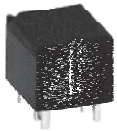
STKC 系列 超小型汽车继电器 AUTOMOTIVE RELAY

- 超小型汽车继电器Subminiature automotive relay
- 重量仅4克The weight is only 4g for single relay
- 环境温度可达125℃ Extended temp. range up to 125℃
- 塑封型和防焊剂型可供选择 Flux proof or sealed type available
- 外形尺寸 Outline dimensions：(12.9 x 12 x 9.9) mm



RoHS

用途举例 Application Examples

- 中央门锁、雨刮器控制、仪表控制、自动门窗、防盗系统、座椅加热控制、照明/闪光灯/指示灯控制
- Central door lock Anti–theft Lock、 Power doors & windows Lighting、 flashlight& indicator lamp control、 Wiper control instrument control、 Rear window and seat heating control

型号命名标准 Product Code Structure

STKC	-12	M	S	E	-(XXX)

本型号 Type

STKC

线圈额定电压 Coil voltage

06，10，12

触点结构 Contact form

Blank– FORM 1C，M – FORM 1A，

封装形式 Category of protection

V – 非密封型 Flux proof ，S – 密封型 Wash tight

触点负载 Contact rating

E–高负载型 For high endurance (1A only)， Blank– 标准型 Standard

特殊标记 Suffix

Blank– 标准型 Standard，(XXX) – 客户特殊需求 For customer special requirement,

■ 性能参数 Characteristics

触点形式 Contact arrangement	1C	1A
接触电阻 Contact resistance	100mΩ max (1A/6VDC)	
触点材料 Contact material	银合金 Ag Alloy	
最大连续电流 Max. continuous current	NO:30A (23℃ , 1h) NC:25A (23℃ , 1h)	
最大切换电压 Max. switching voltage	16VDC	
最大切换电流 Max. switching current	30A	
机械寿命 Mechanical endurance,	$1x10^7$ ops (at 18,000 ops /h)	
电气寿命 Electrical endurance	详见触点参数 See contact data	
吸合时间 Operate time	≤10ms;	
释放时间 Release time	≤10ms	
绝缘电阻 Insulation resistance	1000MΩ以上 (500VDC)	
介质耐压 Initial dielectric strength	500VAC	
振动 Vibration resistance	10Hz~500 Hz 58.8m/ S^2	
冲击 Shock resistance	294m/S^2	
温度范围 Ambient operating temperature	-40℃~+125 ℃ ;	
湿度范围 Ambient operating humidity	5-85%RH	
引出端形式 Termination	印制板式	
重量 Weight	Approx..4g	

■ 触点参数 Contact Data

触点负载电压 Load voltage	负载类型 Load type		触点负载电A Load current A		通断比 ON/OFF ratio		电耐久性 Electrical endurance (ops)	触点材料 Contact material	触点接线图load wiring diagram
			1c		接通ON S	断开OFF S			
			常开	常闭					
13.5VDC	阻性 Resistive	接通 ON	20	—	1	5	3×10^5	$AgSnO_2$	见图1
		开断 OFF	20	—					
	雨刷 电机 wiper L=1.0mH	接通 ON	25(1)	—	0.2	2	3×10^5	$AgSnO_2$	见图2
		断开 OFF	5	—	1.8				
	电机锁定 motor locked L=0.77mH	接通 ON	20	—	0.2	2	1×10^5	$AgSnO_2$	见图3
		断开OFF	20	—					

触点负载电压 Load voltage	负载类型 Load type		触点负载电A Load current A	通断比 ON/OFF ratio		电耐久性 Electrical endurance (ops)	触点材料 Contact material	触点接线图 load wiring diagram
			1A	断开OFF S	断开 OFF S			
13.5VDC	阻性 Resistive	接通 ON	20	1	5	3×10^5	$AgSnO_2$	见图3
		开断 OFF	20					
	灯闪光(3) flasher	接通 ON	3 x 21W	0.356	0.356	2×10^6	$AgSnO_2$	见图4
		断开 OFF						
	灯lamp	接通 ON	40(2)	2	2	1×10^5	$AgSnO_2$	见图6
		断开OFF	10					

备注:

(1)电机初始峰值冲击电流;

(2)初始冷态灯丝第一次尖峰冲击电流;

(3)当用于闪光灯负载时,须按下图极性要求接线,并须采用特殊AgSnO2触点

(4)触点接线图如下所示

1)Corresponds to the peak inrush current on initial actuation (motor)

2)Corresponds to the peak inrush current on initial actuation (cold filament)

3)When it is utilized in flasher, a special Ag no contact material should be used and the customer special code should be (170)as a suffix. Please connect by the polarity according to the diagrams below.

4)The load wiring diagrams are listed below.

图1

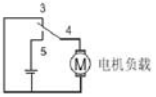


图2

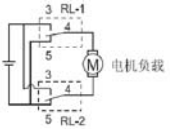


图3

图4

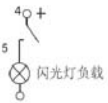


图5

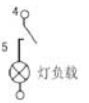


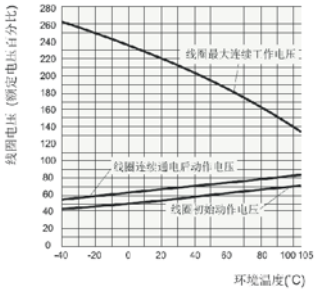
图6

■ 线圈参数 Coil Data(DC)

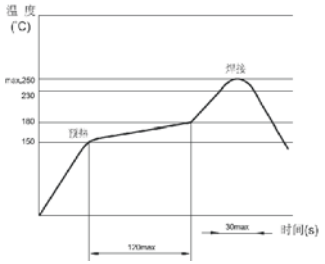
额定电压 Rated voltage (V)	吸合电压 Operate voltage			释放电压 Release voltage			线圈电阻 Coil resistance (Ω)	额定功耗 Rated coil power (W)
	23℃	85℃	125℃	23℃	85℃	125℃	23℃	23℃
6	≤3.5	≤4.4	≤5.0	≤0.8	≤1.0	≤1.1	63	0.55
10	≤5.7	≤7.1	≤8.1	≤1.5	≤1.5	≤1.7	181	0.55
12	≤6.9	≤8.6	≤9.9	≤1.5	≤1.8	≤2.1	254	0.55
12	≤6.9	≤8.6	≤9.9	≤1.5	≤1.8	≤2.1	181	0.8

■ 性能曲线 Engineering Data

线圈连续通电电压范围
Coil operating voltage range

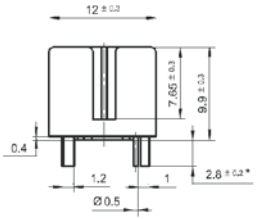


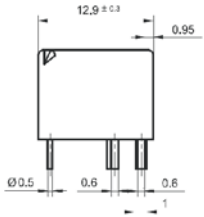
回流型焊产品，推荐焊接温度
Reflow soldering temperature on PCB board



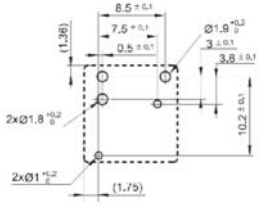
■ 外形图、接线图、安装孔尺寸Outline dimensions、PCB Layout、Wiring Diagram （mm）

外形图Outline dimensions





安装孔（底部视图）PCB Layout(Bottom View)



接线图Wiring Diagram