

汽车继电器	TRS
-------	-----

- 30A 16VDC switching rating  
30A 16VDC 转换负载
- 40A inrush at 16VDC  
16VDC 时 40A 浪涌电流
- Lower power relay  
低功耗继电器
- For Automotive Applications  
适合汽车使用
- Conform to RoHS,ELV directive  
符合 RoSH, ELV 指令



■ CONTACT DATA 触点参数

Contact Ratings 触点负载	负载类型 Load Type		触点负载电流(A)		Frequency 频率 ops/min	Duty Cycle 占空比	电气寿命 (次) Life Expectancy
			NO 常开	NC 常闭			
	Resistive Load 阻性负载		20	---	15	0.5	$3 \times 10^5$
	Wiper reserve 雨刷电机 L=1.0mH	Make 接通	25	25	15	0.5	$3 \times 10^5$
		Break 断开	5	5			
	Motor reserve blocked 电机锁定 L=0.77mH		20A Inrush		15	0.5	$1 \times 10^5$
	Flasher Load 闪光灯		$3 \times 21W$	---	80	0.5	$2 \times 10^6$
	Lamp 灯	Inrush 突入	100	---	6	1/6	$1 \times 10^5$
		Steady state 稳	10	---			
Contact Arrangement 触点形式			1H/1Z				
Contact Material 触点材料			Silver Alloy 银合金				
Load 负载			NO/NC: 30A/25A 13.5VDC				
Minimum load 最小负载			0.5A 12VDC				
Max. Continuous Load Current 最大持续通电电流			NO: 30A(at 23°C,1h); 20A(at 85°C,1h)				
			NC: 25A(at 23°C,1h); 15A(at 85°C,1h)				
Max. Switching Current 最大切换电流			40A				
Max. Switching Power 最大切换功率			420W				
Contact Resistance 接触电阻			100mΩ Max. at 6VDC 1A				
Electrical Endurance 电耐久性			See "Contact Data" Table 见触点参数				
Mechanical Endurance 机械耐久性			$1 \times 10^7$ OPS(at 300 OPS/min)				

**■ CHARACTERISTICS 性能参数**

Insulation Resistance 绝缘电阻		100MΩ Min. at 500VDC
Dielectric Strength 介质耐压	Between Open Contacts 触点间	500VAC(for 1 min)
	Between Contacts and Coil 触点与线圈间	500VAC(for 1 min)
Operate Time 动作时间		4ms Max.
Release Time 释放时间		2ms Max.
Ambient Temperature 环境温度		-40℃~+105℃
Shock Resistance 冲击		Functional 稳定性: 10G
		Destructive 强度: 100G
Vibration Resistance 振动		10~55Hz, 1.5mm DA 双振幅
Max. Switching Frequency 最大切换频率		Mechanical: 18,000 OPS/h
Humidity 湿度		20~85%
Unit Weight 重量		Approx 4g 约4克

**■ COIL DATA 线圈参数 (at 20℃)**

Rated Voltage 额定电压 (VDC)	6	10	12	24	0.57W
Coil Resistance 线圈电阻 (Ω±10%)	63	175	254	1010	
Rated Current 额定电流 (mA)	95	57	47.5	23.7	
Max. Operate Voltage 最大动作电压 (VDC)	3.6	6.0	7.2	14.4	
Min. Release Voltage 最小释放电压 (VDC)	0.6	1.0	1.2	2.4	
Max. Voltage 最大电压	7.8	13	15.6	31.2	
Coil Resistance 线圈电阻 (Ω±10%)	45	125	180	720	0.8W
Rated Current 额定电流 (mA)	133.3	80	66.7	33.3	
Max. Operate Voltage 最大动作电压 (VDC)	3.45	5.8	6.9	13.8	
Min. Release Voltage 最小释放电压 (VDC)	0.6	1.0	1.2	2.4	
Max. Voltage 最大电压	7.8	13	15.6	31.2	

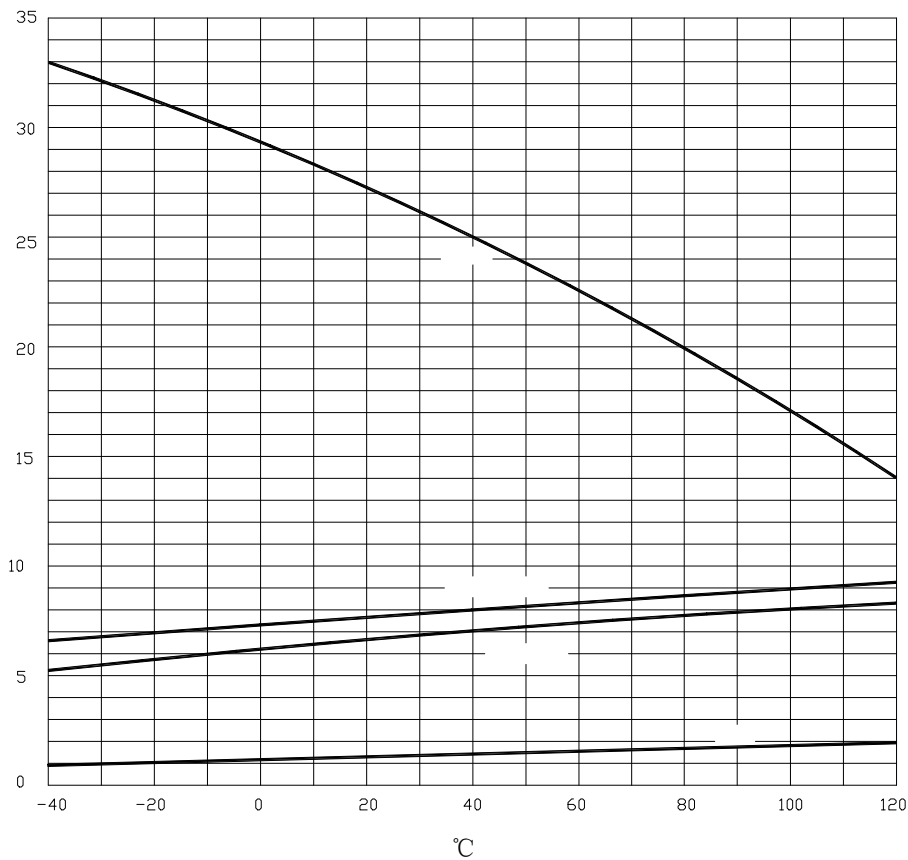
Remark: Max. Voltage refers to the maximum voltage which relay coil could endure in a period of time.

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。

■ ORDERING INFORMATION 订货标记示例

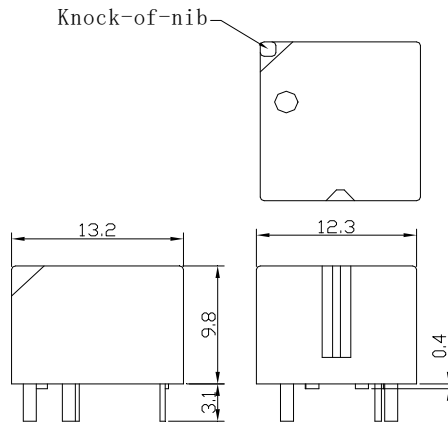
		<b>TRS</b>	<b>D</b>	<b>-S</b>	<b>-H</b>	<b>/12VDC</b>
<b>Type</b>	TRS: 继电器型号					
<b>Coil Power</b>	L: 0.57W					
线圈功耗	D: 0.8W					
<b>Construction</b>	S: Plastic sealed Nil: Vented(Flux-tight)					
封装方式	S: 塑封型 Nil: 防焊剂型					
<b>Contact Arrangement</b>	H: 1 Form A Z: 1From C					
触点形式	H: 一组常开 Z: 一组转换					
<b>Coil Rated Voltage</b>	06,10,12,24VDC					
线圈额定电压						

■ CHARACTERISTIC CURVES 性能曲线图



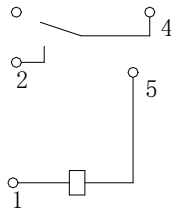
■ OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT 外形图、接线图、安装孔尺寸

Outline Dimensions 外形尺寸图

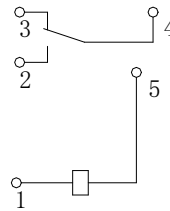


Wiring Diagrams 接线图

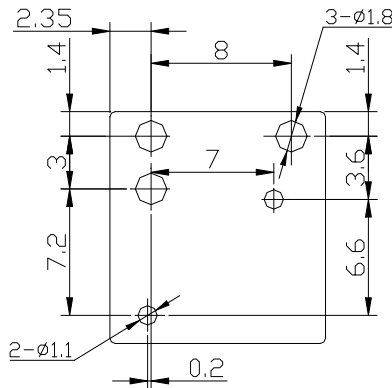
1 Form A



1 Form C



PC Board Layout 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.