

# JQX-115F-T/TH

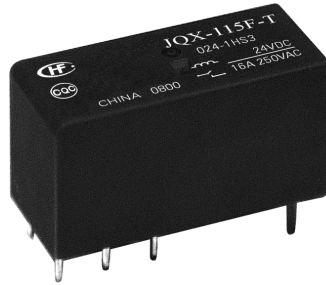
## MINIATURE HIGH POWER RELAY



File No.:116934



File No.:CQC02001001951



### Features

- \* High Temperature 105°C
- \* Low height 15.7 mm
- \* 5KV dielectric coil to contacts
- \* Creepage distance 10mm
- \* Sealed IP67& unsealed types available

### CONTACT DATA

|                                 |                                           |
|---------------------------------|-------------------------------------------|
| Contact Arrangement             | 1A, 1C                                    |
| Initial Contact Resistance Max. | 50mΩ(at 1A/ 6VDC)                         |
| Contact Material                | See ordering info.                        |
| Max. switching voltage          | 440VAC/ 125VDC                            |
| Max. switching current          | 16A                                       |
| Max. switching power            | 2500VA                                    |
| Contact Rating                  | 10A/ 250VAC                               |
|                                 | 1 x 10 <sup>5</sup> OPS(360 ops/hour)     |
|                                 | 16A/ 250VAC                               |
|                                 | 5 x 10 <sup>4</sup> OPS(360 ops/hour)     |
| Mechanical life                 | 1 x 10 <sup>7</sup> OPS (72,000 ops/hour) |
| Electrical life                 | 1 x 10 <sup>5</sup> OPS (360 ops/hour)    |

### CHARACTERISTICS

|                                         |                           |                       |
|-----------------------------------------|---------------------------|-----------------------|
| Initial Insulation Resistance           |                           | 1000MΩ, 500VDC        |
| Dielectric Strength                     | Between coil and Contacts | 5000VAC 1min.         |
|                                         | Between open contacts     | 1000VAC 1min.         |
| Surge voltage between coil and contacts |                           | 10KV (1.2X50μs)       |
| Operate time (at nomi. Volt.)           |                           | Max. 15ms             |
| Release time (at nomi. Volt.)           |                           | Max. 8ms              |
| Temperature rise (at nomi. Volt.)       |                           | Max. 55°C             |
| Shock Resistance                        | Functional                | 100 m/s <sup>2</sup>  |
|                                         | Destructive               | 1000 m/s <sup>2</sup> |
| Vibration Resistance                    |                           | 10 to150Hz , 10g/5g   |
| Humidity                                |                           | 35% to 85%            |
| Ambient temperature                     |                           | -40°C to +105°C       |
| Termination                             |                           | PCB                   |
| Unit weight                             |                           | 13.5g                 |
| Construction                            |                           | Sealed IP67 &Unsealed |

### COIL

|            |                                    |
|------------|------------------------------------|
| Coil power | JQX-115F-TH:0.25W, JQX-115F-T:0.4W |
|------------|------------------------------------|

### COIL DATA

#### Standard (JQX-115F-T)

| Nominal Voltage VDC | Pick-up Voltage VDC | Drop-out Voltage VDC | Max. allowable Voltage VDC(at 20°C) | Coil Resistance Ω(at 20°C) |
|---------------------|---------------------|----------------------|-------------------------------------|----------------------------|
| 5                   | 3.50                | 0.5                  | 6.5                                 | 62 ± 10%                   |
| 6                   | 4.20                | 0.6                  | 7.8                                 | 90 ± 10%                   |
| 9                   | 6.30                | 0.9                  | 11.7                                | 202 ± 10%                  |
| 12                  | 8.40                | 1.2                  | 15.6                                | 360 ± 10%                  |
| 18                  | 12.6                | 1.8                  | 23.4                                | 810 ± 10%                  |
| 24                  | 16.8                | 2.4                  | 31.2                                | 1440 ± 10%                 |
| 48                  | 33.6                | 4.8                  | 62.4                                | 5760 ± 10%                 |
| 60                  | 42.0                | 6.0                  | 78                                  | 7500 ± 15%                 |

#### Sensitive (JQX-115F-TH)

| Nominal Voltage VDC | Pick-up Voltage VDC | Drop-out Voltage VDC | Max. allowable Voltage VDC(at 20°C) | Coil Resistance Ω(at 20°C) |
|---------------------|---------------------|----------------------|-------------------------------------|----------------------------|
| 5                   | 3.75                | 0.5                  | 6.5                                 | 100 ± 10%                  |
| 6                   | 4.50                | 0.6                  | 7.8                                 | 144 ± 10%                  |
| 9                   | 6.75                | 0.9                  | 11.7                                | 324 ± 10%                  |
| 12                  | 9.00                | 1.2                  | 15.6                                | 576 ± 10%                  |
| 18                  | 13.50               | 1.8                  | 23.4                                | 1,296 ± 10%                |
| 24                  | 18.00               | 2.4                  | 31.2                                | 2,304 ± 10%                |
| 48                  | 36.00               | 4.8                  | 62.4                                | 9,216 ± 15%                |
| 60                  | 45.00               | 6.0                  | 78                                  | 12,857 ± 15%               |

### SAFETY APPROVAL RATINGS

JQX-115F-TH (High Temp and High Sensitive)

| VDE | Specifications           | Ratings                                     |
|-----|--------------------------|---------------------------------------------|
|     | JQX-115F-TH-1H(S)3(G)(F) | 10A 250VAC @ to105°C<br>6A 400VAC @ to105°C |



HONGFA RELAY  
ISO9001\*ISO/TS16949 \*ISO14001 CERTIFIED

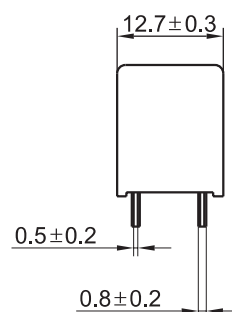
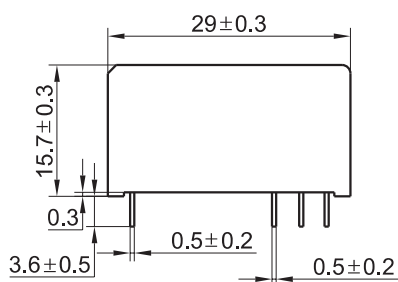
VERSION: EN02-20040601

## ORDERING INFORMATION

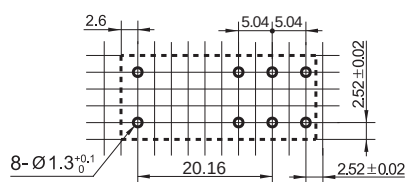
|                     |                               |     |    |   |   |   |
|---------------------|-------------------------------|-----|----|---|---|---|
| JQX-115F-T/TH       |                               | 012 | 1H | S | 3 | A |
| Type                | JQX-115F-TH Sensitive 0.25W   |     |    |   |   |   |
| Coil voltage        | 5, 6, 9,12, 18, 24, 48, 60VDC |     |    |   |   |   |
| Contact arrangement | 1H: 1 Form A 1Z: 1 Form C     |     |    |   |   |   |
| Structure           | S: Sealed IP67 Nil: Unsealed  |     |    |   |   |   |
| Version             | 3: 5.0mm                      |     |    |   |   |   |
| Contact Material    | A: AgSnO2 B: AgNi Nil: AgCdO  |     |    |   |   |   |

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Outline Dimensions

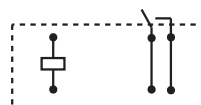


PCB layout

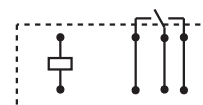


Wiring Diagram

(1 Form A)

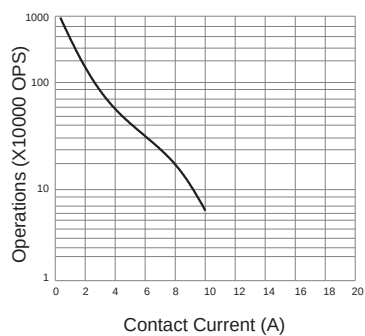


(1 Form C)



## CHARACTERISTICS CURVE

LIFE CURVE



COIL OPERATING RANGE DC

