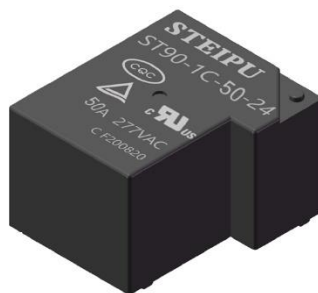


ST90-50/60A 小型大功率继电器 Miniature High Power Relay

特性 Features

- 外形尺寸 Outline dimensions : (32.2x27.5x20.4)mm
- 触点形式 Contact arrangement : 1A 1B 1C
- 线圈功率 Coil power : 0.9W 1.5W 2.25W
- 负载条件 Load conditions : 50A/60A 250VAC
- 重量 Unit weight : ≈ 28g



典型应用 Application

充电桩 Charging Station

功率电源 Power Supply

触点参数 Contact Data

触点形式 Contact Arrangement	1A, 1B, 1C
额定电压 Rating Voltage	250VAC
最大切换电压 Max. Switching Voltage	277VAC
最大切换电流 Max. Switching Current	50/60A
最大切换功耗 Max. Switching Power	13850VA/16620VA
触点材质 Contact Material	Silver Alloy
接触电阻 Contact Resistance	100mΩ(1A 6VDC)
动作/释放时间 Operate Time/ Release Time	15ms max /10ms max
电耐久性 Electrical Endurance	6x10 ³ OPS(Rating load, Resistance, on:off=1s:9s @23°C)
机械耐久性 Mechanical Endurance	1x10 ⁶ OPS (on:off=1s:1s)

性能参数 Characteristics

绝缘电阻 Insulation Resistance		100MΩ 500VDC
介质耐压 Dielectric Strength	断开触点间 Open Load Contacts	1500VAC 1min
	线圈与触点间 Coil to Load Contacts	4000VAC 1min
温度范围 Temperature Range		-40°C to +85°C
湿度 Ambient Operating Humidity		5 ~ +95%RH
振动 Vibration Resistance		5HZ to 55HZ 1.5mm 双 振幅 Double Amplitude
冲击 Shock	稳定性 Functional	10G
	强度 Destructive	30G
重量 Weight		≈ 28g
耐热焊接 Soldering (Max.)		10s, 265°C

线圈参数 Coil Data

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110% 110% of Rated Voltage*
线圈绝缘等级 Coil Insulation System	F Class
额定线圈功率 Coil Rating Power	0.9W/1.5W/2.25W

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.

* : 具体参考线圈规格一栏 Specific reference to the Coil Voltage Specifications sheet .

线圈规格 Coil Voltage Specifications

额定电压 Nominal Coil	动作电压 Must Operate	释放电压 Release Coil	最大过载电压 Max. Voltage (VDC)			线圈电阻 Coil Resistance Ω(±10%)		
VDC	VDC	VDC	0.9W	1.5W	2.25 W	0.9W	1.5W	2.25 W
5	≤ 3.75	≥ 0.5	6.5	6.5	5.5	27.7	16.6	11.1
6	≤ 4.5	≥ 0.6	7.8	7.8	6.6	40	24	16
9	≤ 6.75	≥ 0.9	11.7	11.7	9.9	90	54	36
12	≤ 9.0	≥ 1.2	15.6	15.6	13.2	160	96	64
18	≤ 13.5	≥ 1.8	23.4	23.4	19.8	360	216	144
24	≤ 18.0	≥ 2.4	31.2	31.2	26.4	640	384	256
48	≤ 36.0	≥ 4.8	62.4	62.4	52.8	2560	1536	1024

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.

ST90-50/60A 小型大功率继电器 Miniature High Power Relay

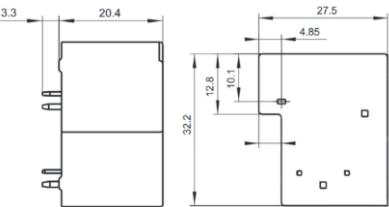
型号命名标准 Model Number Legend

	ST90	-1A	-50	-12	S	6	L	G	W	-Q	,XXX
基本型号 Basic Type :	ST90										
触点结构 Contact Arrangement:											
1A--1 Form A; 1C--1 Form C											
1AS--1组常开带辅助触点 1 Form A With Auxiliary Contact											
触点负载 Contact Rating:											
50: 50A; 60: 60A											
线圈电压 Coil Voltage:											
5: 5VDC; 6: 6VDC; 9: 9VDC; 12: 12VDC; 24: 24VDC; 48: 48VDC											
封装形式 Construction:											
Blank: 防尘型 Dust-proof; S: 塑料密封型 Plastic sealed											
引出脚形式 Terminal:											
Blank: 标准型 Standard; 6: 带6号脚位											
线圈功率 Coil Power:											
Blank: 2.25W; L: 1.5W; SL: 0.9W											
触点间隙 Contact Gap:											
Blank: Standard; M: 2.35mm(only 1A); G: 3.0mm(only 1A)											
特殊类别 Special Type:											
Blank: 标准型 Standard; W: 宽脚 WideTerminal											
输出脚位间距 Output Terminal Spacing											
Blank: 17.8mm; Q: 18.75mm											
特殊特性 Special Characteristic:											
XXX: 客户特殊特性号 Customer special feature number											

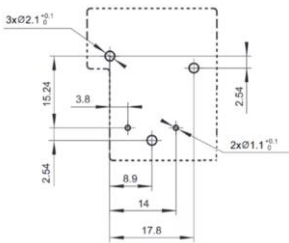
外形尺寸、PCB 布局、接线图 Outline Dimensions, PCB Layout, Wiring Diagram (mm)

1) ST90-1AS (一组常开 1 Form A)

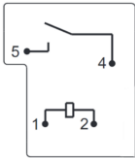
外形尺寸 Outline dimensions



底部视图 Bottom View

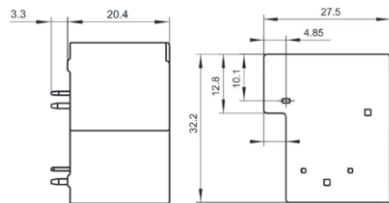


接线图 Wiring Diagram

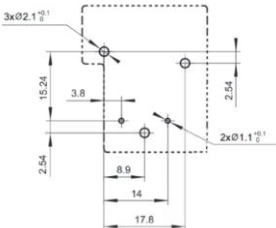


2) ST90-1AS6 (一组常开 1 Form A)

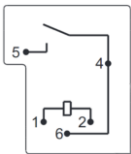
外形尺寸 Outline dimensions



底部视图 Bottom View



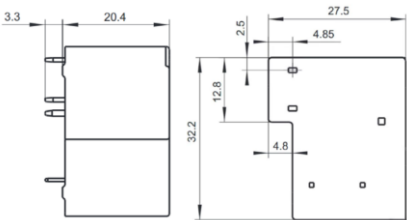
接线图 Wiring Diagram



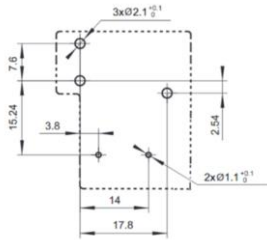
ST90-50/60A 小型大功率继电器 Miniature High Power Relay

3) ST90-1CS (一组转换 1 Form C)

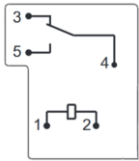
外形尺寸 Outline dimensions



底部视图 Bottom View

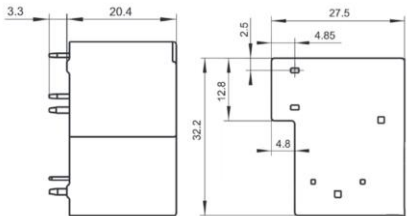


接线图 Wiring Diagram

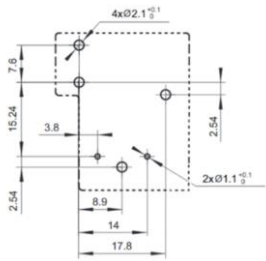


4) ST90-1CS6 (一组转换 1 Form C)

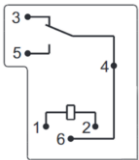
外形尺寸 Outline dimensions



底部视图 Bottom View

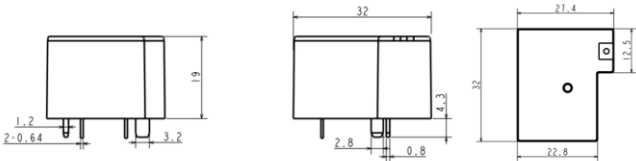


接线图 Wiring Diagram

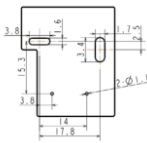


5) ST90-1ASW (一组常开 1 Form A)

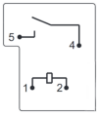
外形尺寸 Outline dimensions



底部视图 Bottom View

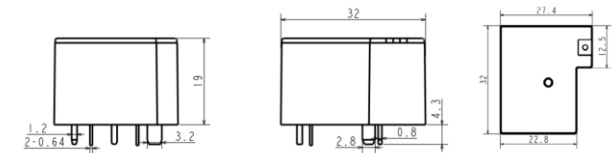


接线图 Wiring Diagram

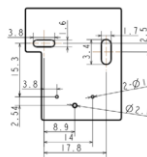


6) ST90-1ASW6 (一组常开 1 Form A)

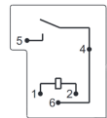
外形尺寸 Outline dimensions



底部视图 Bottom View



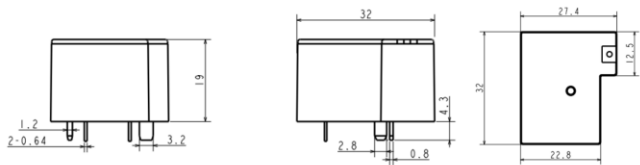
接线图 Wiring Diagram



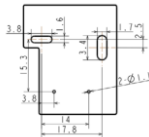
ST90-50/60A 小型大功率继电器 Miniature High Power Relay

7) ST90-1PS (一组常开 1 Form A)

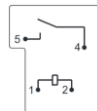
外形尺寸 Outline dimensions



底部视图 Bottom View

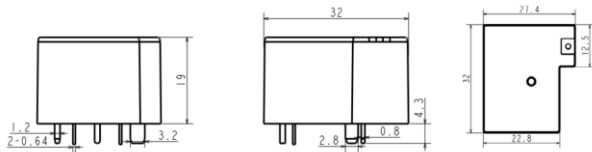


接线图 Wiring Diagram

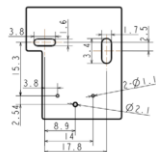


8) ST90-1PS6 (一组常开 1 Form A)

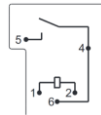
外形尺寸 Outline dimensions



底部视图 Bottom View

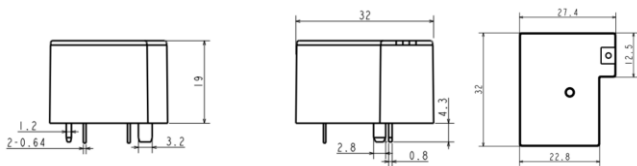


接线图 Wiring Diagram

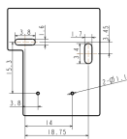


9) ST90-1ASW-Q (一组常开 1 Form A)

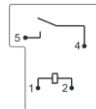
外形尺寸 Outline dimensions



底部视图 Bottom View



接线图 Wiring Diagram



注 Note:

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