TA, TR 继电器

TA, TR Relay

TA–1a

TR–1a

● 认证事项 ●
Certification

RoHS对应品

产品特点 Features

- 最小型尺寸(宽5mm，高12.5mm)高密度安装容易
- 宽范围的负载能力(1mA/5VDC到 5A/250VAC,300VDC)
- 十子交叉型双镀24K金触点
- 高动作灵敏度：120mW~180mW(5 to 24VDC)
- 银合金触点镀24K金处理
- 单列直插封装，两种的端子间距封装(TA:5.08mm/TR:7.62mm)
- 插座端子镀24K金处理
- 工作温度等级F 155℃

产品应用 Application

- 产业用机器，OA机器家用电器，PLC，继电器模块等
- 计时器，时间继电器，计数继电器，传感器，温度控制器
- 其它各种控制器的信号及驱动

型号命名 Select Code

T □ - 1a □

端子间距离：
A：5.08mm
R：7.62mm

电压(DC)：
5,12,24V

触点部位 Contact

触点形式 Arrangement		1a
触点材质 Contact material		银合金(镀24K金) Gold-clad silver alloy
接触电阻(首次) Initial contact resistance		30mΩ Max.
额定负载(阻性) Rating (resistive)	额定负载容量 Nominal switching capacity	5A 250VAC,5A 30VDC
	额定负载功率 Maximum switching power	1,250VA,150W
	最大工作电压 Maximum switching voltage	250VAC,110VDC
	最大工作电流 Max. switching current	5A
	最小负载容量 Min. switching capacity	1mA 5VDC
寿命 Expected life	机械 Mechanical	200 万次
	电气(20次/分) Electrical(at 20 cpm)	3A 250V AC,3A 30V DC,10^5次 5A 250V AC,5A 30V DC,5×10^4次

技术规格 General

动作频率 Max. operating speed		20次/分(额定负载)
绝缘电阻 Initial insulation resistance		1,000MΩ以上at 500V DC
介质耐压 Initial break-down voltage	触点间 Between open contacts	1,000Vrms
	触点与线圈间 Between contacts and coil	2,000Vrms
浪涌电压(触点与线圈间) Surge voltage(between contacts and coil)		4,000V
动作时间 Operate time(at nominal voltage)		Approx.6ms
复位时间 Release time(without diode) (at nominal voltage)		Approx.3ms
温度范围 Temperature rise		Max.45℃(额定线圈电压和额定负载条件下)
冲击 Shock resistance	耐久性 Functional	Min.147m/s²{15G}
	破坏性 Destructive	Min.980m/s²{100G}
振动 Vibration resistance	耐久性 Functional	Min.147 m/s² {15G},10 to 55Hz at double amplitude of 2.5mm
	破坏性 Destructive	Min.205.8 m/s² {21G},10 to 55Hz at double amplitude of 3.5mm
工作环境	环境温度 Ambient Temperature	-40℃ ~ +70℃
	环境湿度 Humidity	5 to 85%R.H.
产品重量 Unit weight		约3g

线圈参数 Coil

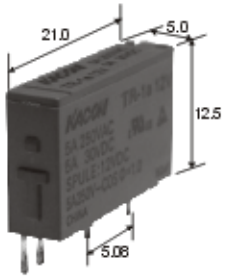
测试温度条件：20℃；工作温度等级：F 155℃

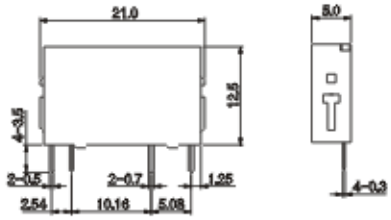
型 号 Part NO.	额定电压 (VDC) Nominal Voltage	吸动电压 (VDC max.) Pick-up Voltage	释放电压 (VDC min.) Drop-out Voltage	额定消耗电流 mA(±10%) Nominal operating current	额定消耗功率 (mW) Nominal operating power	线圈电阻 Ω(±10%) Coil resistance	最大工作电压 (VDC) Max.allowable voltage
T□-1a 5V	5	3.5	0.25	24	120	208	6
T□-1a 12V	12	8.4	0.6	10	120	1,200	14.4
T□-1a 24V	24	16.8	1.2	7.5	180	3,200	28.8

※ 包装规格：20只/塑胶管，20只×50管=1000只/包装箱

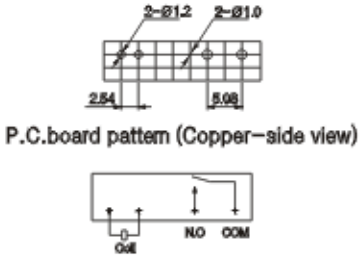
继电器 Relay

1、TA-1a





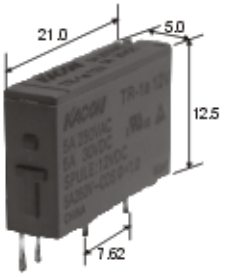
General tolerance:±0.3

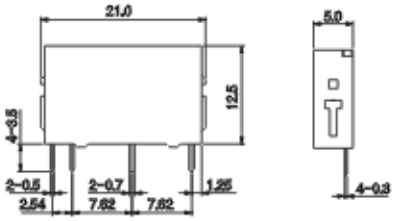


P.C.board pattern (Copper-side view)

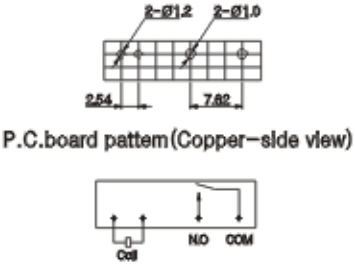
Schematic(Bottom view)

2、TR-1a





General tolerance:±0.3

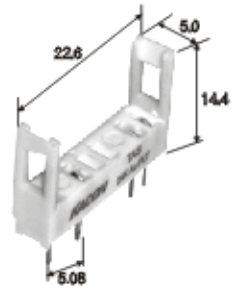


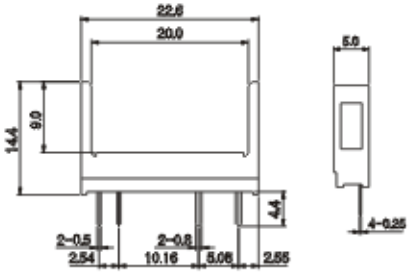
P.C.board pattern(Copper-side view)

Schematic(Bottom view)

插 座 Soket

1、TAS(TA用)





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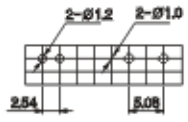
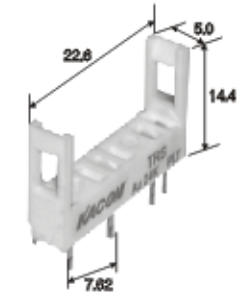
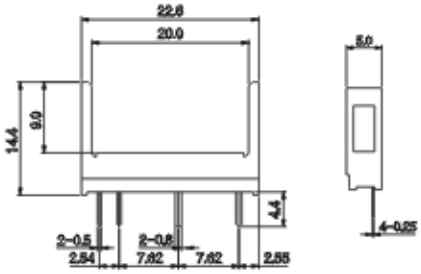


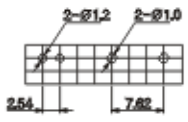
P.C.board pattern(Copper-side view)

2、TRS(TR用)





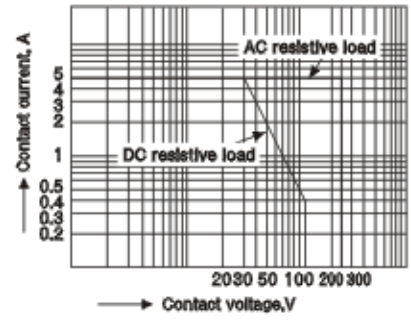
General tolerance:±0.3



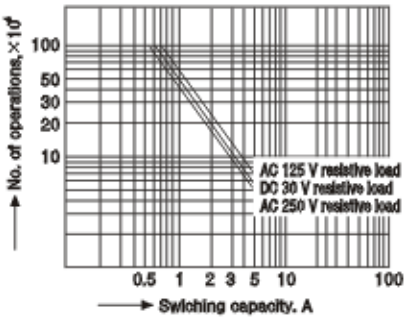
P.C.board pattern(Copper-side view)

技术特性曲线

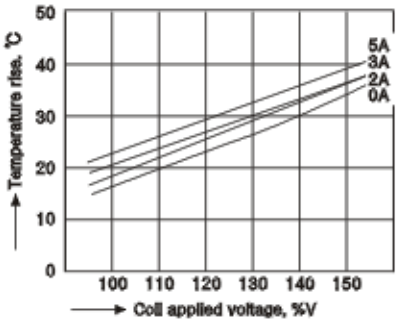
1. Max. switching capacity



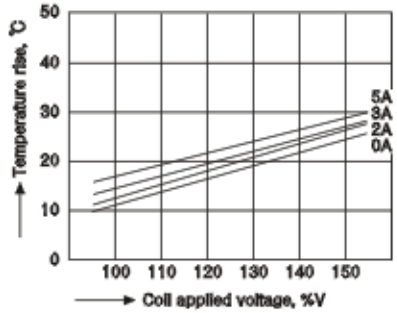
2. Life curve



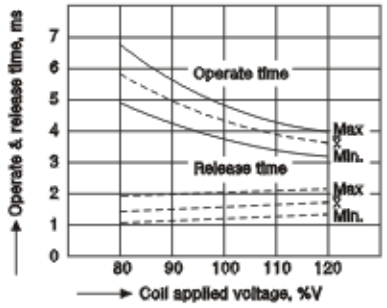
3.(1)Coil temperature rise(120mW)
Sample:TA-1a12V
Ambient temperature:20℃
Measured portion:inside the coil



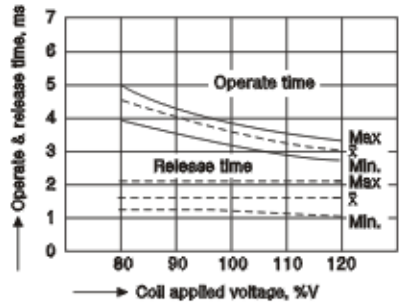
3.(2)Coil temperature rise(180mW)
Sample:TA-1a24V
Ambient temperature:20℃
Measured portion:inside the coil



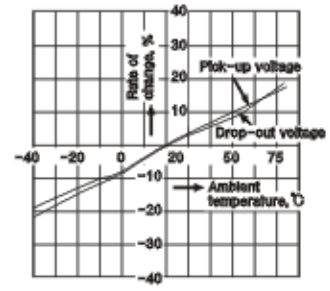
4.(1)Operate & release time(120mW)
Sample:TA-1a12V



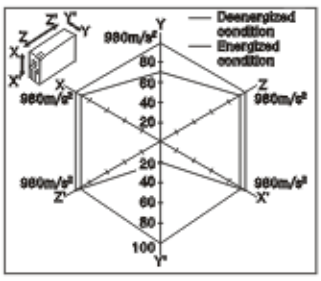
4.(2)Operate & release time(180mW)
Sample:TA-1a24V



5.Ambient temperature characteristics
Sample:TA-1a12V

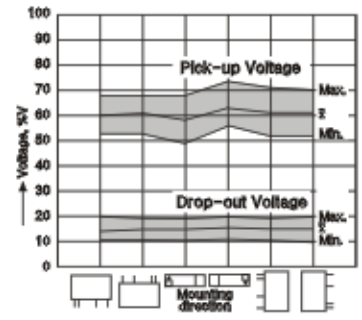


6.Malfunctional shock
Sample:TA-1a12V

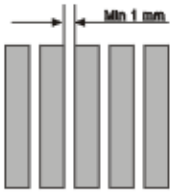


注意事项

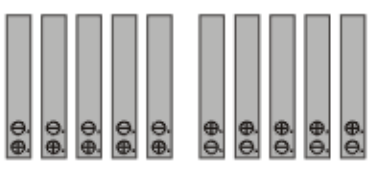
1. 根据继电器的使用安装方向，继电器的动作电压特性：



2. 继电器安装间距1mm时注意事项：



(1) 继电器的安装必须同样的方向



(2) 线圈端子极性必须同一方向