

ST115-G

PCB通用功率继电器 PCB General Power Relay

特性 Features

- TV-5, TV-8负载可选 TV-5, TV-8 optional
- 16A负载开闭能力 16A switching capability
- 低高度: 15.7 mm Low height: 15.7 mm
- 1.5mm/0.75mm间隙可选 1.5mm/0.75mm Contact Gap optional
- 5kV介电强度(线圈与触点之间) 5kV dielectric strength (between coil and contacts)
- 可选塑料密封型和耐助焊剂型 Plastic sealed and flux proofed types available
- UL绝缘系统:F级可选 UL insulation system: Class F available
- 环保产品(符合RoHS标准) Environmental friendly product (RoHS compliant)
- 尺寸: 29.0 x 12.7 x 15.7 mm Dimensions: 29.0 x 12.7 x 15.7 mm



典型应用 Application

- 家用电器/智能家居解决方案/自动化系统/仪表等。 Household Electrical Appliance / Intelligent Home Solution / Automation System / Meter, etc.

触点参数 Contact Data		
触点形式 Contact Arrangement	1A/1B/1C	2A/2B/2C
触点负载 Contact Rating	12A,16A 277VAC/250VAC (resistive) 1/2HP 250VAC / 125VAC	8A 277VAC/250VAC (resistive)
最大切换电压 Max. Switching Voltage	440VAC	
最大切换电流 Max. Switching Current	12/16A	8A
触点材质 Contact Material	银合金 Ag alloy	
接触电阻 Contact Resistance	Max.100mΩ (1A 5VDC)	
动作/释放时间 Operate Time/ Release Time	≤15ms/≤8ms	
电耐久性 Electrical Endurance	1*10 ⁵ ops	
机械耐久性 Mechanical Endurance	1*10 ⁷ ops.	
最大切换功率 Max. Switching Power	12A:3000VA 16A:4000VA	2000VA

线圈参数 Coil Data	
线圈电压范围 Coil Voltage Range	9~110 VDC
容许最大电压 Max. Continuous	额定电压的150% 150% of Rated Voltage
线圈绝缘等级 Coil Insulation System	Class F
额定线圈功率 Coil Rating Power	约Approx. 0.71W/1.28W

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°C ambient temperature.

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	2500Vrms 1min(1.5mmGAP) 2000Vrms 1min(0.75mmGAP)
	触点组之间 Between Contact Sets	2500Vrms 1min
	线圈与触点间 Between Coil and Contact	5000Vrms 1min
浪涌电压 Surge Voltage	线圈与触点间 Between Coil and Contact	10kV (1.2 / 50μs)
温度范围 Temperature Range		-40~+85°C
湿度 Ambient Operating Humidity		5% ~ 85%RH
振动 Vibration Resistance		10~150Hz 100/50 m/s ²
冲击 Shock	稳定性 Functional	10G
	强度 Destructive	100G
重量 Weight		Approx.13.5g

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	线圈电阻 Coil Resistance	
VDC	VDC	VDC	0.71W	1.28W
			Ω(±10%)	
9	7.20	0.45	114	63
12	9.60	0.6	203	112
18	14.4	0.9	456	253
24	19.2	1.2	811	450
48	38.4	2.4	3245(1±15%)	1800(1±15%)
60	48.0	3.0	5070(1±15%)	2813(1±15%)
110	88.0	5.5	17040(1±15%)	9453(1±15%)

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°C ambient temperature, ±10% tolerance.

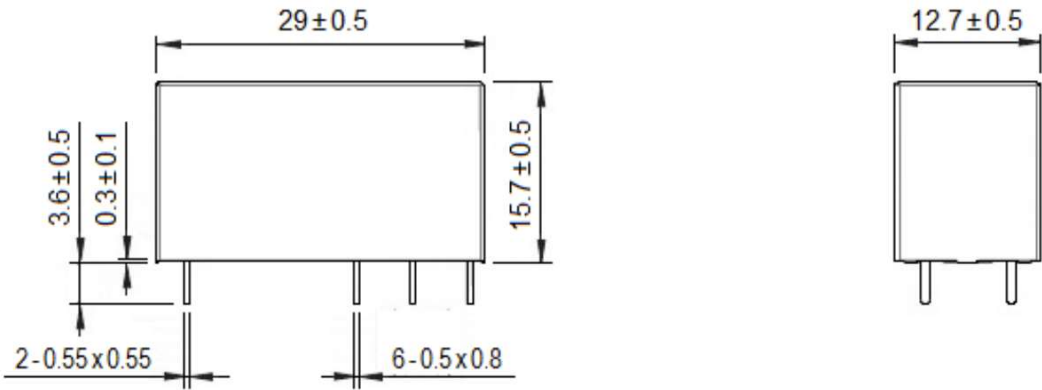
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■ 型号命名标准 Model Number Legend

	ST115	-16	-1A	-12	S	T	F	G	,XXX
基本型号 Basic Type:	ST115								
触点负载 Contact Rating:									
8: 8A (8A only for 2 pole 5mm)									
12: 12A (only for 1 pole 3.5mm or 1 pole 5mm, single pinning)									
16: 16A									
触点结构 Contact Arrangement:									
1A: 1组常开 1 Form A; 1B:1组常闭 1 Form B; 1C: 1组转换 1 Form C									
2A: 2组常开 2 Form A; 2B:2组常闭 2 Form B; 2C: 2组转换 2 Form C									
线圈电压 Coil Voltage:									
9, 12, 18, 24, 48, 60, 110VDC									
防护构造 Protective Construction:									
Blank: 耐助焊剂型 Flux Tight; S: 塑料密封型 Plastic Sealed									
耐温等级 Temperature Resistance Class:									
Blank: 85°C; T: 105°C									
绝缘等级 Insulation Class:									
Blank/F: F级 Class F									
特殊特性 Special Characteristic:									
G: 1.5mm触点间隙常开型或0.75mm间隙转换型 1.5mm Contact Gap with NO Type or 0.75mm Contact Gap for Double Turn Type;									
G1: 0.75mm触点间隙常开型 0.75mm Contact Gap with NO Type									
特殊特性 Special Characteristic:									
5*: TV-5认证; 8*: TV-8认证; R*: 加强绝缘 Reinforce;									
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

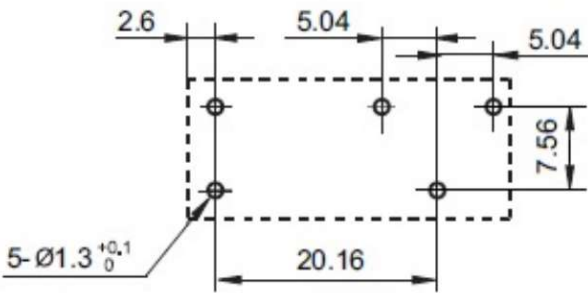


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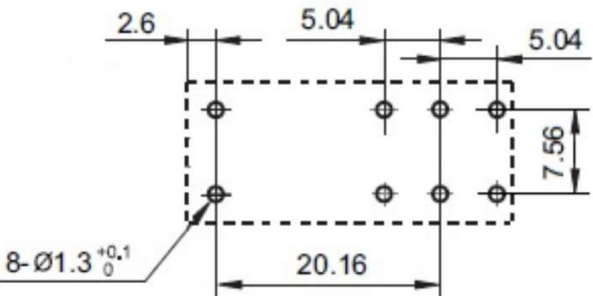
外形尺寸、PCB 布局、接线图 Outline Dimensions, PCB Layout, Wiring Diagram (mm)

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

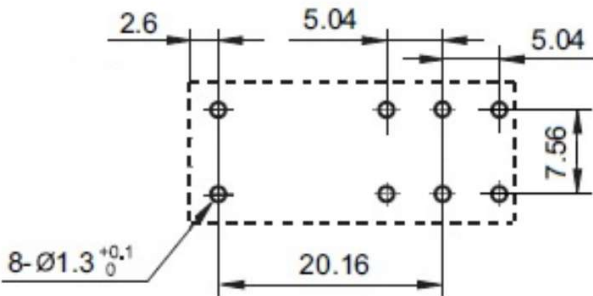
- ST115 5mm 1Pole 12A/16A



- ST115 5mm 1Pole 16A



- ST115 5mm 2Pole 8A



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

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

接线图 Wiring Diagram Bottom View

- ST115 5mm 1Pole 12A/16A

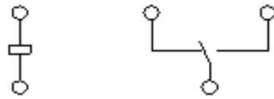
1 Form A



1 Form B

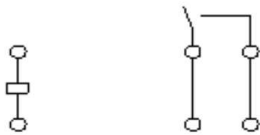


1 Form C

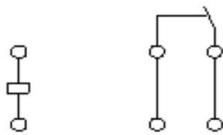


- ST115 5mm 1Pole 16A

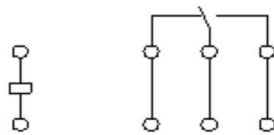
1 Form A



1 Form B

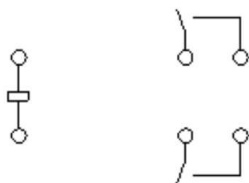


1 Form C

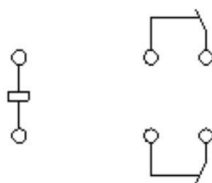


- ST115 5mm 2Pole 8A

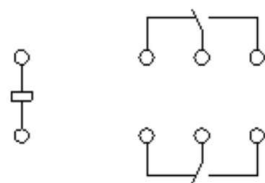
2 Form A



2 Form B



2 Form C



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。

Disclaimer:

This manual is for reference only. For more information, see Terms and Guidelines. Specifications are subject to change without notice. We cannot evaluate all performance and all parameters for every possible application. Therefore, users should choose the right product for them in the right place. If you have any questions or need technical services, please contact STEIPU.