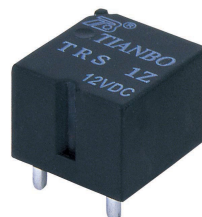


| | |
|-------|-----|
| 汽车继电器 | TRS |
|-------|-----|

- 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

| | |
|--|---|
| <u>TRS</u> <u>D</u> — <u>S</u> — <u>H</u> / <u>12VDC</u> 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

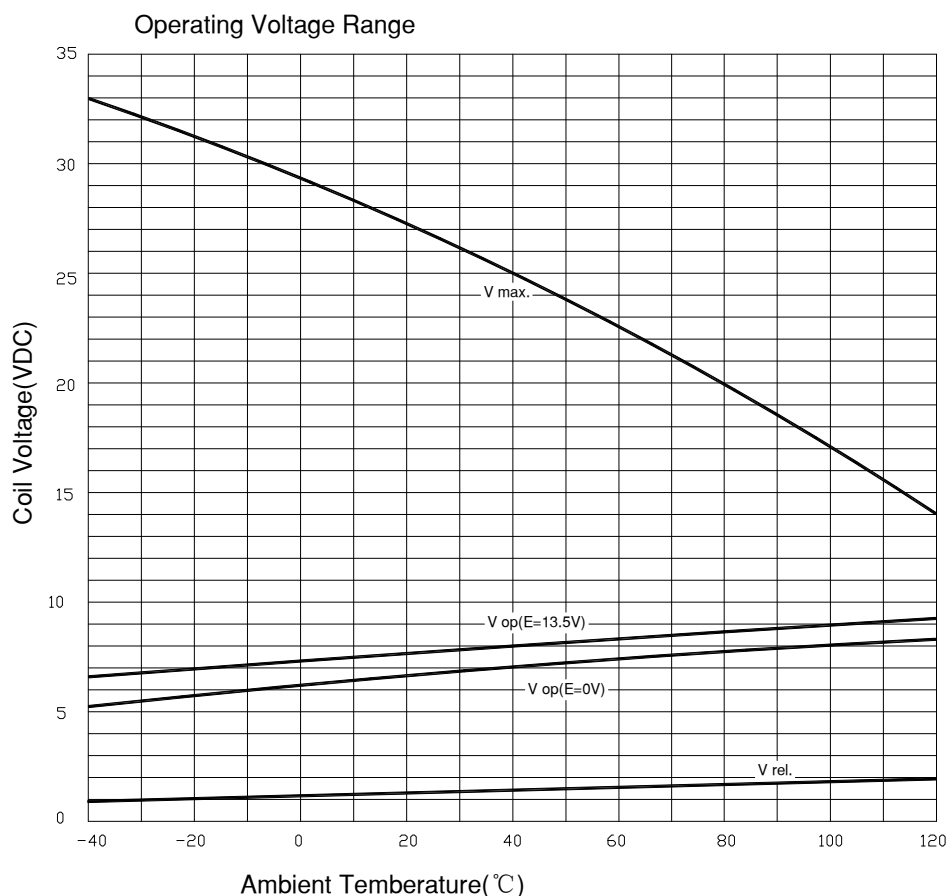
| Contact Ratings 触点负载 | 负载类型 Load Type | 触点负载电流(A) | | Frequency 频率 ops/min | Duty Cycle 占空比 | 电气寿命 (次) Life Expectancy | |
|-------------------------|-------------------------------------|-----------|----------------|----------------------------|-------------------|-----------------------------------|-----------------|
| | | 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 | | $3 \times 21W$ | --- | 80 | 0.5 | 2×10^6 |
| | Lamp 灯 | Inrush 突入 | 100 | --- | 6 | 1/6 | 1×10^5 |
| Steady state 稳 | | 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



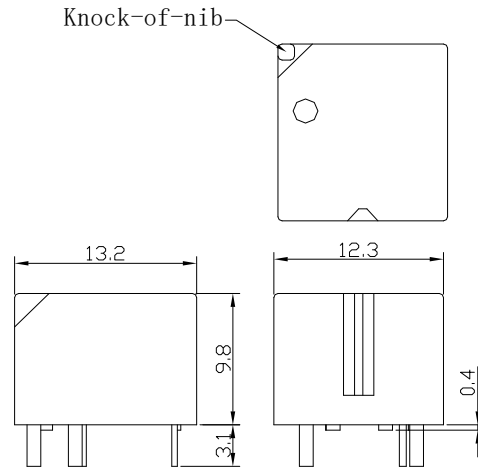
Does not take into account the temperature rise due to the contact current

V_{op}=Operation voltage

E=Pre-Generation

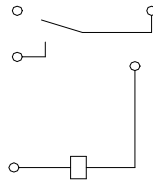
■ OVERALL AND MOUNTING DIMENSIONS 安装图

Outline Dimensions-Single Relay

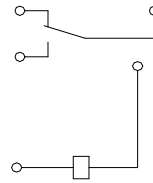


Wiring Diagrams-Single Relay(Bottom Views)

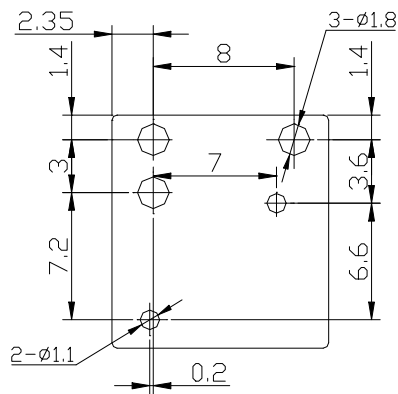
1 Form A



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。