ST33 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

- 电能表/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℃, 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

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	750Vrms 1min
	线圈与触点间 Coil to Load Contacts	4000Vrms 1min
温度范围 Temperature Range		-40~+85℃
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	10G
	强度 Destructive	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

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

额定电压 Nominal Coil	动作电压 Must Operate	释放电压 Release Coil	线圈电阻 Coil Resistance
VDC	VDC	VDC	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℃下未预通电的线圈 All the performance data are for coils that are not pre energized at 23℃ ambient temperature.

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

额定电压 Nominal Coil	动作电压 Must Operate	释放电压 Release Coil	线圈电阻 Coil Resistance
VDC	VDC	VDC	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℃，公差为±10% Coil resistance is tested at 23℃ ambient temperature, ±10% tolerance.

■ 型号命名标准 Model Number Legend

ST33	-1A	-12	L	S	F	,XXX

基本型号 Basic Type:
ST33

触点结构 Contact Arrangement:
1A: 1 Form A; 1C: 1Form C

线圈电压 Coil Voltage:
5, 6, 9, 12, 24VDC

线圈功耗 Coil Power:
Blank: 400mW; L: 200mW

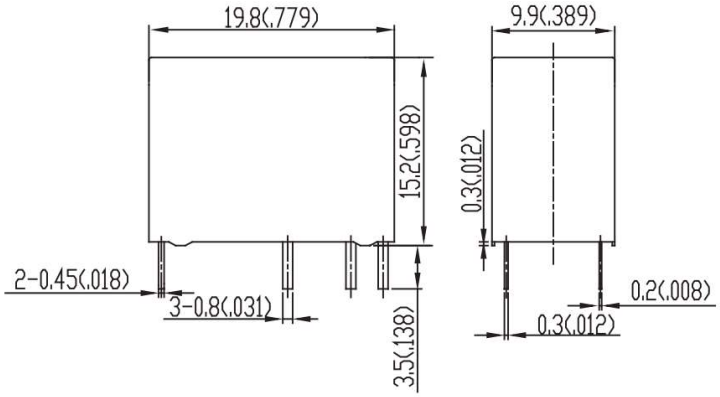
防护构造 Protective Construction:
Blank: 耐助焊剂型 Flux Tight; S: 塑料密封型 Sealed

绝缘等级 Insulation Class:
Blank: CLASS A; F: CLASS F (155℃)

特殊特性 Special Characteristic:
Blank: 标准型Standard; XXX: 客户特殊特性号 Customer Special Feature Number

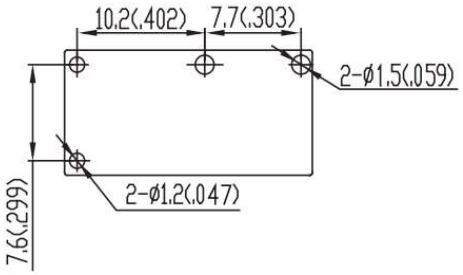
■ 外形尺寸、PCB 布局、接线图 Outline Dimensions, PCB Layout, Wiring Diagram (mm)

◆ 外形尺寸 Outline Dimensions

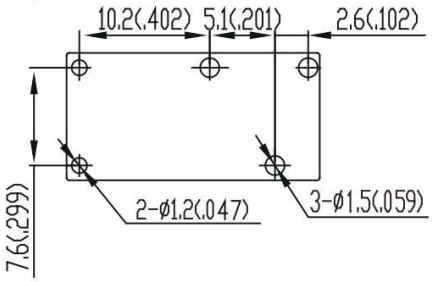


◆ 印刷线路板加工尺寸 PCB Outline Dimension (Bottom View)

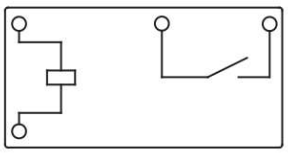
1A

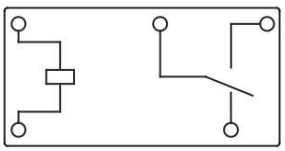


1C



◆ 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. 4mm ;

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.

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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