

**YONGNENG****东莞市永能电子有限公司**

产品规格书 Product Specification

文件号: YG208LZ-D031-A0

产品规格书 Relay Specification Sheet

1. 品种 Type Model1.1 种类 Kinds: 小型大功率继电器 Miniature high power relay1.2 型号 Type: YX208LZ-S-112H1.3 触点形式 Contact Arrangement: 转换型 Form C1.4 触点材料 Contact Material: AgSn02**2. 安全标准 Safety Standard**国际安全认证 Foreign Standard: Recognized by TUV file no. TUV:R50352581Recognized by CQC file no. CQC16002148348**3. 线圈额定参数 Coil Rating (at 23℃)**3.1 额定电压 Rated Voltage: 12VDC3.2 线圈电阻 Coil Resistance: $267 \pm 10\% \Omega$ 3.3 额定功耗 Normal Operating Power: 0.54 W3.4 最大允许线圈电压 Max. Allowable Coil Voltage: 15.6VDC**4. 触点参数 Contact Specification**4.1 触点阻性负载 Contact Rating: 16A 250VAC4.2 最大切换电流 Max. Contact Current: 20A4.3 最大切换电压 Max. Contact Voltage: 250VAC/30VDC4.4 最大切换功率 Max. Allowable Capacity: 4000VA**5. 性能 Performance**5.1 接触电阻 Contact Resistance: Max. 100m Ω (at 6VDC 1A)5.2 动作电压 Operate Voltage: $\leq 9VDC$ 5.3 释放电压 Release Voltage: $\geq 1.2VDC$ 5.4 动作时间 Operate Time: Max. 15ms5.5 释放时间 Release Time: Max. 10ms

5.6 寿命 Life

(1) 电气寿命 Electrically

1 $\times 10^5$ 次 (ops)20 次/分钟 (ops/minute)

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(2) 机械寿命 Mechanically

 1×10^7 次 (ops)180 次/分钟 (ops/minute)5.7 介质耐压 Dielectric Strength (漏电流 Leak Current: 1mA)(1) 断开触点间 Between Contacts: 1000VAC (50/60Hz 1min)(2) 触点与线圈间 Between Coil To Contacts: 5000VAC (50/60Hz 1min)

5.8 绝缘电阻 Insulation Resistance

(1) 断开触点间 Between Contacts: $\geq 1000M\Omega$ (500VDC)(2) 触点与线圈间 Between Coil To Contacts: $\geq 1000M\Omega$ (500VDC)5.9 线圈温升 Coil Temperature Rise: $< 60 K$

线圈以 100%额定电压激励, 触点负载 16A@250VAC

Applied voltage of coil 100% rated voltage , Carry current of contact 16A@250VAC.

5.10 振动 Vibration

强度: 1.5mm 双振幅, 10~55Hz, 3 小时。继电器外观、结构和性能不应有异常。

Durability: 1.5mm Double amplitude ,10 to 55Hz, 3 hours. It shall be no abnormalities in appearance, construction and performance.

5.11 冲击 Shock

稳定性: $98m/s^2$ (10g), 6 次 (X、Y、Z 三个方向中的每个方向), 闭合回路的断开或开路回路的闭合时间应不超过 $100 \mu s$ 。Malfunction: $98m/s^2$ (10g), 6 shocks (each direction of X,Y,Z), No opening of any closed contact circuit of no closing of any opened contact circuit shall exceed $100 \mu s$.强度: $980m/s^2$ (100g), 6 次 (X、Y、Z 三个方向中的每个方向), 继电器外观、结构和性能不应有异常。Durability: $980m/s^2$ (100g), 6 shocks (each direction of X,Y,Z), It shall be no abnormalities in appearance, construction and performance.5.12 引出脚强度 Terminal Strength: 5N 1 分钟 (minute)

引出脚在插入方向上施加 5N 的拉力, 继电器应无异常。(引出脚微弯可以接受) At push in direction the terminal can endure 5N force for 1 minute, It Shall be no abnormalities. (a little curving of the terminals shall be Acceptable)

5.13 耐焊接热 Soldering Heat Resistance: $260 \pm 5^\circ C$, 10s.

继电器应无异常

There shall be no abnormalities.

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5.14 焊接性能 Soldering Ability: 240±5℃, 3±0.5s.

引出端被浸锡部分应有 90%以上连续覆上一层锡层。90% of the dipped portion shall be soldered.

5.15 耐温性 Temperature Resistance**(1) 耐热 Heat Resistance**

105℃±2℃ 温度中放置 2 小时, 恢复常温 2 小时后, 继电器的结构及性能应无异常。Must be free from any abnormality in both the construction and characteristics after the relay is lift in a temperature of 105±2℃ for 2h and then in room temperature and humidity for 2h.

(2) 耐寒 Cold Resistance

-40℃±2℃温度中放置 2 小时, 恢复常温 2 小时后, 继电器的结构及性能应无异常。Must be free from any abnormality in both the construction and characteristics after the relay is lift in a temperature of -40±2℃ for 2h and then in room temperature and humidity for 2h.

5.16 耐湿性 Moisture Resistance

在温度 40±2℃ 相对湿度 90~95%RH 中放置 48 小时, 恢复常温常湿 2 小时后, 继电器的结构及性能应无异常。且绝缘电阻应不小于 50MΩ min。(500VDC)

Must be free from any abnormality in both the construction and characteristics after the relay is lift in a temperature of 40±2℃, and humidity of 90% to 95% RH for 48h and then in room temperature and humidity for 2h. Insulation resistance however must be no less than 50MΩ min. (500VDC)

6. 产品标识 Marking**6.1 外壳颜色 Case Color: 黑色 Black****6.2 激光打标位置 Marking Position: 顶部 Top**

D2MF151

16A 250VAC

16A 30VDC

YX208LZ-S-112H

生产编码 production code



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订货标记示例 ORDERING INFORMATION

YX208LZ	-S	-1	12	D	M	
						触点形式 Contact form : 无-转换, M-常开, B-常闭 Nil-Form C, M-Form A, B-Form B
						线圈功耗 Coil power : D-0.4 W ,H-0.54W
						线圈规格 Coil voltage : 03,05,06,09,12,15,18,24,36,48 (VDC)
						触点组数 Number of poles : 1-1组 1-1 Group
						封装形式 Protective construction : S-塑封式 S-Flux proofed
						基本型号 Type designation : YX208LZ

7. 标准测试条件 Standards Test Condition7.1 温度 Temperature: 23±5℃7.2 湿度 Humidity: 60 ± 10% RH7.3 方向 Direction of Measurement: 引出脚向下为标准方向Terminals down position is standard position**8. 使用条件 Operating Condition**8.1 温度 Temperature: -40 ~+105 ℃8.2 湿度 Humidity: 5% ~ 85% RH8.3 安装方向 Mounting Direction: 引出脚向下为标准方向Terminals down position is standard position**9. 贮存条件 Storage Condition**9.1 温度 Temperature: 0~+40℃9.2 湿度 Humidity: < 80% RH

9.3 环境 Environment

(1) 产品贮存场地不能有腐蚀性气体 Store in locations where the product is not exposed to corrosive gas.(2) 贮存中应避免阳光直照产品 Keep product is not exposed to the direct ray of the sun.

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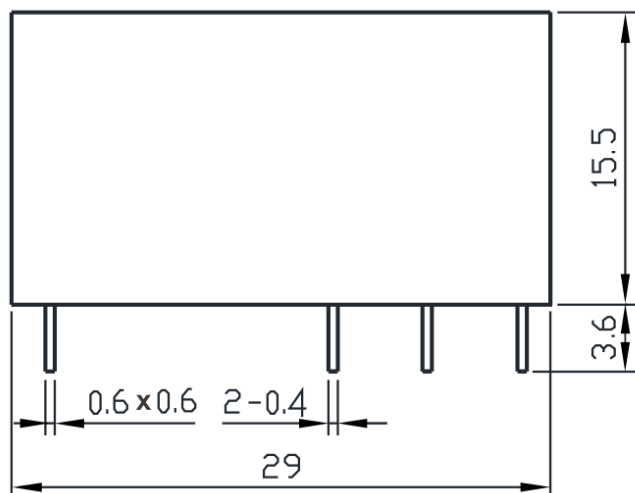
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10. 产品结构 Configuration

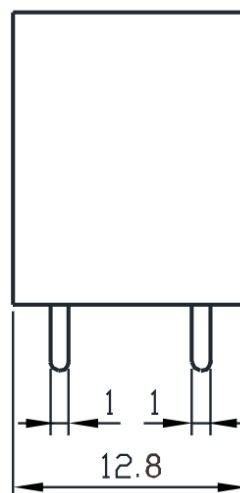
外形及结构简图

Outline And Construction Schematic



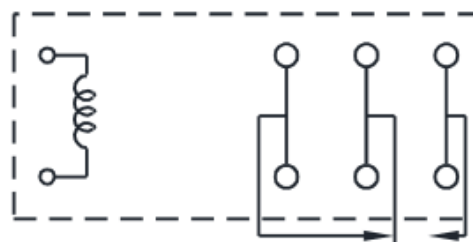
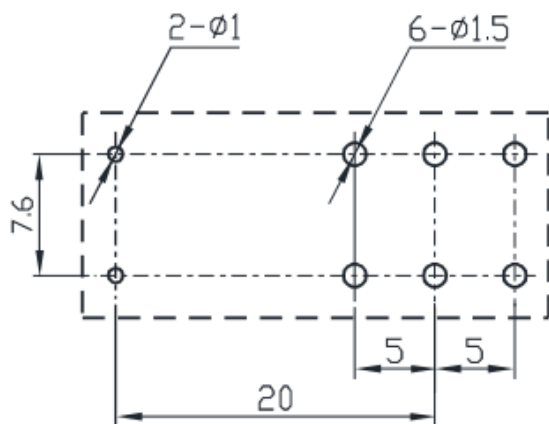
安装孔位图 (底视图)

PCB Layout (Bottom View)



接线图(底视图)

Wiring Diagram (Bottom View)



注 Remark :

1.未标注尺寸公差 Unmarked dimensional tolerance

≤1mm: ±0.2mm ; (1~5)mm: ±0.3mm ; ≥5mm: ±0.4mm.

2.安装孔尺寸公差: ±0.1mm.

The tolerance of PCB layout is always: ±0.1mm.

3.引出脚尺寸为预焊前尺寸.

Extended terminal dimension is dimension before soldering.

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11. 主要零部件 Important Part And Components

序号 Serial No.	零部件名称 Part And Components Name	材料名称 Material Name
1	外壳 Case	PBT
2	线圈骨架 Bobbin	PBT
3	基座 Base	PBT
4	推片 Card	PBT
5	铁芯 Core	DT4C
6	衔铁 Armature	DT4E
7	挂钩 Hook	铜合金 Copper alloy
8	A 脚 A terminal	铜合金 Copper alloy
9	B 脚 B terminal	铜合金 Copper alloy
10	簧片引脚	铜合金 Copper alloy
11	动簧片 Movable spring	铜合金 Copper alloy
12	静触点 Stationary contact	AgSn02
13	动触点 Movable contact	AgSn02
14	线圈端子 Coil terminal	方针线 HCP wire
15	漆包线 Copper wire	3UEW
16	密封胶 sealant	EPOXY