



乐清裕林电子有限公司

YueQing Yulin Electronic Co., Ltd

地址：浙江省温州市乐清市柳市镇象阳工业区克爱斯路 19 号
Add: F/6 No.19 Ke'aisi Road, Xiangyang industrial Zone, Liushi Town, YueQing City, Zhejiang Province, China 325600

网址 Website: www.indicatorlight.com 电话 Tel: 0577-62768130 传真 Fax: 0577-62768130

SPECIFICATION FOR APPROVAL

规格说明书

CUSTOMER'S CODE

本厂代码: _____

DESCRIPTION

Rocker Switch

品 名:

SPECIFICATION

规 格:

30×22

DATE

编制日期:

2020-3-12

PART NO.

本厂型号:

KCD4-0112-21

REFERENCE No.

档案编号: _____

| Approved By Customer 编 制 | Qualified By 审 核 | Form Designer 批 准 |
|-----------------------------|---------------------|----------------------|
| | | |

FILN 飞林

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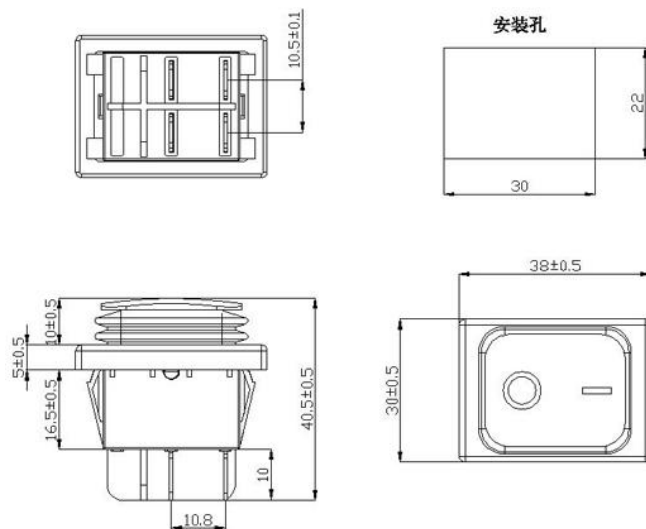
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1. Picture:

FILN 飞林



2. drawing



3. Material:

| Accessories name | Material |
|------------------------------|---------------------|
| 铝片 Actuator | PC |
| 导光件 light guiding part | PC |
| 支架 holder | ABS |
| 防护罩 Waterproof cover | 橡胶 Rubber |
| 上壳 Up base | ABS |
| 底座 Bottom base | PA66 |
| 中座 Middle base | ABS |
| 边脚/中脚/跳板 Pin/spring board | 黄铜 H62 Brass H62 |
| 银触点 contact | AgCd012 |
| 弹簧 spring | 72# |
| 铁套 Iron case | 08F |
| 垫圈 washer | 橡胶 Rubber |
| 灯组件 Light comp | |



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4 温度范围 Temperature Range:

使用环境温度: $-25^{\circ}\text{C} \sim +85^{\circ}\text{C}$ 。Working environment temperature: $-25^{\circ}\text{C} \sim +85^{\circ}\text{C}$ 。

5 外观和手感 Out looking and operation feeling:

5.1 标志清晰牢固 Clear and firm marking;

外观清洁美观, 无变形, 无损伤, 无开裂

The appearance is clean and beautiful, no deformation, no damage, no cracking;

无锈蚀, 无电镀不良

No rust, no electroplating;

各组件连接牢固, 无松动, 无脱落

The components are firmly connected, no looseness, no falling off;

5.2 开关操作灵活, 无卡死, 无明显摩擦

The switch operation is flexible, no jamming, no obvious friction.

6 电气性能 Electrical Capacity:

| 项目 Item | | 测试条件 test condition | 技术要求 technical requirements |
|---------|-------------------------------|--|--------------------------------------|
| 6.1 | 额定值 Rating | 30A 250VAC | |
| 6.2 | 接触电阻 Contact Resistance | 在 1KHz 小电流下测量。 Test <1KHz | $\leq 200\text{m}\Omega$ |
| 6.3 | 绝缘电阻 Insulation resistance | 在端子之间和端子与外壳之间施加 DC500V, 60s 后测量。 Working at DC500V Between pins and housing, in 1 mins | $\geq 100\text{M}\Omega$ |
| 6.4 | 耐压 Withstand Voltage | 在端子之间施加 AC1500V, 0.5mA, 10 秒; 端子与外壳之间施加 AC3000V, 0.5mA, 10 秒; Working at DC500V Between pins , in 10 seconds; Working at DC500V Between pins and housing, in 10 seconds | 无击穿或闪络。 No breakdown or flashover |



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|------------------------------------|---------------------------------|---|---|
| 6.5 | 电气耐久 Electrical Endurance | 额定负载情况下, 每分钟操作 30 次, 共进行 10,000 次操作。 Under rated load, 30 operations per minute for a total of 10,000 operations. | <ol style="list-style-type: none"> 1. 外观和手感合格; 2. 接触电阻$\leq 2\Omega$; 3. 端子温升$\leq 55K$; 4. 耐压测试合格。 <ol style="list-style-type: none"> 1. Appearance and feel are acceptable; 2. Contact resistance $\leq 2\Omega$; 3. Terminal temperature rise $\leq 55K$; 4. The pressure test is qualified. |
| 7 机械性能 Mechanical Capacity: | | | |
| 7.1 | 操作力 Operation force | 开关垂直于操作方向放置, 在按钮一侧逐渐施力, 测量开关导通所需的最大力度。 The switch is placed perpendicular to the direction of operation, applying a force on one side of the button to measure the maximum force required to turn the switch on. | 按顾客要求。 As customer required. |
| 7.2 | 端子强度 Terminal Strength | 在端子的顶部施加一向内推的 60N 静负荷, 持续 60 秒。 Apply a 60N static load, always pushed inward, to the top of the terminal for 60 seconds. | 端子无损伤, 脱落, 开关功能动作正常。 The terminal is free from damage and falling off, and the switch function is normal. |
| Item | | test condition | technical requirements |
| 7.3 | 可焊性 Solder ability | 将端子浸入熔融的锡槽内, 温度为 $235 \pm 5^\circ\text{C}$, 时间为 3 ± 0.5 秒。 The terminal into the molten tin bath, temperature of $235 \pm 5^\circ\text{C}$, time of 3 ± 0.5 seconds. | 浸入的部分 90% 以上表面被锡覆盖。More than 90% of the immersed portion is covered with tin. |



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|---------------------------------------|--------------------------------------|---|---|
| 7.4 | 耐焊接热 Resistance to soldering Heat | 端子的焊接部分浸入温度为 $260 \pm 5^\circ\text{C}$ 熔融的锡炉内 3 ± 1 秒。Terminal welding part of the immersion temperature for $260 \pm 5^\circ\text{C}$ molten tin furnace 3 ± 1 second. | 1. 本体无明显变形; 2. 机械性能, 电气性能测试合格。The body has no obvious deformation; Mechanical performance, electrical performance test qualified. |
| | | 手工烙铁焊接, 焊接温度 $350 \pm 5^\circ\text{C}$, 焊接时间 3 ± 1 秒。焊接时不得在端子上施加压力。 Manual soldering iron welding, the welding temperature of $350 \pm 5^\circ\text{C}$, welding time 3 ± 1 seconds. No pressure shall be applied to the terminals during welding. | |
| 8 耐候性能 Weathering Performance: | | | |
| 8.1 | 耐高温 high temperature resistance | 在 $85 \pm 2^\circ\text{C}$ 环境下放置 72 小时, 然后在自然环境下放置 1 小时后测试。In $85 \pm 2^\circ\text{C}$ for 72 hours, and then placed in a natural environment test in 1 hour. | 1. 外观和手感合格; 2. 接触电阻 $\leq 2\Omega$; 3. 耐压测试合格; 4. 机械性能合格。 |
| 8.2 | 耐湿热 hot-wet | 在 $40 \pm 2^\circ\text{C}$, 湿度 91%-95%RH 环境下放置 96 小时, 然后在自然环境下放置 1 小时后测试。In $40 \pm 2^\circ\text{C}$, humidity 91%-95% RH conditions for 96 hours, and then placed in a natural environment test in 1 hour | 1. Out looking and operation felling pass; 2. Contact resistance $\leq 2\Omega$; 3. high-voltage insulation test ok; |
| 8.3 | 耐低温 low temperature resistant | 在 $-25 \pm 2^\circ\text{C}$ 环境下放置 12 小时, 然后在自然环境下放置 1 小时后测试。Under the environment of $-25 \pm 2^\circ\text{C}$ for 12 hours, and then placed in a natural environment test in 1 hour. | 4. Mechanical qualification ok |

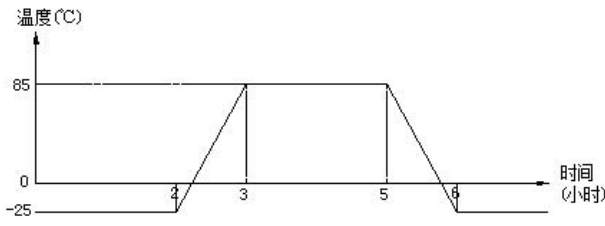


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|-----|------------------------------------|---|--|
| 8.4 | 温度交变 alternative temperature | <p>按图示温度和时间进行温度交变，连续 5 次循环，然后在自然环境下放置 1 小时后测试。According to the temperature and time shown in the figure, the temperature alternation was carried out for 5 consecutive cycles, and then the test was carried out in the natural environment for 1 hour.</p>  <p>温度(°C)</p> <p>时间(小时)</p> | |
|-----|------------------------------------|---|--|