最 大摆幅10mm (2)振动方向: 三个相互垂直的方向, 其中一个方向应该促动 元件运动的方向; (3)周期: 每个方向12个周期(1个周期的比率扫引20分钟) Install the switch to the test equipment with conventional installation methods, do test under the following specification conditions: (1)Typical random vibration conditions:Cyle frequency sweep cited(8.3±1)Hz→(200±4)Hz→(8.3±1)Hz Logarithmic sweep cited methods:maximum speed 43.2m/s ² ; Maximum amplitude:10mm (2)Direction of vibration: Three mutually perpendicular directions, one of them should be to motivate the direction of movement components. (3)Time:12 cycles in every direction(Sweep rate of 1 cycle at least 20 minutes)	力矩变化率为初始值的±30%; 其它性能符合第5-1---5-4; Rotation torque change rate shall be within ±30% against initial value; The performance requirments specified in item 5-1---5-4 shall be satisfied

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7 耐久性能 Endurance Characteristics		
项目 ITEM	条件 CONDITIONS	规格 SPECIFICATIONS
7-1. 按压寿命 Push-life	在无负荷条件下沿轴向施以1Kgf以下的力，以600次/小时的速度按压。 Push 1Kgf to the shaft of encoder in the axial direction under non-load conditions, and with a speed of 600 times/hour.	25,000±200次。 25,000±200cycles. 端子间接触阻抗100mΩ以下； 力矩变化率为初始值的±50%； 其它性能符合第5-1 --- 5-4； Contact resistance 100mΩMax； Rotation torque change rate shall be within ±50% against initial value； The performance requirements specified in item 5-1 --- 5-4 shall be satisfied
7-2. 耐湿性 Damp heat	温度60±2℃,湿度90~95%的恒温恒湿槽中放置240±10小时后,在常温、常湿中放置1.5小时后测试。 The encoder shall be stored at temperature of 60±2℃ with relative humidity of 90% to 95% for 240±10H in a thermostatic chamber. And the encoder shall be subjected to standard atmospheric conditions for 1.5H, After which measurements shall be made.	端子间接触阻抗100mΩ以下； 力矩变化率为初始值的±50%； 其它性能符合第5-1 --- 5-4； Contact resistance 100mΩMax； Rotation torque change rate shall be within ±50% against initial value； The performance requirements specified in item 5-1 --- 5-4 shall be satisfied
7-3. 耐热性 Dry heat	温度90±3℃的恒温箱中放置240±10小时, 常温、常湿放置1.5小时后测试。 The encoder shall be stored at a temperature of 90±3℃ for 240±10H in a thermostatic chamber. And then the encoder. shall be subjected to standard atmospheric conditions for 1.5H, After which measurements shall be made.	
7-4. 低温特性 Cold	温度-40±3℃的恒温箱中放置240±10小时, 常温、常湿放置1.5小时后测试。 The encoder shall be stored at a temperature of -40±3℃ for 240±10H in a thermostatic chamber. And then the encoder. shall be subjected to standard atmospheric conditions for 1.5H, After which measurements shall be made.	
7-5. 焊锡耐热性 Resistance to Soldering heat	槽焊 Dip soldering. 使用基板:t=1.6mm的单面覆铜板。 Printed wiring board:single-sided copper clad laminate board with thickness of 1.6mm. 预热:基板表面温度100℃以下,时间1分钟以内。 Preheating:1. Surface temperature of board:100℃ or less 2. Preheating time:within 1 minute. 焊接:温度260±5℃或以下,时间3秒以内。 Soldering:Solder temperature:260±5℃ or less Immersion time:within 3s 手焊 Manual soldering. 温度400℃以下,时间3秒以内。 Bit temperature of soldering iron:400℃ less than Application time of soldering iron:within 3s.	不得有绝缘体的破损、变形、接触无异常。 Electrical characteristics shall be satisfied No mechanical abnormality.
7-6. 焊锡性 Solderability	端子在260±5℃温度的焊锡槽内浸锡5±1秒。 The terminals shall be immersed into solder bath at 260±5℃for 5±1s.	浸渍面须有75%以上焊锡附着 A new uniform coating of solder shall cover 75% minimum of the surface being immersed.



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<p>7-7. 温度循环特性 Change of temperature</p>	<p>在下表条件中5次温度循环后去除表面湿气，在常温常湿中放置1.5小时后再进行测量。</p> <table border="1" data-bbox="475 365 948 495"> <thead> <tr> <th>STEP</th> <th>TEMPERATURE</th> <th>TIME</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>-40℃ ± 2℃</td> <td>30 MINUTES</td> </tr> <tr> <td>2</td> <td>85℃ ± 2℃</td> <td>30 MINUTES</td> </tr> </tbody> </table> <p>The potentiometer shall be subjected to 5 successive change of temperature cycles, each as shown in table and then the potentiometer shall be subjected to standard atmospheric conditions for 1.5 hours, after which measurement shall be made.</p>	STEP	TEMPERATURE	TIME	1	-40℃ ± 2℃	30 MINUTES	2	85℃ ± 2℃	30 MINUTES	<p>端子间接触阻抗100mΩ以下； 力矩变化率为初始值的±50%； 其它性能符合第5-1 --- 5-4； Contact resistance 100mΩMax； Rotation torque change rate shall be within ±50% against initial value； The performance requirements specified in item 5-1 --- 5-4 shall be satisfied</p>
STEP	TEMPERATURE	TIME									
1	-40℃ ± 2℃	30 MINUTES									
2	85℃ ± 2℃	30 MINUTES									

<p>8-1. 包装方式 Packing</p>	<p>使用吸塑盒和纸箱包装。 Packed in plastic tray and carton.</p>	<p>每盒90PCS，每箱20盒。 共计：1800PCS/箱 Put 90PCS products into plastic tray, then pack 20 plates into a carton ,total 1800PCS/carton.</p>
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吸塑盒
plastic tray



内标签
inner label

吸塑盒尺寸：L:440*W:270*H:30；每盘吸塑盒装60PCS产品
Plastic Tray size:L:440*W:270*H:30mm 90PCS per plastic tray

每一个吸塑盒贴一个内标签，每20层吸塑盒为一叠
an innerlable attached to per plastic tray, 20 pcs of plastic tray for one carton.



纸箱
carton



外标签
label

外箱尺寸：
L:455mm*W:285mm*H:350mm；每箱装一叠产品：1800PCS carton
size:L:455mm*W:285mm*H:350mm
1800CS of items for each carton

每箱贴一个外标签
a outside label attached to the carton

9-1. 环保要求：产品所含零件都符RoHS标准
9-1.environmental requirement:products comply RoHS

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