

TRS

TR10S 12VDC

- 30A 13.5VDC switching rating
- 40A inrush at 13.5VDC
- Smallest power relay
- 1 Form A and 1 FormC arrangements in single and dual relay packages
- For Automotive Applications
- Conform to RoHS,ELV directive



13.2×12×9.8

ORDERING CODE 订购代码

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

COIL DATA 线圈参数 (at 20°C)

Nominal Voltage额定电压(VDC)	6	12	24	
Coil Resistance线圈阻值($\Omega \pm 10\%$)	63	254	1010	
Rated Current额定电流(mA)	95	47.5	23.7	0.57W
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	
Coil Resistance线圈阻值($\Omega \pm 10\%$)	45	180	720	
Rated Current额定电流(mA)	133.3	66.7	33.3	0.8W
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

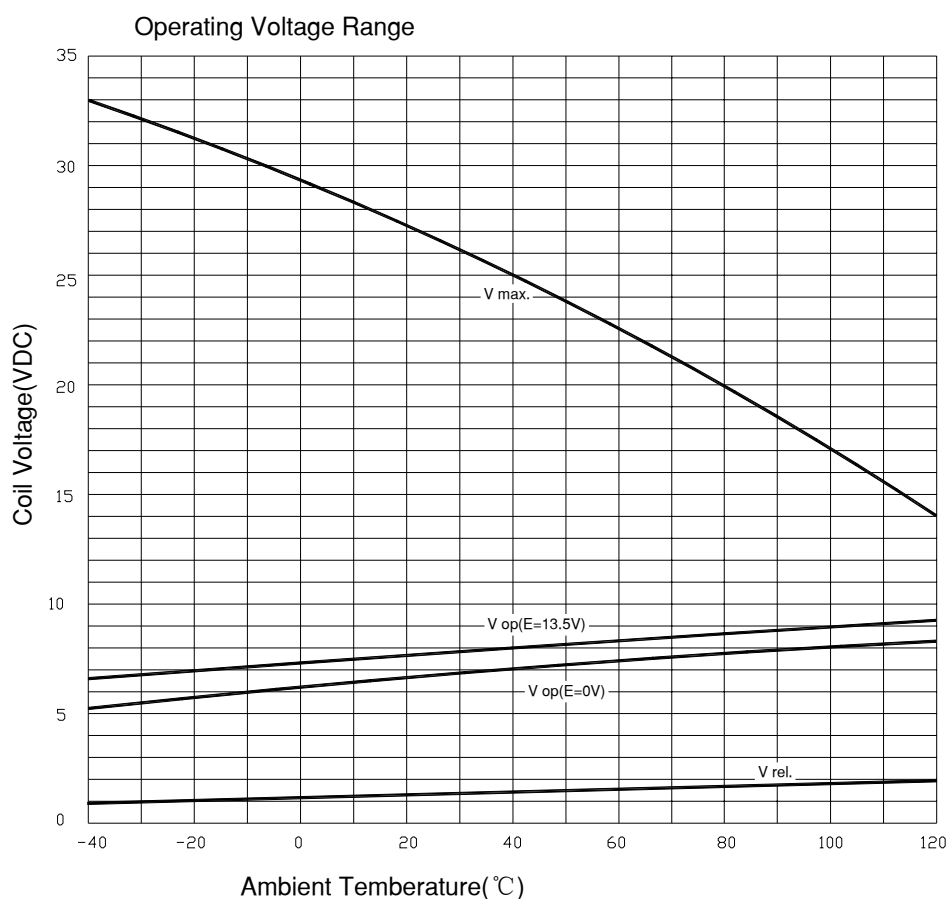
Contact Ratings 触点负载	负载类型 Load Type		触点负载电流(A)		Frequency 频率 ops/min	Duty Cycle 占空比	电气寿命 (次) Life Expectancy
			NO 常开	NC 常闭			
	Resistive Load阻性负载		20	---	15	0.5	3×10^5
	Wiper reserve雨刷电机 L=1.0mH	Make接通	25	25	15	0.5	3×10^5
		Break断开	5	5			
	Motor reserve blocked电机锁定 L=0.77mH		20A Inrush		15	0.5	1×10^5
	Flasher Load 闪光灯		$3 \times 21W$	---	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(COS Φ =1) Cut 13.5VDC
Minimum load 最小负载	0.5A 12VDC
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	100m Ω 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	100M Ω 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 $^{\circ}$ C to +105 $^{\circ}$ 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



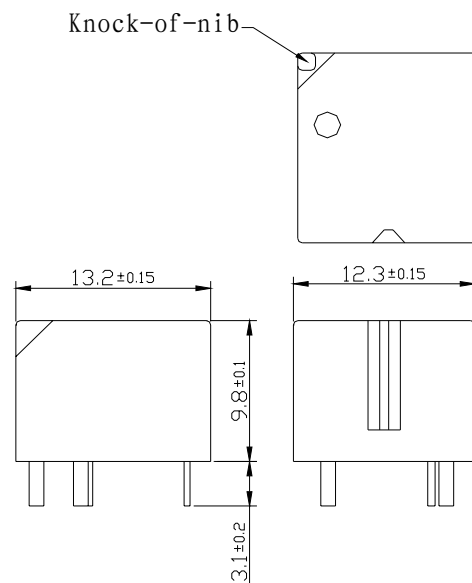
Does not take into account the temperature rise due to the contact current

V op=Operation voltage

E=Pre-Generation

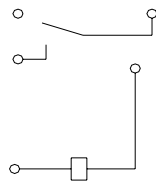
■ OVERALL AND MOUNTING DIMENSIONS 安装图

Outline Dimensions-Single Relay

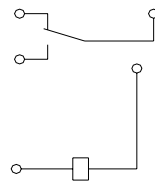


Wiring Diagrams-Single Relay(Bottom Views)

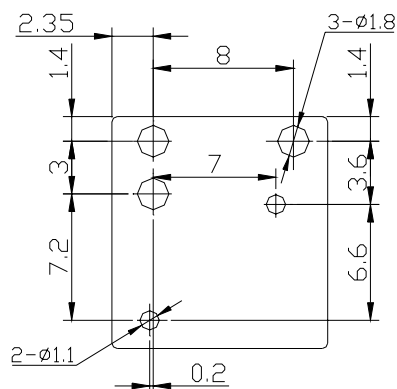
1 Form A



1 Form C



Suggested PC Board Layout-Single Relay(Bottom View)



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。