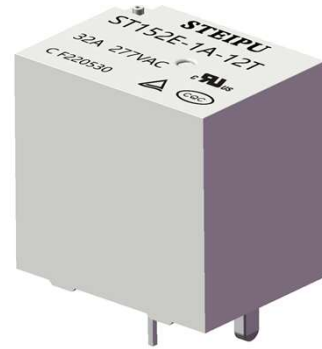


ST152E 小型大功率继电器 Miniature High Power Relay

特性 Features

- 小体积, 35A负载开闭能力 Small size, 35A switching capability
- 最大35A负载能力 Max.35A Carrying capability
- 转换型可选 Conversion type optional
- 0.8mm, 1.8mm, 2.4mm触点间隙可选 0.8mm, 1.8mm, 2.4mm contact gap available
- 耐高温型 High temperature resistance type: 105°
- 空间距离大于4mm, 爬电距离大于5mm Clearance distance: >4mm, and creepage distance: >5mm.
- 线圈触点间介质耐压4000V The dielectric voltage between the coil contacts is 4000V
- UL绝缘系统:F级 UL insulation system: Class F
- 环保产品(符合RoHS标准) Environmental friendly product (RoHS compliant)



典型应用 Application

- 车载充电机/电动车充电桩/逆变器/UPS电源/压缩机等 On board charger/electric vehicle charging pile/inverter /UPS power supply/compressor, etc.

触点参数 Contact Data

类型 Type	标准 Standard	-L 25A型 Type
触点形式 Contact Arrangement	1A, 1C	
触点额定 Contact Rating	NO: 35A/32A 277VAC NC: 16A 277VAC	NO: 25A 277VAC NC: 16A 277VAC
最大切换电压 Max. Switching Voltage	277VAC/30VDC	
最大切换电流 Max. Switching Current	35A	25A
触点材质 Contact Material	银合金 Ag alloy	
接触电阻 Contact Resistance	Max.100mΩ (1A 5VDC) Max. 10mΩ (20A 6VDC)	
动作/释放时间 Operate Time/ Release Time	≤15ms/≤10ms	
最小切换负载 Min. switching load	10mA24V	
电耐久性 Electrical Endurance	NO: making 16A, carrying 35A/32A, breaking 16A, 277VAC, 105°C, 阻性负载 R-Load, 1*10 ⁴ ops NO: 32A/25A 277VAC, on : off = 1s : 9s, 85°C, 阻性负载 R-Load, 1*10 ⁴ ops. NC: making 5A, carrying 16A, breaking 5A, 277VAC, 85°C, 阻性负载 R-Load, 1*10 ⁴ ops	
机械耐久性 Mechanical Endurance	1*10 ⁷ ops.	
最大切换功率 Max. Switching Power	9695VA	

线圈参数 Coil Data(1.2W功耗 Coil Power)

线圈电压范围 Coil Voltage Range	5~48 VDC*
容许最大电压 Max. Continuous	额定电压的120% 120% of Rated Voltage
最小线圈脉冲宽度 Min. Coil Voltage Plus Width	200ms
额定线圈功率 Coil Rating Power	1.2W* 0.3W(50% ~ 55% @85°C 保持电压 Holding voltage)

注:

- 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.
- 继电器不允许长时间施加超过保持电压的上限值, 防止继电器过热烧毁 Relays are not allowed to be applied for a long time beyond the upper limit of the holding voltage to prevent overheating and burnout of the relay.

性能参数 Characteristics

绝缘电阻 Insulation Resistance	1000MΩ Min (at 500VDC)
介质耐压 Dielectric Strength	断开触点间 Between Open Contacts 线圈与触点间 Between Coil and Contact 2000Vrms 1min 4000Vrms 1min
温度范围 Temperature Range	-40~+105°C
湿度 Ambient Operating Humidity	20% ~ 85%RH
振动 Vibration Resistance	频率 10Hz-55Hz, 双振幅 1mm 10Hz-55Hz, at double amplitude 1mm
冲击 Shock	稳定性 Functional 强度 Destructive 10G 100G
重量 Weight	Approx.16g

线圈规格 Coil Voltage Specifications(1.2W功耗 Coil Power)

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(10A) Coil Resistance Ω(±10%)
5	4.0	0.25	20.8
12	9.6	0.60	120
24	19.2	1.20	480
48	38.4	2.40	1920

注:

- 以上值为初始值 All the performance data are initial values.
- 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.

ST152E 小型大功率继电器 Miniature High Power Relay

线圈参数 Coil Data(2.8W功耗 Coil Power)

线圈电压范围 Coil Voltage Range	5~48 VDC*
容许最大电压 Max. Continuous	额定电压的120% 120% of Rated Voltage
最小线圈脉冲宽度 Min. Coil Voltage Plus Width	200ms
额定线圈功率 Coil Rating Power	2.8W* 0.35W(35%~55% @85°C 保持电压 Holding voltage)

注:

- 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.
- 继电器不允许长时间施加超过保持电压的上限值, 防止继电器过热烧毁
Relays are not allowed to be applied for a long time beyond the upper limit of the holding voltage to prevent overheating and burnout of the relay.

线圈规格 Coil Voltage Specifications(2.8W功耗 Coil Power)

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(10A) Coil Resistance Ω(±10%)
5	4	0.25	9
12	9.6	0.60	51
24	19.2	1.20	206
48	38.4	2.40	823

注:

- 以上值为初始值 All the performance data are initial values.
- 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.

■ 型号命名标准 Model Number Legend

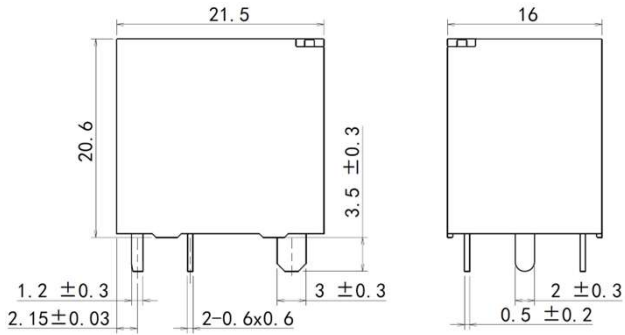
	ST152E	-1A	-12	L	S	T	F	XXX
基本型号 Basic Type:	ST152E							
触点结构 Contact Arrangement:		1A: 1组常开 1 Form A; 1C: 1组转换 1 Form C						
线圈电压 Coil Voltage:	5, 9, 12, 24, 48VDC							
线圈功耗 Coil Power:	Blank: 2.8W; L: 1.2W							
防护构造 Protective Construction:	Blank: 耐助焊剂型 Flux Tight; S: 塑料密封型 Sealed							
耐温等级 Temperature Resistance Class:	Blank: 85°C; T: 105°C							
绝缘等级 Insulation Class:	F: F级 Class F							
特殊特性 Special Characteristic:	G1: 1.8mm (仅限1A&35A&2.8W或1A&25A&1.2W 线圈功耗产品 Only For 1A&35A&2.8W or 1A&25A&1.2W coil Power Type) G: 2.4mm (仅限1A&35A&2.8W或1A&25A&2.8W 线圈功耗产品 Only For 1A&35A&2.8W or 1A&25A&2.8W coil Power Type) L: 25A额定负载电流规格产品 25A Load Rating Type Product N: 窄输入输出引脚间距类型 Narrow Spacing of Input to Output Terminal 2: A脚为双脚位引出 Daul Pin Leads Out For A Terminal XXX: 客户特殊特性号 Customer Special Feature Number							

ST152E 小型大功率继电器 Miniature High Power Relay

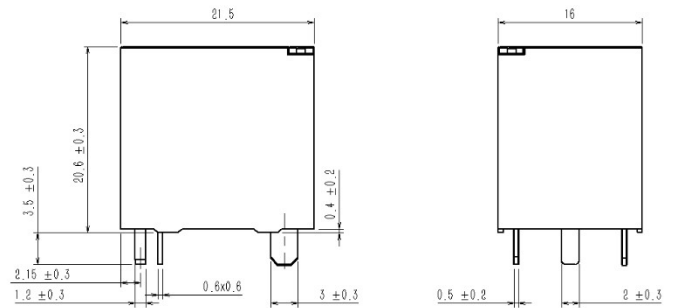
■ 外形尺寸、PCB 布局、接线图 Outline Dimensions, PCB Layout, Wiring Diagram (mm)

◆ 外形尺寸 Outline Dimensions

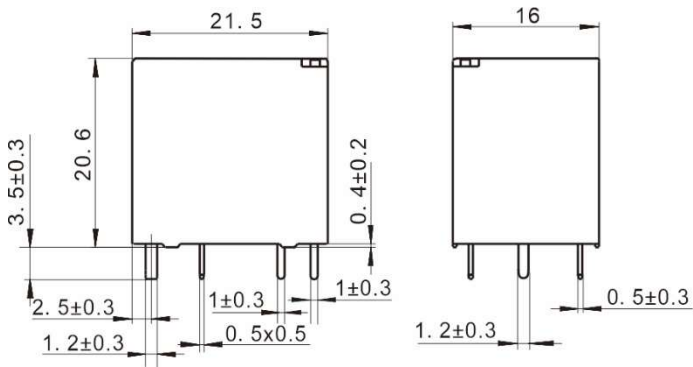
● 标准脚位 Standard Terminal Type



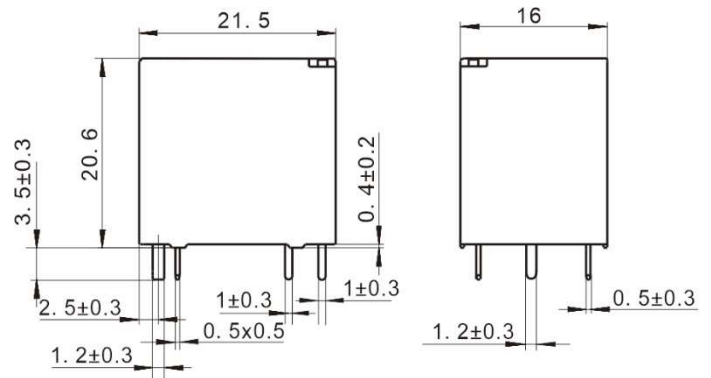
● **N 型脚位 For **N Terminal Type



● **2型脚位 For **2 Terminal Type



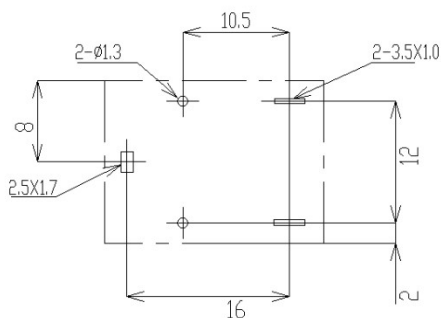
● **N2型脚位 For **N2 T Type



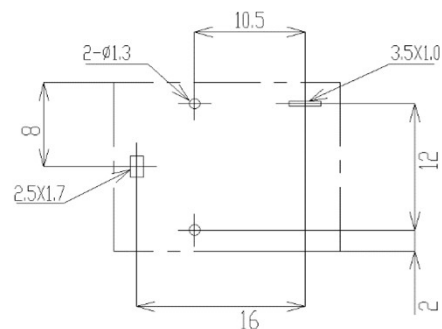
◆ 印刷线路板加工尺寸 PCB Outline Dimension Bottom View

● 标准脚位 Standard Terminal Type

➤ 1C型 1 Form C



➤ 1A型 1 Form A



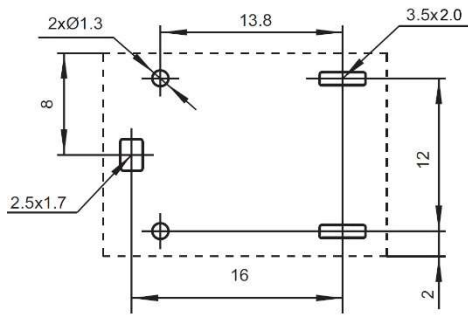
ST152E 小型大功率继电器 Miniature High Power Relay

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

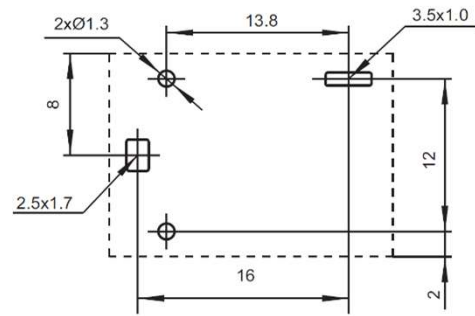
◆ 印刷电路板加工尺寸 PCB Outline Dimension Bottom View

● **N 型脚位 For **N Terminal Type

➢ 1C型 1 Form C

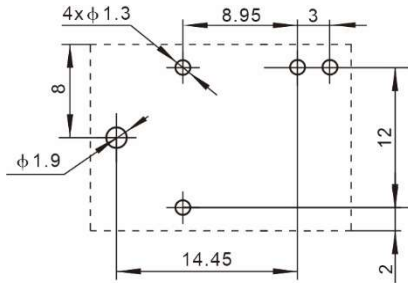


➢ 1A型 1 Form A

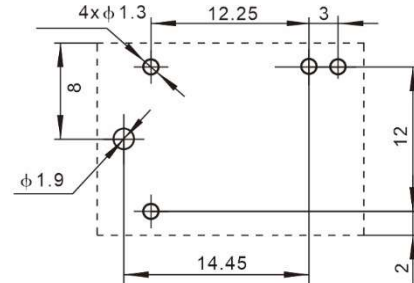


● **2 型脚位 For **2 Terminal Type

➢ 标准**2脚位 For **2 Standard Terminal



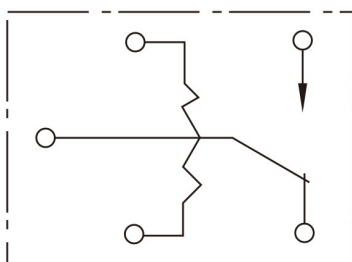
➢ **N2型脚位 For **N2 Terminal Type



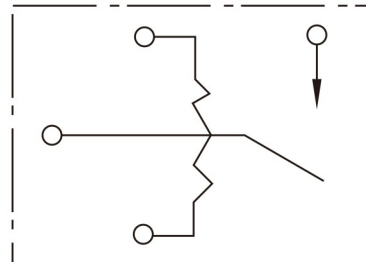
◆ 接线图 Wiring Diagram Bottom View

● 标准脚位 Standard Terminal Type

➢ 1C型 1 Form C



➢ 1A型 1 Form A



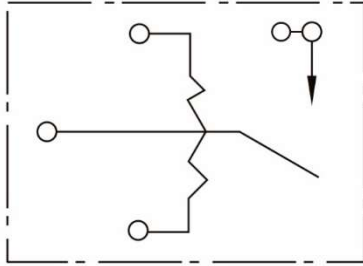
ST152E 小型大功率继电器 Miniature High Power Relay

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

◆ 接线图 Wiring Diagram Bottom View

● **2型脚位 For **2 Terminal Type

> 1A型 1 Form A



注 Note:

未注尺寸公差 Unspecified tolerance : <1mm: ± 0.2 mm, 1~5 mm: ± 0.3 mm, >5mm: ± 0.5 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 ± 0.1 mm.

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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