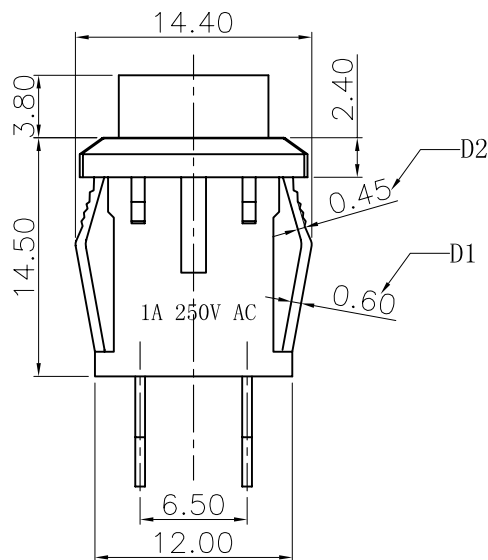
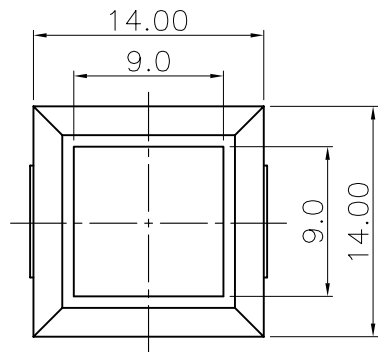
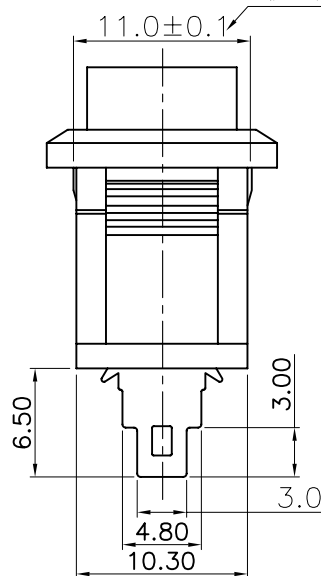
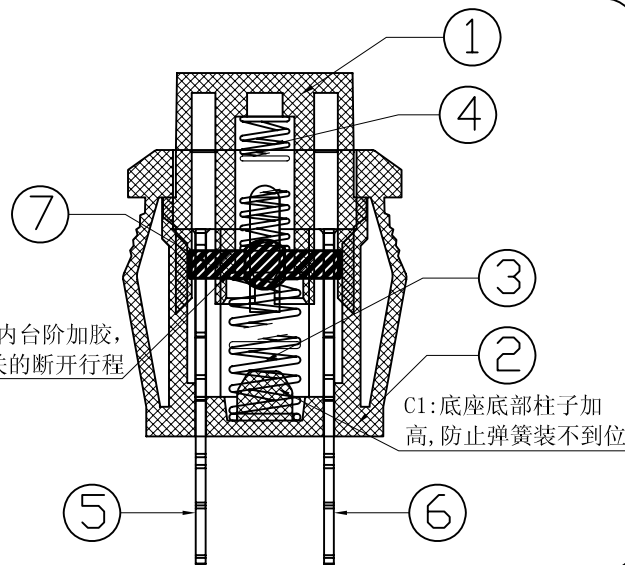


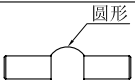
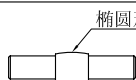
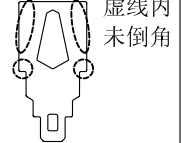
ABIDE BY WEEE & ROHS

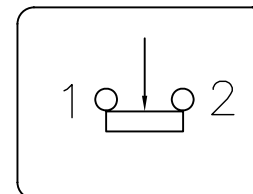


C2: 推柄内台阶加胶, 减小开关的断开行程



变更说明:

零件名称	变更前 (A版)	变更后 (B版)	原因说明
接触横杆			A版接触横杆为车床加工, 容易产生加工刀纹, 存在隐患; 且A版接触横杆中间为圆形组装困难
端子			A版端子如左图中未倒角, 在产品组装铆压中容易变形, 因此变更为B版端子倒角, 方便端子组装, 杜绝端子铆压变形的隐患



Circuit Diagram

Specification :

- 1. Circuit : PUSH OFF (Non Locked)
- 2. Rating : AC 125V 1A
- 3. Contact Resistance : 100mΩ Max
- 4. Insulation Resistance : 100MΩ Min (DC500V)
- 5. Withstand Voltage : AC1000V (50-60Hz) for 1 minute
- 6. Operation Force : 250 ± 50gf
- 7. Mechanical Life : 10,000 Cycles (min)
- 8. Full Travel : 3.80mm ± 0.3
- 9. OFF Starting Travel : 0.45mm (max)

⑦	Contact	—	1	Brass	Plating silver	—
⑥	Terminal	1	1	Brass(0.50t)	Plating silver	—
⑤	Terminal	2	1	Brass(0.50t)	Plating silver	—
④	Spring	—	1	Stainless Steel	—	—
③	Spring	—	1	Stainless Steel	—	—
②	Base	—	1	PA66	Black	UL 94HB
①	Keystoke	—	1	PA66	White	UL 94HB
ITEM	PART NAME	TER'NO.	QTY.	MATERIAL	FINISHING	REMARK

ECN-1101-01	D	2011/01/26	底座弹性壁硬, 装配支架困难, 变更弹性壁厚度, D1处0.7变更为0.6, D2处0.5变更为0.45			
ECN-1010-01	C	2010/10/05	见上述工程图变更说明: C1、C2、C3处			
ECN100501	B	2010/05/10	见上述变更说明			
—	A	—	NEW	—	—	—
ECN NO.		DATE.	DESCRIPTION.	CHANGE.	CHECK.	APPRO.

APPROVALS		DATE	 东莞市凯华电子有限公司 DONGGUAN CITY KAIHUA ELECTRONICS CO.,LTD			
DRAWN	Wanwenxue	Apr.02.2009				
CHECKED			TITLE:	Cymbiform Switch		
APPROVALS			PART NO.	RK141401W01		
TOLERANCES ARE	30<L	±0.30	ANGLE	UNIT: mm	SCALE: 1:1	PROJ: 
	10<L≤30	±0.20				
	5<L≤10	±0.15	±2'	DRAWING NO.		SHEET 1 OF 1
	L≤5	±0.10				

1. 一般特性 General Characteristics

- 1.1 额定值(Rating Value): AC125V 1A.
1.2 工作温度(Work Temperature Range): $-10^{\circ}\text{C} \sim 70^{\circ}\text{C}$
1.3 存贮温度(Store Temperature Range): $-20^{\circ}\text{C} \sim 80^{\circ}\text{C}$
1.4 正常测试条件(未有特殊说明量测在以下条件进行):

General test condition (Tests and measurements shall be made under the following standard conditions unless otherwise specified):

正常温度: $5^{\circ}\text{C} \sim 35^{\circ}\text{C}$ 相对湿度: 45%~85% RH 气压: 8,600~10,600 帕
Temperature: $5^{\circ}\text{C} \sim 35^{\circ}\text{C}$ Relative humidity: 45%~85% Air pressure: 8,600~10,600 pa

2. 产品外观及尺寸要求 Appearance & Dimension Requirement

- 2.1 产品外形结构紧凑,无配合不良.
The structure of product is compact, and assembly of parts has no badness.
- 2.2 产品塑胶部件无严重缩水、披锋、欠注、斑点、破损或变形现象.
The plastic parts of product have no serious defects such as very serious shrink, scarcity, fleck, disrepair, transmutation, etc.
- 2.3 产品引脚和外壳无严重氧化、脏污、变形、毛刺或电镀不良.
Lead feet and shell have no serious defects such as oxidation, smudge, disrepair, burr, defects on plating.
- 2.4 开关操作顺畅,节奏感强,无明显卡塞现象,(自锁开关锁芯锁住后,允许导芯倾斜正负 2°)
Operating switch is unhindered, rhythmed, and there is not palpable clag. (After the keystoke is locked, it is normal that the keystoke tilt to one side plus or minus 2°)
- 2.5 产品结构及尺寸参见产品规格图纸.
Construction and dimensions: Refer to individual product drawing.

3. 电气特性 Electronic Characteristics

No.	项 目 Item	测试方法 Test Method	测试设备 Equipment	特性要求 Requirements
3.1	接触电阻 Contact Resistance	在低电流($\leq 100\text{mA}$)条件下测试. Measured at low current (100mA or less).	低电阻测试仪 Low Resistance Meter	$100\text{m}\Omega \text{ max}$
3.2	绝缘阻抗 Insulation Resistance	测试相邻引脚之间,引脚与外壳之间的绝缘阻抗(DC 500V). Measurement shall be made between adjacent terminals, between terminal and shell(DC 500V).	绝缘测试机 Insulation Resistance Tester	$100\text{M}\Omega \text{ min}$
3.3	耐压测试 Dielectric Withstand Voltage	输入一定电压(50~60Hz, 电压值 AC 500V)1 分钟,漏电流为 2mA,测试邻近端子间. Apply certain voltage (50~60Hz, AC 500V) for 1 minute between adjacent contacts of the connector with 2mA leakage sensitivity.	耐压测试机 Puncture Tester	没有绝缘破坏. 电弧等异常. No arcing, break down and damaging insulation.

4. 机械特性 Mechanical Characteristics

No.	项 目 Item	测试方法 Test Method	测试设备 Equipment	特性要求 Requirements
4.1	操 作 力 Operation Force	逐渐施力操作开关按键，测量开关到达全部工作行程时所需的最大操作力度。 Operate the keystroke of the switch and then increase press strength gradually, Measured maximum operation force while the travel of the switch is full.	测力计 Force Gauge	250±50gf
4.2	全 行 程 Full travel	垂直操作开关按键，量测开关顶端最大移动距离。 Operate the keystroke of the switch vertically, the travel distance of keystroke moving from its free position to maximum moving distance shall be measurement.	游标卡尺 Vernier Caliper	Full Travel(全行程): 3.80±0.2mm Off Staring Travel (断 开行程):0.45(Max)

5. 可靠性测试 Reliability trial

No.	项 目 Item	测试方法 Test Method	测试设备 Equipment	特性要求 Requirements
5.1	可焊性试验 Solder ability Test	端子顶部被浸入焊锡炉中，温度为 230±5℃，时间 5±1 秒。 The top of the terminals shall be dipped in the solder bath at 230±5℃ for 5±1 seconds.	控温锡炉 Solder Stove	引脚至少 95%上锡。 Ninety-five percent of terminals shall be dipped.
5.2	寿命试验 Operation Life	开关在寿命试验设备上以约 90 次 / 分的速度连续被操作，具体次数见规格图示。 Switch shall be operated continuously at about 90 cycles /min without load.	寿命试验机 Life Tester	寿命: 10,000 次 实验后: 绝缘电阻: 10MΩ Min 操作力: 变化在±50%内 开关外观及结构无损坏。 Life test:10,000cycles After test: Insulation resistance: 10MΩ Min Operating force: Change should be within ±50% of specified value. No abnormalities shall be recognized in appearance and construction.

5. 可靠性测试 Reliability trial

No.	项 目 Item	测试方法 Test Method	测试设备 Equipment	特性要求 Requirements
5.3	耐焊接热 Resistance to Soldering heat	端子焊接部分浸入焊炉， 焊炉温度及浸渍时间： 1): 自动焊接 $260 \pm 5^{\circ}\text{C}$ $5 \pm 1\text{S}$ 2): 手动焊接 $300 \pm 5^{\circ}\text{C}$ 2-3S(浸渍深度—接线端应浸 到离开根部 1.6mm) 3) 焊接时不可于端子施 加外力。 Terminals shall be dipped in the solder 1): Dip Soldering 260 $\pm 5^{\circ}\text{C}$ $5 \pm 1\text{S}$ 2): Manual Soldering $300 \pm 5^{\circ}\text{C}$ 2-3S(immersion—depth shall be at copper plating portion of PCB after mounting. (Thickness of PCB=1.6mm) 3): without additional force for terminals.	控温锡炉 控温烙铁 Solder Stove Solder Searing-iron	本体无变形，能满足 于机械、电气性能。 Appearance should be not damaged, electrical and mechanical characteristics shall be satisfied.
5.4	耐高温测试 Resistance to Heat Test	放置在温度 $80 \pm 2^{\circ}\text{C}$ 环境 中 96 小时后，再置于正常条 件下 1 小时后测定。 The switch shall be stored at a temperature of 80 ± 2 $^{\circ}\text{C}$ for 96 hours, Measurements shall be made after it be subjected to the standard conditions for 1 hour.	高低温试验机 High & Low Temperature Tester	外观，机械及电 气性能均符合要求。 Appearance, electrical and mechanical characteristics shall be satisfied.

5.5	耐低温测试 Resistance to Cold Test	放置在温度$-25\pm 2^{\circ}\text{C}$环境中 96 小时后，再置于正常条件下 1 小时后测定。 The switch shall be stored at a temperature of $-25\pm 2^{\circ}\text{C}$ for 96 hours, Measurements shall be made after it be subjected to the standard conditions for 1 hour.	高低温试验机 High & Low Temperature Tester	外观，机械及电气性能均符合要求。 Appearance, electrical and mechanical characteristics shall be satisfied.
5.6	耐湿性测试 Resistance to Humidity Test	放置于温度 $40\pm 2^{\circ}\text{C}$，相对湿度为 90~96%环境中 96 小时后，再置于正常条件下 1 小时后测定（注意要擦去水滴）。 The switch shall be stored at a temperature of $40\pm 2^{\circ}\text{C}$, relative humidity 90~96% for 96 hours, Measurements shall be made after it be subjected to the standard conditions for 1 hour (Wipe out water drip).	恒温恒湿箱 Temperature & Humidity Tester Chamber	外观，机械及电气性能均符合要求。 Appearance, electrical and mechanical characteristics shall be satisfied.
5.7	盐雾实验 Salt Mist Test	试件在下述实验后测量： 1. 温度： $35\pm 5^{\circ}\text{C}$ 2. 盐溶液浓度： $5\pm 1\%$（质量百分比）， 3. 试验时间： 24 小时， 4. 试验后，将盐沉积物用水冲掉。 The switch shall be checked after following test: 1. Temperature: $35\pm 5^{\circ}\text{C}$ 2. Salt solution: $5\pm 1\%$(Solids by mass) 3. Duration: 24 hours, 4. After immersing, salt deposit shall be removed by running water.	盐雾试验机 Salt Spray Tester	在金属件上没有严重腐蚀斑点。 No remarkable corrosion shall be recognized in metal parts.