# HK4100F/4101F

## SUBMINIATURE SIGNAL RELAY



## Features

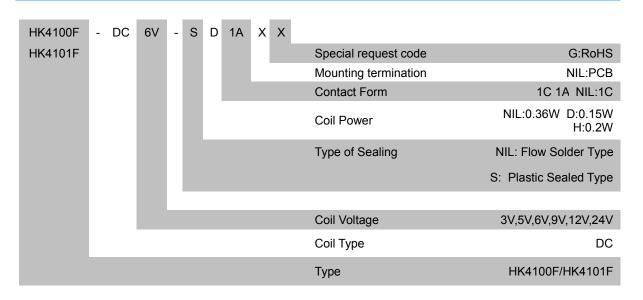
- 3A switching capability
- 1 Form C ,B&Aconfiguration
- Standard PCB layout
- Plastic sealed and flux proofed types available
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (15.5 x 10.5 x 11.8) mm

| ■ CONTACT DATA        |                                   |  |  |  |
|-----------------------|-----------------------------------|--|--|--|
| Contact Form          | 1C 1A 1B                          |  |  |  |
| Contact Material      | Silver Alloy                      |  |  |  |
| Contact Ratings       | 3A 250VAC/3A 30VDC                |  |  |  |
| Max Switching Voltage | 300VAC/60VDC                      |  |  |  |
| Max Switching Current | 3A                                |  |  |  |
| Max Switching Power   | 750VA /90W                        |  |  |  |
| Contact Resistance    | 100MΩ(at 1A 6VDC)                 |  |  |  |
| Electrical Life       | 1X10 <sup>5</sup> Ops(30Ops/min)  |  |  |  |
| Mechanical Life       | 1X10 <sup>7</sup> Ops(300Ops/min) |  |  |  |

| ■ GENERAL DATA        |                         |                  |  |  |  |  |
|-----------------------|-------------------------|------------------|--|--|--|--|
| Insulation Resistance |                         | 100MΩ 500VDC     |  |  |  |  |
| Dielectric Strength   | Between coil & contacts | 1000VAC 1min     |  |  |  |  |
|                       | Between open contacts   | 500VAC 1min      |  |  |  |  |
| Operate Time          |                         | Max. 10ms        |  |  |  |  |
| Release Time          |                         | Max. 5ms         |  |  |  |  |
| Temperature Range     |                         | - 25℃ to +70℃    |  |  |  |  |
| Shock Resistance      | Functional              | 98m/s² (10g)     |  |  |  |  |
|                       | Destructive             | 980m/s² (100g)   |  |  |  |  |
| Vibration Resistance  |                         | 10 to 55Hz 1.5mm |  |  |  |  |
| Humidity              |                         | 35% to 85% RH    |  |  |  |  |
| Weight                |                         | Approx. 3.5g     |  |  |  |  |
| Safety Standard       |                         | CUL TüV CQC      |  |  |  |  |

| ■ COIL DATA              |                                   |       |                     |                     |                       |       |  |  |  |
|--------------------------|-----------------------------------|-------|---------------------|---------------------|-----------------------|-------|--|--|--|
| Nominal Voltage<br>(VDC) | Coil Resistance at 20 °C ± 10%(Ω) |       | Max Operate Voltage | Min Release Voltage | Max Applicate Voltage |       |  |  |  |
|                          | 0.15W                             | 0.20W | 0.36<br>W           | (VDC)               | (VDC)                 | (VDC) |  |  |  |
| 3                        | 60                                | 45    | 25                  | 2.25                | 0.30                  | 3.90  |  |  |  |
| 5                        | 167                               | 125   | 70                  | 3.75                | 0.50                  | 6.50  |  |  |  |
| 6                        | 240                               | 180   | 100                 | 4.50                | 0.60                  | 7.80  |  |  |  |
| 9                        | 540                               | 405   | 225                 | 6.75                | 0.90                  | 11.70 |  |  |  |
| 12                       | 960                               | 720   | 400                 | 9.00                | 1.20                  | 15.60 |  |  |  |
| 24                       | 3840                              | 2880  | 1600                | 18.00               | 2.40                  | 31.20 |  |  |  |

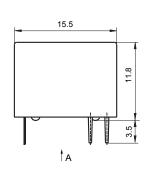
### **ORDERING INFORMATION**



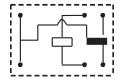
## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

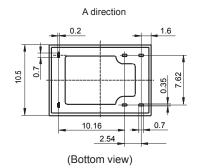
Unit: mm

#### **Outline Dimensions**

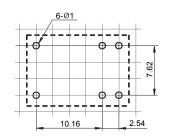


Wiring Diagram (Bottom view)

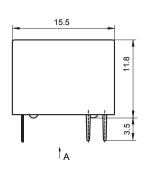


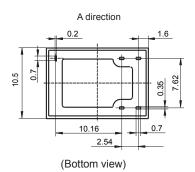


PCB Layout (Bottom view)

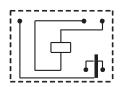


#### **Outline Dimensions**

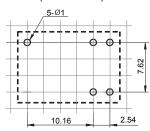




Wiring Diagram (Bottom view)



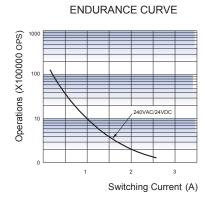
PCB Layout (Bottom view)

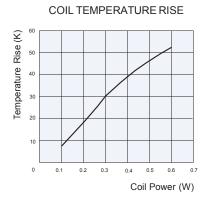


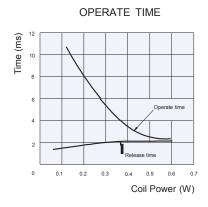
Remark: 1) In case of no tolerance shown in outline dimension: outline dimension ≤1mm, tolerance should be ±0.2mm; outline dimension >1mm and ≤5mm, tolerance should be ±0.3mm; outline dimension >5mm, tolerance should be ±0.4mm.

- 2) The tolerance without indicating for PCB layout is always ±0.1mm.
- 3) The width of the gridding is 2.54mm.

### CHARACTERISTIC CURVES







#### Disclaimer

This datasheet is for the customers' reference. All the specifications are subject to change without notice.

We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a tight position to choose the suitable product for their own application. If there is any query, please contact Ever-way for the technical service. However, it is the user's responsibility to determine which product should be used only.

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