

SIGNAL RELAY 信号继电器

HJR4102

- Small size and low cost
小尺寸, 低成本
- DIP standard terminals
DIP 标准引脚
- Surge Strength 1500V FCC68
浪涌强度 1500V,符合 FCC68
- Sealed type available
塑封型
- Conform to RoHS,ELV directive
符合 ROHS,ELV 指令



CONTACT DATA 触点参数

Contact Arrangement 触点形式	1H/1Z
Contact Material 触点材料	Silver Alloy 银合金
Load 负载	Resistive load 阻性负载 (cosΦ=1)
Contact Ratings 触点负载	3A120VAC/24VDC 3A250VAC 1A 250VAC(TUV)
Min. Contact Load 最小负载	1mA 5VDC
Max. Switching Voltage 最大切换电压	240VAC/60VDC
Max. Switching Current 最大切换电流	5A
Max. Switching Power 最大切换功率	360VA/90W
Contact Resistance 接触电阻	≤100mΩ (6VDC 1A)
Electrical Endurance 电耐久性	1×10 ⁵ OPS(at 300OPS/min) 1×10 ⁵ 次(30次/分钟)- 3A120VAC/24VDC
Mechanical Endurance 机械耐久性	1×10 ⁷ OPS(at 300 OPS/min) 1×10 ⁷ 次(300次/分钟)

CHARACTERISTICS 性能参数

Insulation Resistance 绝缘电阻		100M Ω Min. at 500VDC
Dielectric Strength 介质耐压	Between Open Contacts 触点间	500VAC (50/60Hz 1 min)
	Between Contacts and Coil 触点与线圈间	1000VAC (50/60Hz 1 min)
Operate Time 动作时间		≤5ms
Release Time 释放时间		≤5ms
Ambient Temperature 环境温度		-40℃to+85℃
Shock Resistance 冲击		Functional 稳定性: 10G
		Destructive 强度: 50G
Vibration Resistance 振动		10~55Hz, 1.5mm DA 双振幅
Humidity 湿度		5~85%
Unit Weight 重量		Approx. 3.5g 约3.5克

■ COIL DATA 线圈参数 (at 23°C)

Rated Voltage 额定电压 (VDC)	3	5	6	9	12	24	48	0.45W
Coil Resistance 线圈电阻 ($\Omega \pm 10\%$)	20	56	80	180	320	1280	5120	
Rated Current 额定电流 (mA)	150	90	75	50	37.5	18.7	9	
Max. Operate Voltage 最大动作电压 (VDC)	2.25	3.75	4.5	6.75	9	18	36	
Min. Release Voltage 最小释放电压 (VDC)	0.3	0.5	0.6	0.9	1.2	2.4	4.8	
Coil Resistance 线圈电阻 ($\Omega \pm 10\%$)	25	69	100	225	400	1600	6400	0.36W
Rated Current 额定电流 (mA)	120	71.4	60	40	30	15	7.5	
Max. Operate Voltage 最大动作电压 (VDC)	2.25	3.75	4.5	6.75	9	18	36	
Min. Release Voltage 最小释放电压 (VDC)	0.3	0.5	0.6	0.9	1.2	2.4	4.8	
Coil Resistance 线圈电阻 ($\Omega \pm 10\%$)	45	125	180	405	720	2880		0.2W
Rated Current 额定电流 (mA)	66.7	40	33.3	22.2	16.7	8.3		
Max. Operate Voltage 最大动作电压 (VDC)	2.25	3.75	4.5	6.75	9	18		
Min. Release Voltage 最小释放电压 (VDC)	0.3	0.5	0.6	0.9	1.2	2.4		
Max Applicable Voltage 最大过载电压	3.9	6.5	7.8	11.7	15.6	31.2	62.4	
Coil Resistance 线圈电阻 ($\Omega \pm 10\%$)	3	5	6	9	12	24		0.15W
Rated Current 额定电流 (mA)	60	167	240	540	960	3840		
Max. Operate Voltage 最大动作电压 (VDC)	50	29.9	25	16.7	12.5	6.3		
Min. Release Voltage 最小释放电压 (VDC)	2.4	4	4.8	7.2	9.6	19.2		
Max Applicable Voltage 最大过载电压	0.3	0.5	0.6	0.9	1.2	2.4		

Remark: Max. Voltage refers to the maximum voltage which relay coil could endure in a period of time.

备注：最大电压是指继电器线圈在短时间内能够承受的最大电压值。

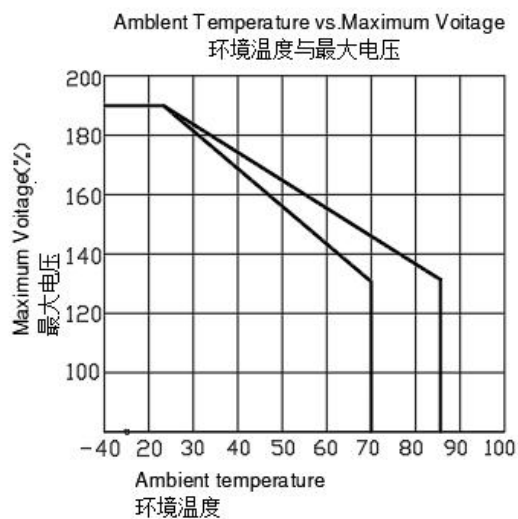
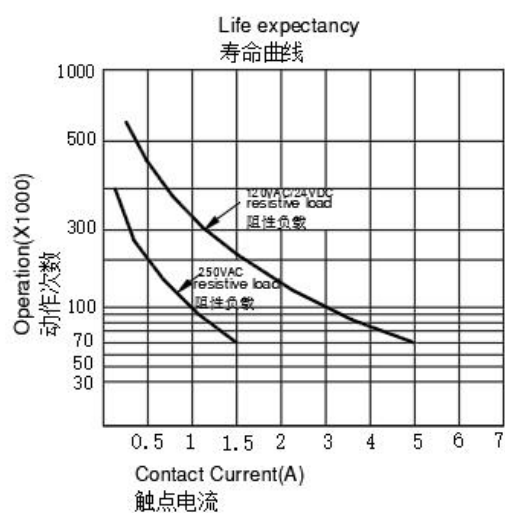
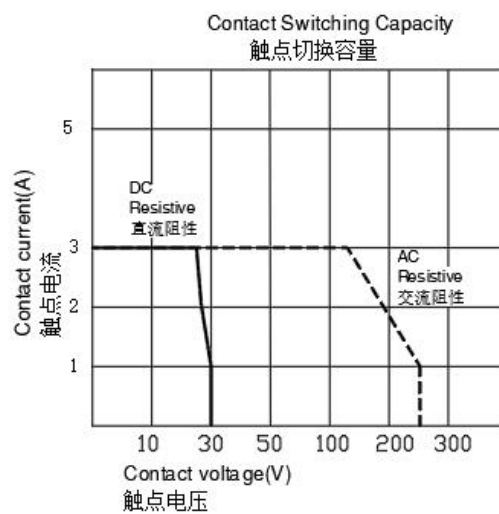
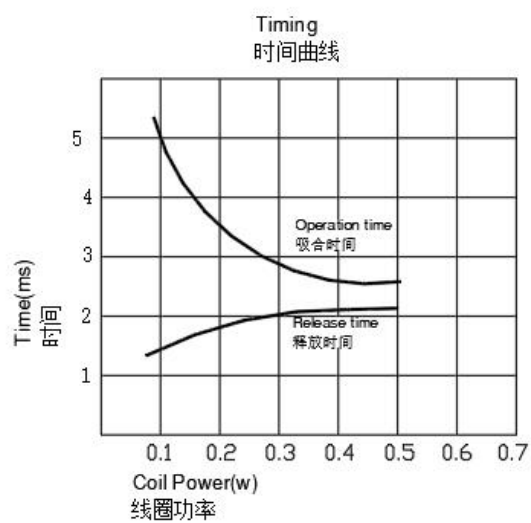
■ SAFETY APPROVED RATINGS 安全认证

Model(型号)	Coiling rating (线圈电压)	Safety Standard (安全标准)	Contact rating (触点负载)
HJR4102	3 to 48VDC	TÜV	3A 120VAC / 250VAC 3A 24VDC 1A 250VAC
		UL/cUL	3A 120VAC / 250VAC 3A 24VDC / 30VDC
		CQC	1A 250VAC 3A 120VAC / 250VAC / 30VDC

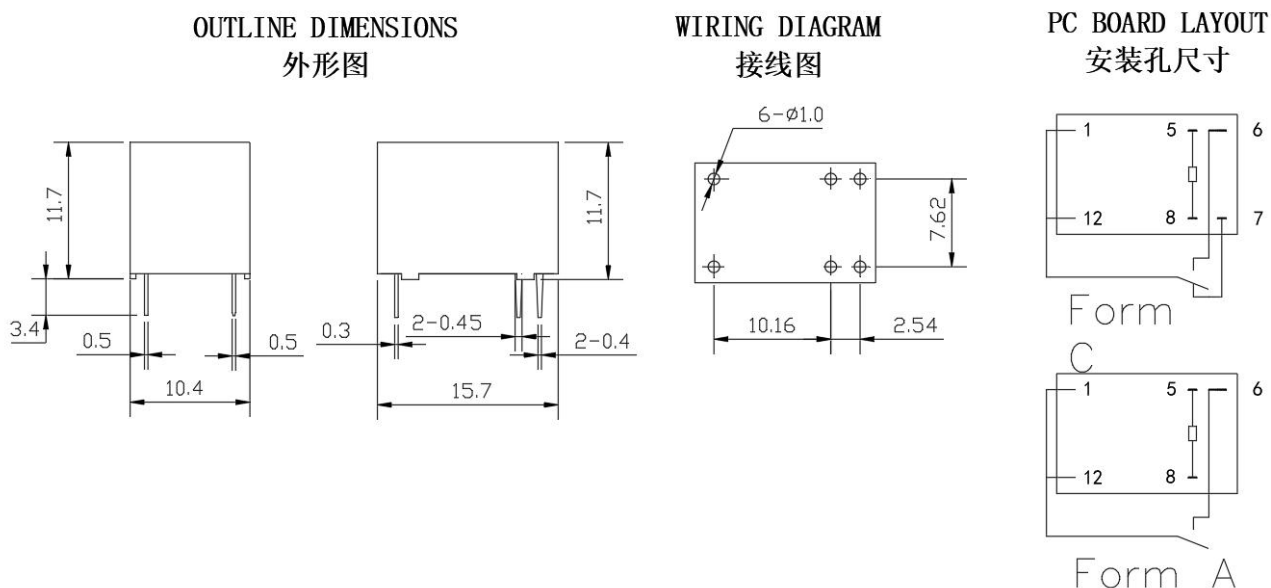
■ ORDERING INFORMATION 订货标记示例

	HJR4102	D	-12VDC	XX
Type 型号				
Coil Power 线圈功率	N=0.45W, D=0.36W, L=0.2W, M=0.15W			
Coil Voltage 线圈电压	03,05,06,09,12,24,48VDC			
Special Code 特性号	XX: Customer Special Requirement XX: 客户特殊要求		Nil: Standard Type 无: 标准型	

■ CHARACTERISTIC CURVES 性能曲线图



■ OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT 外形图、接线图、安装孔尺寸



备注:

- 1) 产品外形图的标注尺寸为沾锡前尺寸（沾锡后会变大），安装孔尺寸为推荐的 PCB 板孔的设计尺寸，具体 PCB 板孔设计尺寸可根据产品实物进行测绘、调整；
- 2) 产品部分外形尺寸中未注尺寸公差：当外形尺寸 $\leq 1\text{mm}$ 时，公差为 $\pm 0.2\text{mm}$ ；当外形尺寸在 $1\sim 5\text{mm}$ 时，公差为 $\pm 0.3\text{mm}$ ；当外形尺寸 $> 5\text{mm}$ 时，公差为 $\pm 0.4\text{mm}$ 。
- 3) 安装孔尺寸中未注尺寸公差均为 $\pm 0.1\text{mm}$ 。

Remark:

- 1) In case of no tolerance shown in outline dimension: outline dimension $\leq 1\text{mm}$, tolerance should be $\pm 0.2\text{mm}$; outline dimension $> 1\text{mm}$ and $\leq 5\text{mm}$, tolerance should be $\pm 0.3\text{mm}$; outline dimension $> 5\text{mm}$, tolerance should be $\pm 0.4\text{mm}$.
- 2) The additional tin top is max. 1mm.
- 3) The tolerance without indicating for PCB layout is always $\pm 0.1\text{mm}$.

声 明:

本产品规格书仅供客户使用时参考，如有更改，恕不另行通知。

Disclaimer:

The specification is for reference only. Specification subject to change without notice.