

ST33F

小型中功率继电器 Miniature Medium Power Relay

特性 Features

- 10A功率继电器 10Amps Power Relay
- 4KVA绝缘能力 4KVA Coil to Contact Dielectric Strength
- 高开关性能, 适用于各种负载 Excellent Switching Performance for a Variety of Loads.
- 低线圈功耗 Low Coil Power Consumption (200 mW ~ 400 mW)
- 外形尺寸 Outline dimensions: (19.8 x 9.9 x 15.2) mm



典型应用 Application

- 电表/房屋设备/楼宇自动化/ UPS, FA设备/照明控制/智能家居应用等。 Electric Power Meter / Housing Equipment / Building Automation / UPS, FA
- Equipment / Illumination Control / Smart Home Application, etc.

触点参数 Contact Data

触点形式 Contact Arrangement	1A, 1C
触点负载 Contact Rating	NO: 10A 277VAC, NC: 3A 277VAC
最大切换电压 Max. Switching Voltage	2770VAC, 30VDC
最大切换电流 Max. Switching Current	10A(NO), 3A(NC)
触点材质 Contact Material	银合金 Ag alloy
接触电阻 Contact Resistance	Max.100mΩ (1A 6VDC)
动作/释放时间 Operate Time/ Release Time	20ms/10ms
电耐久性 Electrical Endurance	1*10 ⁵ ops.(NO: 10A 277VAC, Resistive load, at 85°C, on:off=1s:9s)
机械耐久性 Mechanical Endurance	1*10 ⁷ ops.(on:off=1s:1s)
最大切换功率 Max. Switching Power	1385VA

线圈参数 Coil Data (标准型 Standard Type)

线圈电压范围 Coil Voltage Range	5~24 VDC
容许最大电压 Max. Continuous	额定电压的130% 130% of Rated Voltage
线圈绝缘等级 Coil Insulation System	Blank: Class A, F: Class F
额定线圈功率 Coil Rating Power	0.4W

线圈参数 Coil Data (灵敏型 Sensitive Type)

线圈电压范围 Coil Voltage Range	5~24 VDC
容许最大电压 Max. Continuous	额定电压的130% 130% of Rated Voltage
线圈绝缘等级 Coil Insulation System	Blank: Class A, F: Class F
额定线圈功率 Coil Rating Power	0.2W

注:

- a) 所有数值均为在环境温度+23°C下未预通电的线圈 All the performance data are for coils that are not pre energized at 23°C ambient temperature.

性能参数 Characteristics

绝缘电阻 Insulation Resistance	1000MΩ (at 500VDC)	
介质耐压 Dielectric Strength	断开触点间 Open Load Contacts 线圈与触点间 Coil to Load Contacts	750Vrms 1min 4000Vrms 1min
温度范围 Temperature Range	-40~+85°C	
湿度 Ambient Operating Humidity	5% ~ 85%RH	
振动 Vibration Resistance	10~55~10Hz 双振幅1.5mm Double Amplitude 1.5mm	
冲击 Shock	稳定性 Functional 强度 Destructive	10G 100G
重量 Weight	Approx.7g	
耐热焊接 Soldering (Max.)	10s, 265°C	
外形尺寸 Outline Dimension	19.8 x 9.9 x 15.2mm	

线圈规格 Coil Voltage Specifications (标准型 Standard Type)

额定电压 Nominal Coil VDC	动作电压 Must Operate VDC	释放电压 Release Coil VDC	线圈电阻 Coil Resistance Ω(±10%)
5	3.75	0.25	63
6	4.5	0.3	90
9	6.75	0.45	202
12	9	0.6	360
24	18	1.2	1440

线圈规格 Coil Voltage Specifications (灵敏型 Sensitive Type)

额定电压 Nominal Coil VDC	动作电压 Must Operate VDC	释放电压 Release Coil VDC	线圈电阻 Coil Resistance Ω(±10%)
5	3.75	0.25	125
6	4.5	0.3	180
9	6.75	0.45	405
12	9	0.6	720
24	18	1.2	2800

注:

- a) 以上值为初始值 All the performance data are initial values.
b) 线圈电阻是在线圈温度23°C, 公差为±10% Coil resistance is tested at 23°C ambient temperature, ±10% tolerance.

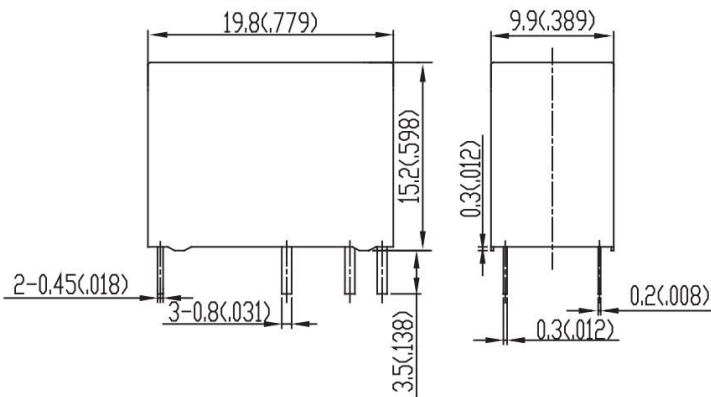
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■ 型号命名标准 Model Number Legend

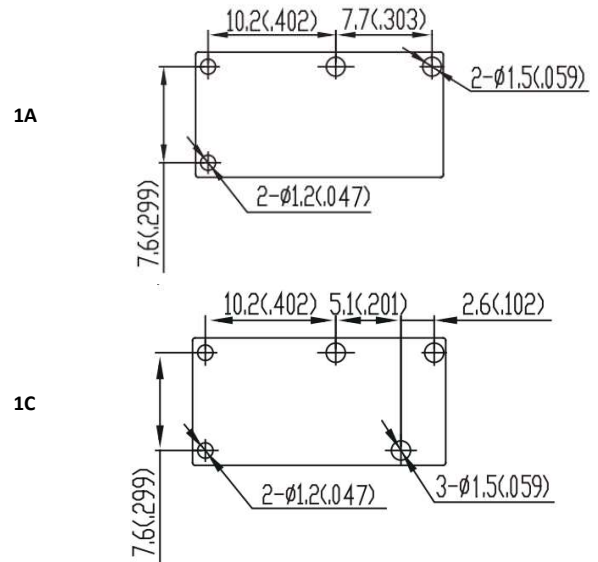
基本型号 Basic Type:	ST33F	-1A	-12	S	L	F	,XXX
触点结构 Contact Arrangement:	ST33F						
线圈电压 Coil Voltage:	1A: 1 Form A; 1C: 1Form C						
防护构造 Protective Construction:	S: 塑料密封型 Sealed						
线圈功耗 Coil Power:	Blank: 400mW; L: 200mW						
绝缘等级 Insulation Class:	Blank: CLASS A; F: CLASS F (155°C)						
特殊特性 Special Characteristic:	Blank: 标准型 Standard; XXX: 客户特殊特性号 Customer Special Feature Number						

■ 外形尺寸、PCB 布局、接线图 Outline Dimensions, PCB Layout, Wiring Diagram (mm)

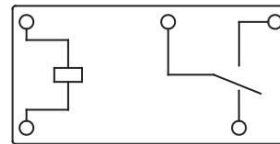
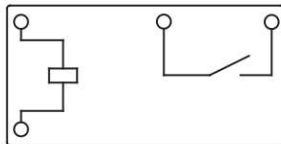
◆ 外形尺寸 Outline Dimensions



◆ 印刷线路板加工尺寸 PCB Outline Dimension (Bottom View)



◆ 接线图 Wiring Diagram Bottom View



注 Note:

未注尺寸公差 Unspecified tolerance : <1mm: +0.2 mm, 1~5 mm: ±0.3mm, >5mm: ±0.4 mm ;

安装孔尺寸中未注尺寸公差为±0.1 mm PC board layout dimensions hadn't specified tolerance is ±0.1mm.

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免责声明:

本说明书仅供参考。

有关更多信息, 请参阅“术语和指南”。规格如有更改, 恕不另行通知。我们无法评估每个可能应用的所有性能和所有参数。因此, 用户应该在一个正确的位置选择适合自己的产品。如有任何疑问或者需要技术服务, 请联系STEIPU。

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