

### 特点 Features:

- 高触点容量: 70A触点切换能力  
High contact switching capability: 70A.
- 工作温度高达125°C  
Extended temp. ranges up to 125°C.
- 可并联电阻或二极管  
Resistor or diode paralleled type available.

### 触点参数 CONTACT DATA

|          |                             |                         |
|----------|-----------------------------|-------------------------|
| 型 号      | Model                       | YQ510                   |
| 触点形式     | Contact Arrangement         | 1A                      |
| 接触电阻     | Contact Resistance          | 50mΩ Max.               |
| 触点材料     | Contact Material            | 银合金 Silver Alloy        |
| 额定负载(阻性) | Contact Rating ( Res.Load ) | 70A 14VDC               |
| 最大切换电流   | Max. Switching Current      | 70A                     |
| 最大切换电压   | Max. Switching Voltage      | 50VDC                   |
| 最大切换功率   | Max. Switching Power        | 980W                    |
| 机械寿命     | Mechanical endurance        | 1x10 <sup>7</sup> 次 OPS |
| 电气寿命     | Electrical endurance        | 1x10 <sup>5</sup> 次 OPS |

### 性能参数 CHARACTERISTICS

|             |                              |                                                        |
|-------------|------------------------------|--------------------------------------------------------|
| 吸合时间(额定电压下) | Operate Time (at nomi.volt.) | 10ms Max.                                              |
| 释放时间(不带二极管) | Release Time (without diode) | 7ms Max.                                               |
| 绝缘电阻        | Insulation Resistance        | 100MΩ Min.( 500VDC )                                   |
| 介质耐压        | Dielectric Strength          | 触点与触点间 Between Open Contacts : 500VAC, 50/60Hz 1 min.  |
|             |                              | 触点与线圈间 Between Coil & Contacts: 500VAC, 50/60Hz 1 min. |
| 抗振性         | Vibration resistance         | 误动作 Functional: 10~55Hz 双振幅 1.5mm ( DA )               |
|             |                              | 耐 久 Destructive: 10~55Hz 双振幅 1.5mm ( DA )              |
| 抗冲击         | Shock resistance             | 误动作 Functional: 10G Min.                               |
|             |                              | 耐 久 Destructive: 100G Min.                             |
| 环境温度        | Ambient Temperature          | -40°C~+125°C (不冷凝 No condensation)                     |
| 重 量         | Unit Weight                  | 约 Approx. 34.3g                                        |

### 线圈参数 COIL DATA (at 23°C)

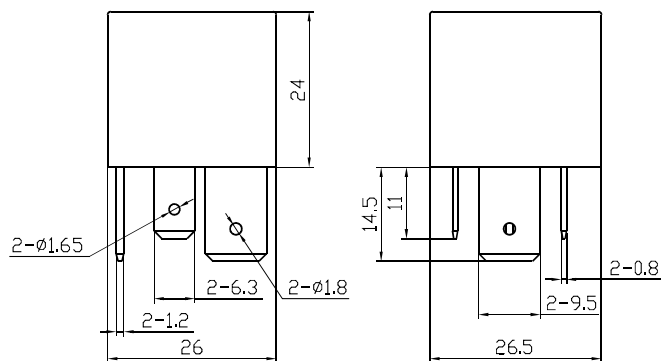
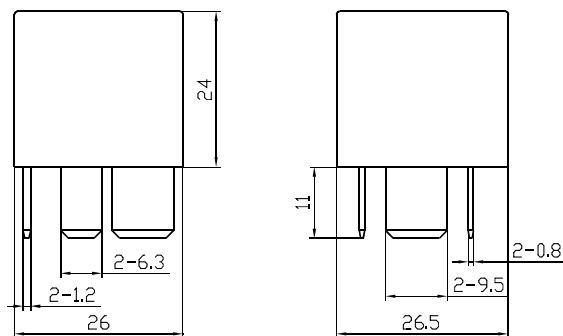
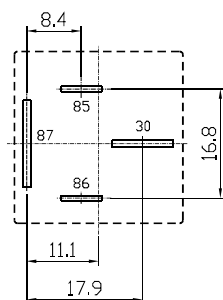
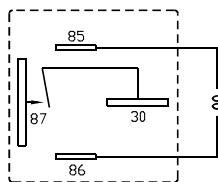
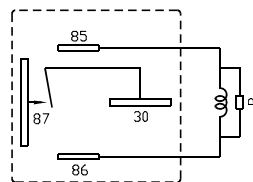
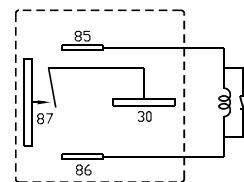
| 额定电压<br>Rated<br>voltage<br>(VDC) | 额定电流<br>Rated<br>current<br>±10%(mA) | 线圈电阻<br>Coil<br>resistance<br>±10%(Ω) | 并联电阻<br>Parallel<br>resistance<br>(Ω) | 等效电阻<br>Equivalent<br>resistance<br>(Ω) | 最大连续外加电压<br>Max allowable<br>voltage VDC<br>(Max.) | 吸合电压<br>Operate<br>voltage VDC<br>(Max.) | 释放电压<br>Release<br>voltage VDC<br>(Min.) | 额定功率<br>Rated coil<br>power<br>(W) |
|-----------------------------------|--------------------------------------|---------------------------------------|---------------------------------------|-----------------------------------------|----------------------------------------------------|------------------------------------------|------------------------------------------|------------------------------------|
| 12                                | 133.5                                | 90.0                                  |                                       |                                         | 额定电压的<br>of rated voltage<br>150 %                 | 额定电压的<br>of rated<br>voltage<br>70 %     | 额定电压的<br>of rated<br>voltage<br>10 %     | 约 approx.<br>1.6/1.8               |
| 24                                | 66.7                                 | 360.0                                 |                                       |                                         |                                                    |                                          |                                          |                                    |
| 12                                | 150.9                                | 90.0                                  | 680.0                                 | 79.5                                    |                                                    |                                          |                                          |                                    |
| 24                                | 75.6                                 | 360.0                                 | 2,700.0                               | 317.5                                   |                                                    |                                          |                                          |                                    |

## 订货标记示例 ORDERING INFORMATION

|       |    |    |    |   |   |   |   |                                                                                                    |
|-------|----|----|----|---|---|---|---|----------------------------------------------------------------------------------------------------|
| YQ510 | -S | -1 | 12 | D | M | R | 1 |                                                                                                    |
|       |    |    |    |   |   |   |   | 脚位长度 Foot length : 1-长脚型, 2-短脚型 1-Long foot 2-Short foot                                           |
|       |    |    |    |   |   |   |   | 附加电路 Accessory Form : 无-标准型, D-带二极管, R-带电阻<br>Nil-Without accessory, D-With diode, R-With resistor |
|       |    |    |    |   |   |   |   | 触点形式 Contact form : M-常开 M-Form A                                                                  |
|       |    |    |    |   |   |   |   | 线圈功耗 Coil power : D-1.6W                                                                           |
|       |    |    |    |   |   |   |   | 线圈规格 Coil voltage : 12,24 (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 : YQ510                                                                      |

## 外形尺寸、接线图、安装孔位图 (单位: mm)

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PCB LAYOUT (Unit: mm)

外形尺寸  
Outline Dimensions长脚型  
Long foot短脚型  
Short foot安装孔位图 (底视图)  
PCB Layout ( Bottom View )接线图 (底视图)  
Wiring Diagram ( Bottom View )普通型  
Without accessory带电阻型  
With resistor带二极管型  
With diode

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.