

继电器产品承认书

SPECIFICATION FOR APPROVAL

客户名称 Customer name: _____

产品名称 Product Description: _____ 继电器 Relay

供方型号 Supplier Part No.: _____ SE-T90-SS-112D

客户料号 Customer Material Code: _____

客户型号 Customer Part No.: _____

版 本 REV: _____

日 期 Date: _____ 2019-05-20

供应 厂商	制 定	审 核	批 准
	苗建峰	黄美凤	饶云飞
客户 确认	开发/工程 审核	品质部 审核	批 准

一、基本特性 Basic characteristics

1、线圈参数 Coil specification

- | | |
|--------------------------------|---|
| (1) 额定电压 Nominal voltage | DC 12V |
| (2) 线圈阻抗 Coil resistance | 160 Ω $\pm$ 10% (at 23 $\pm$ 5 $^{\circ}$ C) |
| (3) 额定电流 Rated current | DC 75mA $\pm$ 10% (at 23 $\pm$ 5 $^{\circ}$ C) |
| (4) 动作电压 Operate voltage | DC 9V Max ((at 23 $\pm$ 5 $^{\circ}$ C) |
| (5) 释放电压 Release voltage | DC 1.2V Min ((at 23 $\pm$ 5 $^{\circ}$ C) |
| (6) 最大电压 Maximum voltage | DC 13.2V(130% of nominal voltage) |
| (7) 线圈温升 Coil temperature rise | 50K Max (Coil:12V) |

2、触点参数 Contact Specification

- | | |
|--|--|
| (1) 触点型式 Contact configuration | SPDT (1 FormC)- (一组转换) |
| (2) 触点额定负载 Contact rating | 20A 277VAC;20A/10A 250VAC (Resistive load)
40A/30 250VAC(Resistive load) available; |
| (3) 接触电阻 Contact resistance | Initial (初始值) 100 m Ω Max (At DC6V 1A) |
| (4) 动作时间 Operate time | 20ms Max |
| (5) 释放时间 Release time | 20ms Max |
| (6) 最大动作频率 Maximum operating frequency | Mechanically 18000 cycle/h (机械)
Electrically 600 cycle/h (电气) |
| (7) 触点温升 Contact temperature rise | 50K Max (Contact:20A) |

3、通用参数 General Specification

- | | |
|----------------------------------|--|
| (1) 绝缘阻抗 Insulation resistance | 1000M Ω Min (at DC500V) |
| (2) 电气强度 Dielectric strength | |
| 触点间 between open contacts | 1500VAC,50/60 HZ for 1Minute |
| 线圈与触点间 between contacts and coil | 4000VAC,50/60 HZ for 1 Minute |
| (3) 环境温度 Ambient temperature | -40 $^{\circ}$ C $\sim$ +85 $^{\circ}$ C
(Not freezing and condensing at low temperature) |
| (4) 相对湿度 Relative Humidity | 45% to 85% RH |
| (5) 电气寿命 Electrical life | 50,000 Operations Min (at 30A 277VAC) |
| (6) 机械寿命 Mechanical life | 10,000,000 operations Min |

4、体系、安规认证和环保 Quality System、Safety Certification and RoHS(REACH)

- | | |
|------------------------------|---|
| (3) CQC certified | 30A 240VAC; 20/10A 240VAC
File No. CQC16002147654
40A/30A 240VAC,30VDC:
20A/10A 250VAC |
| (4) ISO9001:2008 certified | File No. U0016Q0450R0S |
| (5) RoHS and REACH Compliant | CAN17-059513-01 |

二、环境参数 Environmental Characteristics

1、抗振动性 Vibration resistance

1.1 误动作 Error operation

在 X、Y、Z 轴三个方向施加双振幅为 1.5mm，频率为 10-55HZ 的振动，时间 5 分钟，误动作时间不超过 1ms。

At constant vibration of double amplitude 1.5mm, 10 $\sim$ 55 HZ , in each direction of X,Y,Z for 5 minutes. No error operation more than 1 ms.

1.2 耐久性 Endurance

在三个方向施加振动 2 小时, 无结构损坏。

No construction trouble when vibrate it from 3 directions for 2 hours.(Amplitude 1.5mm, 10~55 HZ)

2、抗冲击性 Shock resistance

2.1 误动作 Error operation

在三个方向施加三次加速度为 100m/s^2 持续时间 11ms, 误动作不超过 1ms。

At peak acceleration 100m/s^2 duration 11ms, 3 shocks is given in each direction of X, Y, Z. No error operation more than 1 ms.

2.2 耐久性 Endurance

三个方向三次加速度为 1000m/s^2 持续时间 6ms, 无结构损坏。

No construction trouble when shock it from 3 directions 3 times at peak acceleration 1000m/s^2 duration 6ms.

3、耐寒性 Cold resistance

3.1 耐寒性 Cold resistance

放置于 $-40^\circ\text{C} \pm 2^\circ\text{C}$ 环境温度下 240 小时, 然后在标准条件下放置 2 小时, 结构和性能无异常。

No any trouble on construction or characteristic when leave relay in $-40^\circ\text{C} \pm 2^\circ\text{C}$ for 240h. After that, leave it in standard condition for 2 hours.

4、耐热性 Heat resistance

4.1 耐热性 Heat resistance

放置于 $+85^\circ\text{C} \pm 2^\circ\text{C}$ 环境温度下 240 小时, 然后在标准条件下放置 2 小时, 结构和性能无异常。

No any trouble on construction or characteristic when leave relay in $+85^\circ\text{C} \pm 2^\circ\text{C}$ for 240h. After that, leave it in standard condition for 2 hours.

5、耐湿性 Moisture resistance

5.1 放置于 40°C , 湿度 90% 环境下 240 小时, 然后在标准条件下放置 2 小时, 绝缘电阻最小 $10\text{M}\Omega$, 结构和性能无异常。

After keeping relay for 240h in 40°C , 90%, then leave it in standard condition for 2 hours. Insulation resistance $10\text{M}\Omega$ Min. No any trouble on construction or characteristic.

三、端子性能 Terminal characteristics

1、端子强度 Terminal strength

在端子上施加 10N 压力 10 秒钟, 无变形现象。

10N pushed into any terminals for 10 s. There shall be no abnormalities.

(The curving of the terminals shall be acceptable)

2、端子可焊性 Terminal solderability

端子浸入 $260 \pm 5^\circ\text{C}$ 焊锡槽中, 时间 $5 \pm 0.5\text{ s}$, 90% 部位应该上锡。

In case of lead free solder $260 \pm 5^\circ\text{C}$, $5 \pm 0.5\text{ s}$, 90% of the dipped portion shall be soldered.

3、耐焊接热 Soldering thermal

端子浸入 $260 \pm 5^\circ\text{C}$ 焊锡槽中, 时间 $10 \pm 1\text{ s}$, 结构和性能无异常。

No any trouble on construction or characteristic. When dipped into solder bath $260 \pm 5^\circ\text{C}$, $10 \pm 1\text{ s}$.

四、标准测试条件 Standard test condition

1、环境温度 Ambient temperature

$23 \pm 5^\circ\text{C}$

2、相对湿度 Relative humidity

25%~75%

3、气压 Air pressure

86kPa~106kPa

4、测试位置 Direction of Test

端子朝下位置 Terminals down position

五、储存条件 Storage condition

1、环境温度 Ambient temperature

-40℃~+85℃

2、相对湿度 Relative humidity

35%~85%

3、环境 Environment

3.1、不要储存在诸如硫化氢和盐雾气体等有腐蚀性的环境中。

Store in locations where the product or container is not expose to corrosive gas such as hydrogen sulfide or salty air.

3.2、储存在没有可视尘埃的环境中。

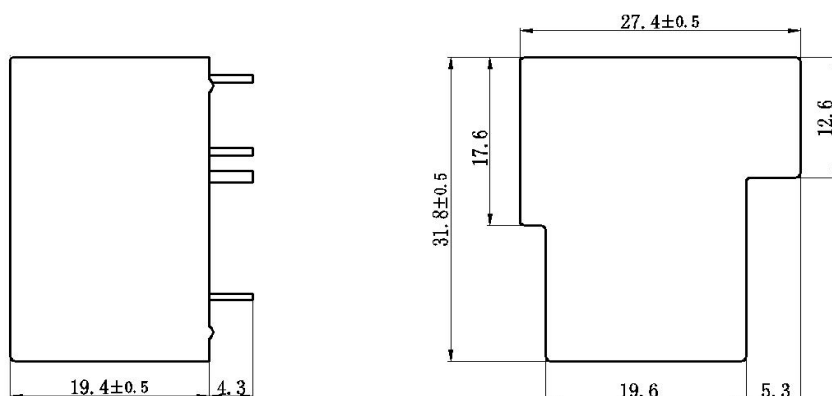
Store in locations where no visible dust exists.

3.3、储存在没有直射阳光的环境中。

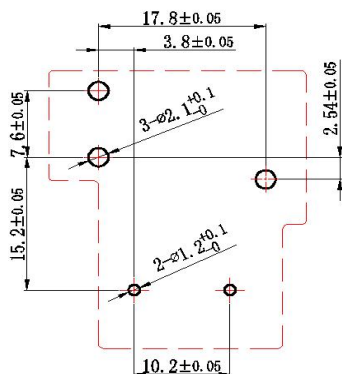
Store in locations not subject to direct sunlight.

六、外型图、线路板孔位图和线路图 Outline、PCB Layout and Wiring diagram(unit:mm)

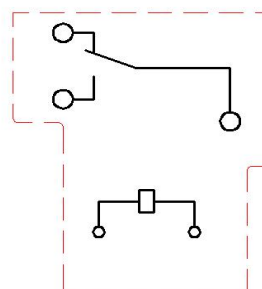
外型图 OUTLINE



线路板孔位图 (底视图)
PCB LAYOUT (BOTTOM VIEW)



线路图 (底视图)
WIRING DIAGRAM (BOTTOM VIEW)



七、命名规则 Encoding Information

SET90 — X — X XX X X xxx

1 2 3 4 5 6 7

1. 产品型号 Product type: SET90

2. 封装方式 Enclosure

SS---Flux-tight 防焊剂型 S-防尘型

3. 触点组数 Contact Pole

1—1 pole

4. 线圈额定电压 Coil Nominal Voltage

05—5VDC 12—12VDC 18—18VDC 24—24VDC

5. 线圈额定功率 Coil Nominal Power

D—Standard coil power 标准功率(0.9W)

6. 触点型式 Contact arrangement

M:常开 B:常闭 无: 转换

7、特殊代码