

汽车继电器	TRS
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- 30A 16VDC switching rating
- 40A inrush at 16VDC
- Lower power relay
- For Automotive Applications
- Conform to RoHS,ELV directive


ORDERING CODE 订购代码

TRS D — S — H / 12VDC 1 2 3 4 5	
1. Relay Model 继电器型号 2. Coil Power 线圈功耗 L: 0.57W D: 0.8W 3. S: Sealed 密封 Nil: Vented(Flux-tight) 防焊剂型	4. 触点转换形式 H: Form A Z: Form C 5. Coil Nominal Voltage 线圈额定电压 6,12,24VDC

COIL DATA 线圈参数 (at 20°C)

Nominal Voltage 额定电压(VDC)	6	12	24	0.57W
Coil Resistance 线圈阻值($\Omega \pm 10\%$)	63	254	1010	
Rated Current 额定电流(mA)	95	47.5	23.7	
Max Operate Voltage 最大吸合电压(VDC)	3.6	7.2	14.4	
Min Release Voltage 最小释放电压(VDC)	0.6	1.2	2.4	
Coil Resistance 线圈阻值($\Omega \pm 10\%$)	45	180	720	0.8W
Rated Current 额定电流(mA)	133.3	66.7	33.3	
Max Operate Voltage 最大吸合电压(VDC)	3.45	6.9	13.8	
Min Release Voltage 最小释放电压(VDC)	0.6	1.2	2.4	
Max Applicable Voltage 最大过载电压	70°C时额定电压的130%，23°C时额定电压的170%			

CONTACT DATA 触点参数

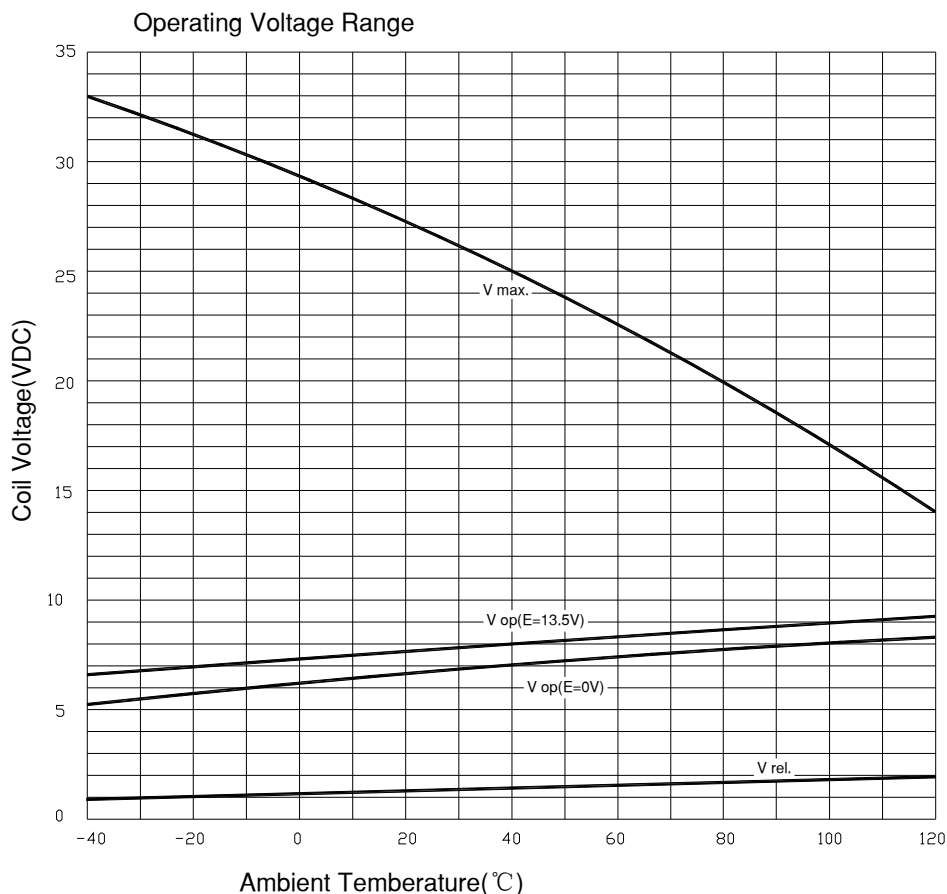
Contact Ratings 触点负载	负载类型 Load Type	触点负载电流(A)		Frequency 频率 ops/min	Duty Cycle 占空比	电气寿命 (次) Life Expectancy	
		NO 常开	NC 常闭				
	Resistive Load 阻性负载	20	---	15	0.5	3×10^5	
	Wiper reserve 雨刷电机 L=1.0mH	Make 接通	25	25	15	0.5	3×10^5
		Break 断开	5	5			
	Motor reserve blocked 电机锁定 L=0.77mH	20A Inrush		15	0.5	1×10^5	
	Flasher Load 闪光灯	3×21W	---	80	0.5	2×10^6	
	Lamp 灯	Inrush 突入	100	---	6	1/6	1×10^5
Steady state 稳态		10	---				

Contact Form触点形式	1H/1Z
Contact Material触点材料	Silver Alloy
Load负载(Resistive load)	NO/NC: 30A/25A 13.5VDC
Minimum load 最小负载	0.5A 12VDC
Max. Continuous Load Current	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最大转换电流	40A
Max Switching Power 最大转换功率	420W
Contact Resistance接触电阻	100mΩ Max at 6VDC 1A
Electrical Life Expectancy电气寿命	See "Contact Data" Table
Mechanical机械寿命	10,000,000 Operations(at300Operations/minute)

■ CHARACTERISTICS DATA 性能参数

Insulation Resistance绝缘阻值	100MΩ Min at 500VDC
Dielectric Strength Between Open Contacts触点间耐压	500VAC(for one minute)
Between Contacts and coil触点与线圈间耐压	500VAC(for one minute)
Operate Time吸合时间	4ms
Release Time释放时间	2ms
Temperature Range环境温度	-40°C to +105°C
Shock Resistance冲击	6 msec up to 30g (No change in the switching state > 10 μ sec)
Vibration Resistance振动	10-500Hz, 6g (No change in the switching state > 10 μ sec)
Max. switching frequency最大转换频率	Mechanical: 18,000operations/hr
Humidity湿度	20-50%
Weight重量	Approx 4g

■ ENGINEERING DATA 设计参数



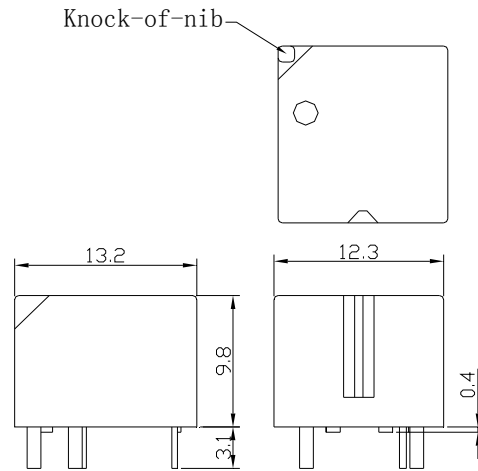
Does not take into account the temperature rise due to the contact current

V_{op}=Operation voltage

E=Pre-Generation

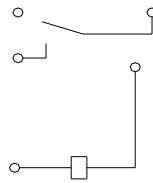
■ OVERALL AND MOUNTING DIMENSIONS 安装图

Outline Dimensions-Single Relay

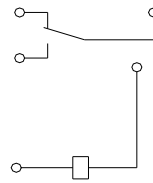


Wiring Diagrams-Single Relay(Bottom Views)

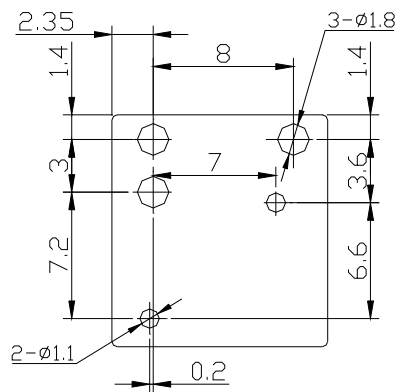
1 Form A



1 Form C



Suggested PC Board Layout-Single Relay(Bottom View)



备注：1) 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 $\pm 0.4\text{mm}$ 。

2) 安装孔尺寸中未注尺寸公差均为 $\pm 0.1\text{mm}$ 。

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。