


|   |                                       |              |
|---|---------------------------------------|--------------|
| <br>Relays for advanced technology | MINIATURE PCB TYPE<br><br>POWER RELAY | WJ114-RELAYS |
|---|---------------------------------------|--------------|



- Smaller size at 16A switching capacity relay for high density P.C. board mounting technique
- 8mm creepage distance. Surge resistivieness of 10000V and dielectric strength of 5000VAC is available
- High sensitive type for low consumption is available
- Complete sealed type is available if equired

**SPECIFICATIONS**

**Contact**

|   |                                       |
|---|---------------------------------------|
| Arrangement                                   | 1A, 1C                                |
| Contact Material                              | Silver alloy                          |
| Contact Resistance<br>(By voltage drop 6V 1A) | Max.100m•                             |
| Rating  |                                       |
| Resistive load<br>(cos•=1)                    | 20A 125VAC<br>16A 240VAC<br>10A 30VDC |
| Inductive load<br>(cos•=0.75•0.8)             | 5A 120VAC<br>5A 24VDC                 |
| Max. Switching current                        | 16A                                   |
| Max. Switching power                          | 2400VAC 600W                          |
| Max. Switching voltage                        | 250VAC 110VDC                         |
| Expected life(min.ope)                        |                                       |
| Mechanical(at 120 cpm)                        | 1×10 <sup>7</sup>                     |
| Electrical (at 20 cpm)                        | 1×10 <sup>5</sup>                     |

**Characteristics**

| Item                         | Type        | WJ114 (0.72W)                             | WJ114 (0.54W) |
|------------------------------|-------------|---|---------------|
| Operate Time                 |             | Max.15msec.                               | Max.20msec.   |
| Release Time                 |             | Max.8msec.                                |               |
| Operating humidity           |             | 45 to 85% RH                              |               |
| Initial breakdown voltage    |             | 5000VAC (50/60Hz)for 1 min.               |               |
| Between coil & contact       |             | 1000VAC (50/60Hz)for 1 min.               |               |
| Between open contacts        |             |   |               |
| Insulation Resistance        |             | Min. 1000M• (500 VDC)                     |               |
| Ambient temperature          |             | -30••+55•                                 | -30••+80•     |
| Shock                        | Functional  | Min.10G                                   |               |
| Resistance                   | Destruction | Min.100G                                  |               |
| Vibration                    | Functional  | 10 to 55 Hz at double Amplitude of 1.5mm  |               |
| Resistance                   | Destruction | 10 to 55 Hz at double Amplitude of 1.5mm  |               |
| Insulation withstand voltage |             | 5000V 1.2×50•s(between coil and contacts) |               |
| Temp. Rise                   |             | Max.45 Deg                                | Max.45 Deg    |
| Unit weight                  |             | Approx.13g                                |               |

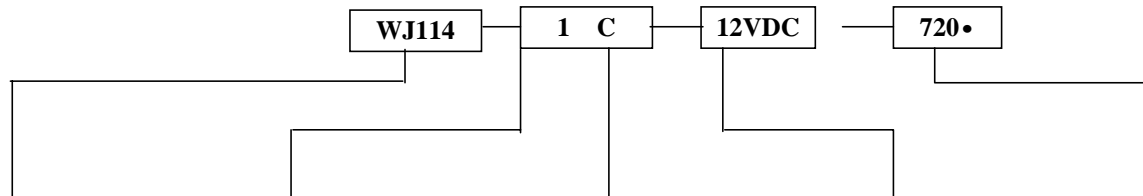
**Coil**

|                         |              |
|-------------------------|--------------|
| Nominal operating power | 0.54W ~0.72W |
|-------------------------|--------------|

**TYPICAL APPLICATION**

Cooking appliances,air controlling equipment,etc.

**ORDERING INFORMATION**



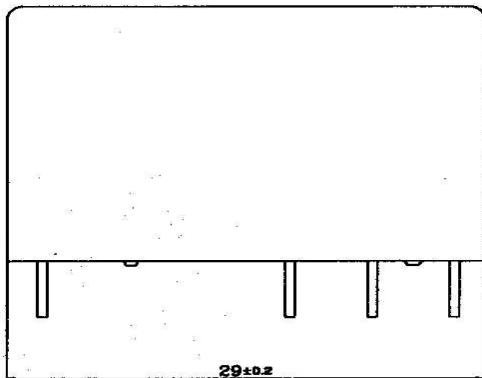
| Type  | Number of pole | Contact form               | Coil voltage(DC)               | Coil sensitivity   |
|-------|----------------|----------------------------|--------------------------------|--|
| WJ114 | 1:1pole        | A: 1 form A<br>C: 1 form C | 3, 5, 6, 9,<br>12, 18, 24, 48V | 17,50,,68,155, 270<br>600,1100,4400 : 0.54W<br>Nil : 0.72W |

**COIL SPECIFICATION (at 20•)**

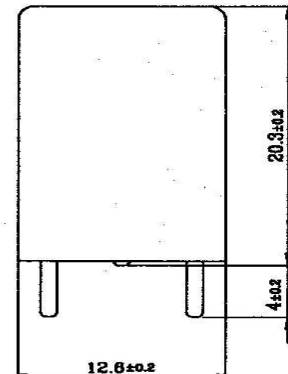
| Nominal Voltage (VDC) | Nominal Current (mA) | Coil Resistance (•)±10% | Power Consumption (W) | Pull-in Voltage (VDC) | Drop-out Voltage (VDC) | Max.Allowable Voltage (VDC) |
|-----------------------|----------------------|-------------------------|-----------------------|-----------------------|------------------------|-----------------------------|
| 3                     | 240                  | 12.5                    | abt0.72               | 80% Max.              | 5% Min.                | 130% of nominal voltage     |
| 5                     | 138.9                | 36                      |                       |                       |                        |                             |
| 6                     | 120                  | 50                      |                       |                       |                        |                             |
| 9                     | 78.3                 | 115                     |                       |                       |                        |                             |
| 12                    | 60                   | 200                     |                       |                       |                        |                             |
| 18                    | 11                   | 450                     |                       |                       |                        |                             |
| 24                    | 29.3                 | 820                     |                       |                       |                        |                             |
| 48                    | 14.5                 | 3300                    | abt0.54               | 80% Max.              | 5% Min.                | 130% nominal voltage        |
| 3                     | 176.5                | 17                      |                       |                       |                        |                             |
| 5                     | 106.4                | 50                      |                       |                       |                        |                             |
| 6                     | 88                   | 68                      |                       |                       |                        |                             |
| 9                     | 58                   | 155                     |                       |                       |                        |                             |
| 12                    | 44.4                 | 270                     |                       |                       |                        |                             |
| 18                    | 11                   | 600                     |                       |                       |                        |                             |
| 24                    | 21.8                 | 1100                    |                       |                       |                        |                             |
| 48                    | 10.9                 | 4400                    |                       |                       |                        |                             |

**DIMENSIONS**

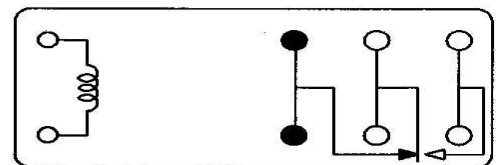
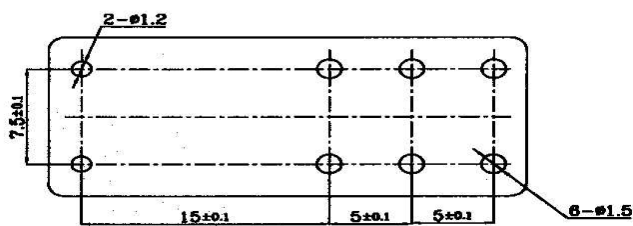
Unit : mm



(BOTTOM VIEW)



(BOTTOM VIEW)



Note: The relative changes for the specification will not be advised in the future.