

规格承认书

SPECIFICATION FOR APPRVAL

客户 (CUSTOMER) :

品名 (ITEM) : 继电器

型号 (MODEL) : KT13FL-2Z

客户料号 (CUSTOMER' S P/N) :

发行部门 (ISSUER) : 技术部

发行日期 (DATE OF ISSUED) :

客户承认栏 (APPROVED BY)				深圳市科泰电子科技有限公司			
核准 APPROVER		承办 CHECKED		核准 APPROVER	余鹏	编制 CHECKED	黄威
承认章 (APPROVED)							



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SPECIFICATION FOR APPROVAL

1 产品类型 (TYPE MODEL)

- 1.1 型号 (TYPE)
KT13FL-2Z
- 1.2 触点形式 (CONTACT ARRANGEMENT)
2Z, 2H, 2D
- 1.3 触点材料 (CONTACT MATERIAL)
银氧化锡(AgSnO₂/Cu)

2 线圈参数 (COIL PARAMETER)

额定电压 (RATED VOLTAGE) DC (V)	线圈电阻 (COIL RESISTANCE) ± 10% (Ω)	线圈最大允许电压 (MAX. ALLOWABLE COIL VOLTAGE) (at 23°C) (V)	线圈消耗功率 (COIL OPERATING POWER) (W)
6	40	额定电压 X110%	0.9
12	160		
24	640		
48	2560		
110	13400		
220	53777		

额定电压 (RATED VOLTAGE) AC (V)	线圈电阻 (COIL RESISTANCE) ± 10% (Ω)	线圈最大允许电压 (MAX. ALLOWABLE COIL VOLTAGE) (V)	线圈消耗功率 (COIL OPERATING POWER) (VA)
6	10.5	额定电压 X110%	1.2
12	42		
24	168		
48	672		
110	3529		
220	14116		
380	42116		

3 触点规格 (CONTACT SPECIFICATION)

- 3.1 触点额定值 (CONTACT RATING)
12A 240VAC/28VDC(阻性 Resistive)
- 3.2 触点额定电流 (RATED CONTACT CURRENT)
12A
- 3.3 最大分断能力 (MAX CONTACT CAPACITY)

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240VAC/28VDC

4 性能 (PERFORMANCE)

4.1 接触电阻 (CONTACT RESISTANCE)

$\leq 100\text{m}\Omega$ (6VDC, 1A)

4.2 吸合电压 (OPERATE VOLTAGE)

DC: $\leq 75\% \times$ 额定电压 The rated voltage (at 23°C)

AC: $\leq 80\% \times$ 额定电压 The rated voltage (at 23°C)

4.3 释放电压 (RELEASE VOLTAGE)

DC: $\geq 10\% \times$ 额定电压 The rated voltage (at 23°C)

AC: $\geq 30\% \times$ 额定电压 The rated voltage (at 23°C)

4.4 动作时间 (OPERATE TIME) $\leq 15\text{ms}$

4.5 释放时间 (RELEASE TIME) $\leq 10\text{ms}$

4.6 寿命 (LIFE)

1) 电气寿命 (ELECTRICALLY): 1×10^5 次 (阻性负载, 15 次/每分钟)

$1 \times 10^5 \text{ ops min}$ (Resistive load, 10 ops/minute)

2) 机械寿命 (MECHANICALLY): 1×10^7 次 (无负荷下, 300 次/每分钟)

$1 \times 10^7 \text{ ops min}$ (At no load, 300 ops/minute)

4.7 介质耐压 (DIELECTRIC STRENGTHS) 漏电流 1mA (LEAK CURRENT 1mA)

1) 触点与触点间 (BETWEEN CONTACTS): 1000VAC, 1minute

2) 线圈与触点间 (BETWEEN COIL TO CONTACTS): 1500VAC, 1minute

4.8 绝缘电阻 (INSULATION RESISTANCE)

1) 触点与触点间 (BETWEEN CONTACTS): $100\text{M}\Omega$

2) 线圈与触点间 (BETWEEN COIL TO CONTACTS): $100\text{M}\Omega$

4.9 耐冲电压 (SURGE RESISTIVE NESS)

3) 线圈与触点间 (BETWEEN COIL TO CONTACTS): 1800VAC, 1minute

4.10 温升 (TEMPERATURE RISE)

1) 线圈 (COIL): 阻性法, 线圈加额定电压触点电流: 0.1A 温度 $\leq 70^\circ\text{C}$ 。

70°C Max. by resistance method at Ccontact: 0.1A,

Coil: rated voltage

2) 触点 (CONTACT): 测温法, 线圈加额定电压触点电流: 10A 温度 $\leq 80^\circ\text{C}$ 。

80°C Max. by temperature measuring method at

Contact: 10A, Coil: rated voltage

4.11 振动 (VIBRATION)

1) 误动作 (ERROR OPERATION): 以三个方向振动 5 分钟, 误动不超过 1ms (振幅 1mm, 10~55Hz)。

No error operation than 1ms Max. when vibrate it from 3 directions for 5 minutes (Amplitude 1.5mm, 10~55Hz).

2) 振动耐久性 (ENDURANCE): 以三个方向振动 2 小时, 无结构故障 (振幅 1mm,

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10~55Hz) 。

No construction trouble when vibrate it from 3 directions for 2 hours (Amplitude 1.5mm, 10~55Hz).

4.12 冲击 (HOCK)

- 1) 误动作 (ERROR OPERATION): 以三个方向冲击 3 次, 触点误动作不超过 1ms (最高加速度 98m/s^2 持续时间 11ms)。

No error operation by contact more than 1ms Max. When shocks is from 3 directions 3 times (at peak acceleration 100 m/s^2 Duration 11ms).

- 2) 耐冲击 (ENDURANCE): 以三个方向冲击 3 次, 无结构故障 (最高加速度 98m/s^2 持续时间 6ms)。

No construction trouble when shocks is from 3 directions 3 times (at peak acceleration 1000 m/s^2 Duration 6ms).

4.13 引脚强度 (TERMINAL STRENGTH)

在任何引脚上施加 5N 的力, 持续 10 秒, 表面及结构上应无损伤。

No construction and exterior trouble when push into any terminals by 5N for 10sec.

4.14 高温试验 (THERMAL PROOF)

在 70°C 恒温状态下放置 24 小时, 然后在常温下放置 2 小时, 无结构及性能损伤。

Not any trouble on construction and characteristic when leave in 70°C 24 hours after that, leave it in standard condition for 2 hours.

4.15 低温试验 (COLD PROOF)

在 -55°C 恒温状态下放置 24 小时, 然后在常温下放置 2 小时, 无结构及性能损伤。

Not any trouble on construction and characteristic when leave in -55°C 24 hours after that, leave it in standard condition for 2 hours.

4.16 潮湿试验 (HUMIDITY PROOF)

在 40°C , 湿度 90% 恒温状态下放置 24 小时, 然后在常温下放置 2 小时, 无结构及性能损伤, 绝缘电阻 $\geq 10\text{ M}\Omega$ 。

Insulation resistance $10\text{ M}\Omega$ min. Not any troubles on construction and characteristic when leave in 40°C , humidity 35%~80% 24 hours after that, leave it in standard condition for 2 hours.

4.17 温度急变试验 (THERMAL SHOCK)

在温度 -40°C 及 70°C 恒温状态下各放置 1 小时为 1 个循环, 共 10 个循环后在正常环境下放置 2 小时, 无结构及性能损伤。

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Not any troubles on construction and characteristic when leave it in -40°C and 85°C temp. room for 1h each. That is one cycle. After 10 cycles has done, Leave it on standard condition for 2 hours.

4. 18 耐焊接热 (SOLDERING THERMAL)

在 $350 \pm 10^{\circ}\text{C}$ 的锡温中浸锡 3.5 ± 0.5 秒或在 $260 \pm 5^{\circ}\text{C}$ 锡温中浸锡 10 ± 1 秒, 无结构及性能损伤。

Not any troubles on construction and characteristic. When dipped into soldering bath $350 \pm 10^{\circ}\text{C}$ $3.5 \pm 0.5\text{sec}$ or $260 \pm 5^{\circ}\text{C}$ $10 \pm 1 \text{ sec}$.

4. 19 可焊性 (SOLDERABILITY)

在 $235 \pm 5^{\circ}\text{C}$ 的锡温中浸锡 2 ± 0.5 秒, 试验后焊锡的浸锡面积应大于 95%。

Not any problems solder dipped at $235 \pm 5^{\circ}\text{C}$ $2 \pm 0.5\text{sec}$.

5 标志 (MARKING)

5. 1 外壳颜色 (CRUST COLOR)

透明 (绿色盖板)

5. 2 标志位置 (MARKING POSITION)

顶面 (Top Surface)

5. 3 字符颜色 (INK COLOR)

激光刻字 (黑色)

6 测试条件 (STANDARDS TEST CONDITION)

6. 1 温度 (TEMPERATURE)

$-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$

6. 2 湿度 (HUMIDITY)

$45\% \sim 85\%$

6. 3 测试方向 (DIRECTION OF MEASUREMENT)

引线脚向下 (Terminal down position is standard position)

7 使用条件 (OPERATING CONDITION)

7. 1 温度 (TEMPERATURE)

$-40 \sim +85^{\circ}\text{C}$, 无冻结、凝露环境 (However, no freeze and no dew condensation)

7. 2 湿度 (HUMIDITY)

$45 \sim 85\%$

7. 3 安装方向 (MOUNTING DIRECTION)

引脚向下 (Terminal down position is standard position)

8 储存条件 (STORAGE CONDITION)

8. 1 温度 (TEMPERATURE)

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-40~+85℃, 无冻结、凝露环境(However, no freeze and no dew condensation)

8.2 湿度 (HUMIDITY)

45~85%

8.3 环境 (ENVIRONMENT)

- 1) 产品或包装箱避免放置在有腐蚀性的气体中, 如硫化氢气体或含盐空气中。

Store in locations where the product or container is not expose to corrosive gas such As hydrogen sulfide gas or salty air.

- 2) 无尘场所。

Store in location where no visible dust exists.

- 3) 避免阳光直射。

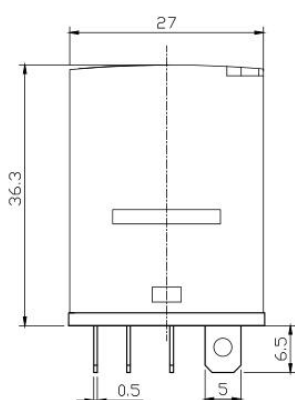
Store in location not subject to direct sunlight.

附：外形尺寸安装与印字图

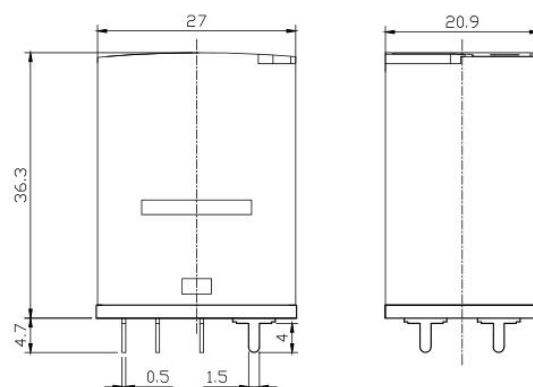
(Overall dimensions、mounting dimensions and the circuit diagram)

外形图：

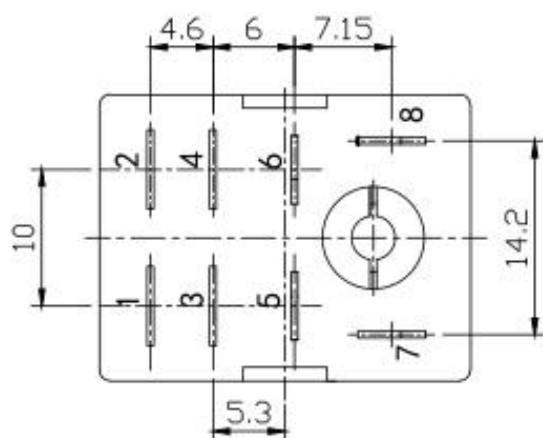
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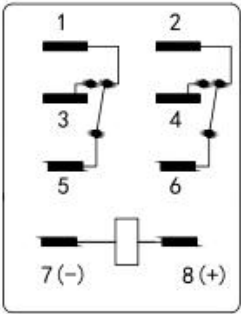
PCB式：



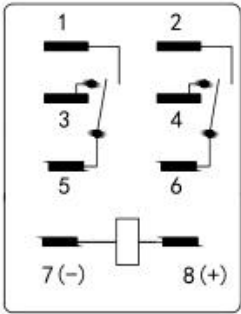
安装尺寸图：



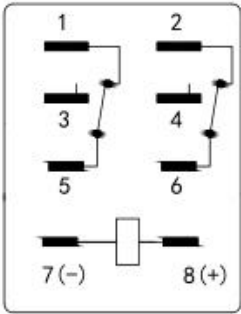
接线图（底视）:



2Z



2H



2D