

# STKF

汽车继电器

Automotive Relays

- 带通用端子的经济型方形继电器 Compact relay with standard PCB layout
- 高开关电源: 15A DC14V 15A 14 VDC switching capacity
- 线圈功耗 Coil power: 800mW
- 外形尺寸 Outline dimensions: (19.2 x 15.5 x 15.25) mm



RoHS

## 用途举例 Application Examples

- 中央门锁 Central door lock
- 防抱死刹车 ABS system
- 安全带松紧调节 Belt tension adjustment
- 座位调节 Seat positioning
- 电动车窗 Power window

## 型号命名标准 Product Code Structure

|                             |  |     |   |   |   |        |
|-----------------------------|--|-----|---|---|---|--------|
| 基本型号 Type                   | STKF   | -12 | M | V | 1 | -(XXX) |
| 线圈额定电压 Coil voltage         | 09, 12, 24   |     |   |   |   |        |
| 触点结构 Contact of arrangement | Blank – FORM 1C, M – FORM 1A, B – FORM 1B                      |     |   |   |   |        |
| 封装形式 Category of protection | V – 非密封型 Flux proof, S – 密封型 Wash tight                        |     |   |   |   |        |
| 接点材质 Contact material       | 1–AgNi, 2–AgCdO, 3–AgSnO                                       |     |   |   |   |        |
| 特殊标记 Suffix                 | Blank -- Standard, (XXX) – 客户特殊需求 customer special requirement |     |   |   |   |        |

### 线圈参数 Coil Data(DC)

| 额定电压<br>Rated voltage<br>(V) | 额定电流<br>Rated current<br>(mA) | 线圈电阻<br>Coil resistance<br>(Ω) | 吸合电压<br>Operate<br>voltage | 释放电压<br>Release<br>voltage | 最大允许电压<br>Max release<br>voltage | 额定功耗<br>Rated coil power |
|------------------------------|-------------------------------|--------------------------------|----------------------------|----------------------------|----------------------------------|--------------------------|
|                              |                               |                                | 额定电压的 % of rated voltage   |                            |                                  |                          |
| 6                            | 133.3                         | 45                             | 75% Max                    | 5% Min                     | 130%                             | Approx.<br>800mW         |
| 12                           | 66.7                          | 180                            |                            |                            |                                  |                          |
| 24                           | 33.3                          | 720                            |                            |                            |                                  |                          |

注：额定电流和线圈电阻是在线圈温度23℃，公差为±10%  
Note. The rated current and coil resistance are measured at a coil temperature of 23° C with a tolerance of ±10%

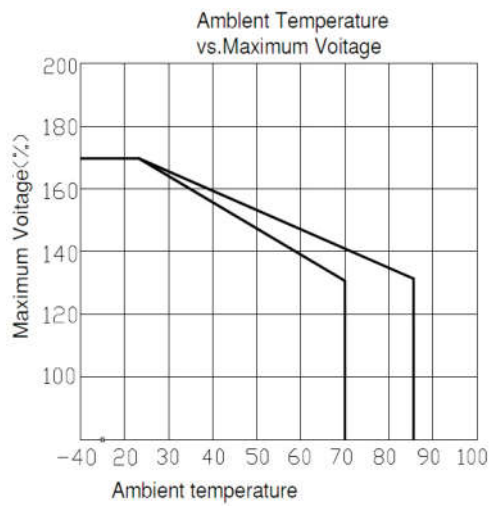
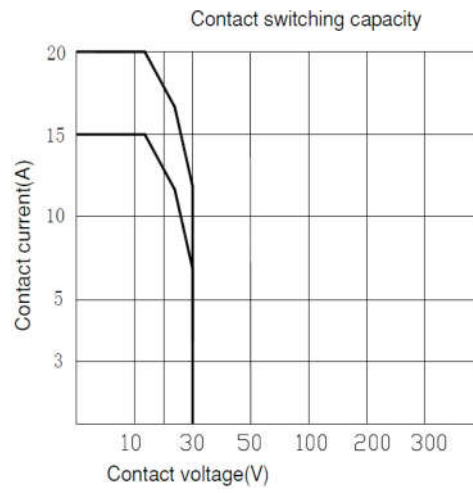
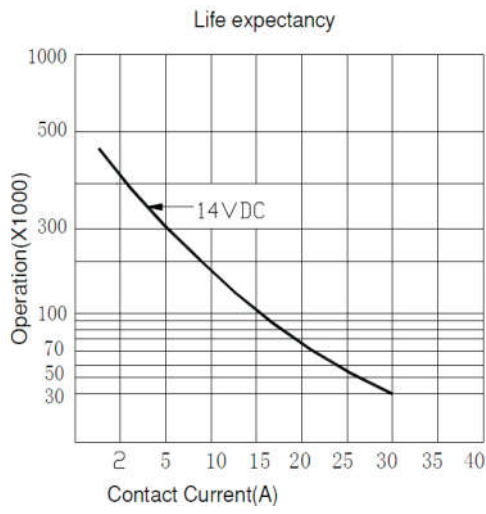
### 触点参数 Contact Data

|                                |  |
|--------------------------------|--|
| 接触电阻 Contact resistance        | 100mΩ max ( 1A/6VDC )                    |
| 额定负载 rated load                | 15A 14VDC                                |
| 最大连续电流 Max. continuous current | 20A                                      |
| 最大连续电压 Max. continuous voltage | 16VDC                                    |
| 机械寿命 Mechanical endurance,     | 1x10 <sup>7</sup> ops (at 18,000 ops /h) |
| 电气寿命 Electrical endurance      | 1x10 <sup>6</sup> ops (at 360 ops /h)    |

### 性能参数 Characteristics

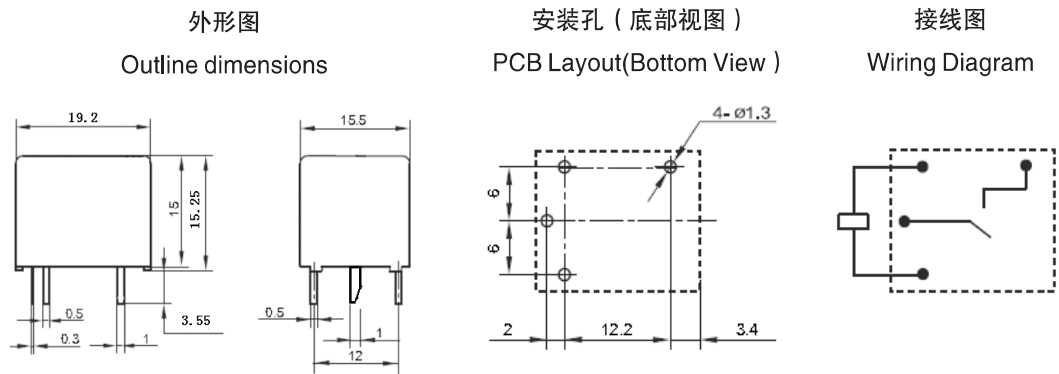
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|--|---|-------------------------------|
| 吸合时间 Operate time                      | ≤10ms   |                               |
| 释放时间 Release time                      | ≤5ms  |                               |
| 绝缘电阻 Insulation resistance             | 1000MΩ以上 ( 500VDC )                             |                               |
| 介质耐压<br>Initial dielectric<br>strength | 线圈触点间 Between contact and coil                  | AC1500V 50/60Hz 1min          |
|  | 开路触点间 Between open contacts                     | AC750V 50/60Hz 1min           |
| 振动 Vibration resistance                | 10~55~10Hz (双振幅 1.5mm) (double amplitude 1.5mm) |                               |
| 冲击 Shock<br>resistance                 | 稳定性 Functional                                  | 100m/S <sup>2</sup> ( 10G )   |
|  | 强度 Destructive                                  | 1000m/S <sup>2</sup> ( 100G ) |
| 温度范围<br>Ambient operating temperature  | -40℃~+85℃ ;                                     |                               |
| 湿度范围 Ambient operating humidity        | 20-85%RH  |                               |
| 引出端形式 Termination                      | PCB   |                               |
| 重量 Weight                              | Approx.9.5g                                     |                               |

性能曲线 Engineering Data

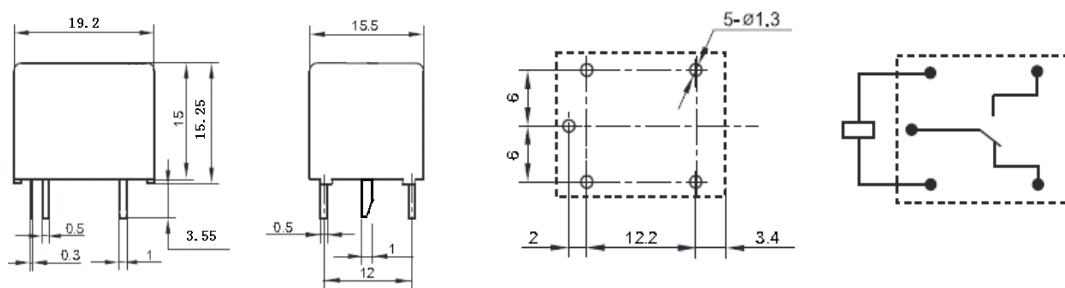


## 外形图、接线图、安装孔尺寸 Outline dimensions、PCB Layout、Wiring Diagram (mm)

1) 1A



2) 1C



未注尺寸公差 dimension tolerance

<1mm: +0.2 mm, 1~5 mm: ± 0.3mm, >5mm: ± 0.4mm

注: 安装孔尺寸中未注尺寸公差为+0.1 mm Note . dimension tolerance of the mounting hole +0.1 mm

### 使用注意事项 Precautions

- 一般的注意事项请参考“印刷基板用继电器共通注意事项”。
- Please refer to “PCB Relays Common Precautions” for correct use.