



## SUBMINIATURE POWER RELAYS

Single-Pole , 10Amp , PC Board

# JQC-3FF



- UL / CUR File No.E170653
- TUV Certificate No. R 2034012
- CQC CQC 03001002865
- SPST-NO & DPDT configuration
- Standard PC layout
- Sealed version available

### ■ CONTACT DATA

|                                                  |                                                       |                                                |
|--------------------------------------------------|-------------------------------------------------------|------------------------------------------------|
| Arrangement                                      | 1 Form A                                              | 1 Form C                                       |
| Initial Contact Resistance<br>Max. (at 1A 24VDC) | 100m Ω                                                | 100m Ω                                         |
| Contact Material                                 | Silver Alloy                                          | Silver Alloy                                   |
| Contact Rating (Res. Load)                       | 15A 125VAC                                            | 10A<br>277VAC/24VDC                            |
| Max. switching voltage                           | 250VAC/30VDC                                          | 250VAC/30VDC                                   |
| Max. switching current                           | 15A                                                   |                                                |
| Max. switching power                             | 2770VA 240W                                           | 2770VA 240W                                    |
| UL/CUR rating                                    | 15A 125VAC<br>10A 277VAC<br>12A 120VAC<br>TV-5 120VAC | 10A 120VAC<br>10A 277VAC                       |
| TUV rating                                       | 12A 125VAC                                            | 5A 250VAC                                      |
| Expected Life min. operations                    | Mechanical<br>Electrical                              | 1X10 <sup>7</sup> OPS<br>1X10 <sup>5</sup> OPS |

### COIL

|                    |       |       |
|--------------------|-------|-------|
| Nominal coil power | 360mW | 360mW |
|--------------------|-------|-------|

### ■ characteristics

|                                                  |                                                            |
|--------------------------------------------------|------------------------------------------------------------|
| Initial Insulation Resistance                    | 100 MΩ 500VDC                                              |
| Dielectric Strength<br>Between coil and Contacts | 1500Vrms 1 minute                                          |
| Between open contacts                            | 750Vrms 1 minute                                           |
| Surge Voltage between<br>Contacts and coil       | No                                                         |
| Operate time (at nomi. Vot.)                     | 10ms                                                       |
| Release time (at nomi. Vot.)                     | 5ms                                                        |
| Temperature rise<br>(at nominal voltage)         | 60                                                         |
| Shock Resistance                                 | Functional<br>Destructive                                  |
|                                                  | 98m/s <sup>2</sup> ( 10g )<br>980m/s <sup>2</sup> ( 100g ) |
| Vibration Resistance                             | 1.5mm 10 to 55Hz                                           |
| Humidity                                         | 35% to 85% RH                                              |
| Ambient temperature                              | -40 to 70                                                  |
| Termination                                      | PC                                                         |
| Unit weight                                      | 10g                                                        |
| Construction                                     | Sealed & Unsealed                                          |

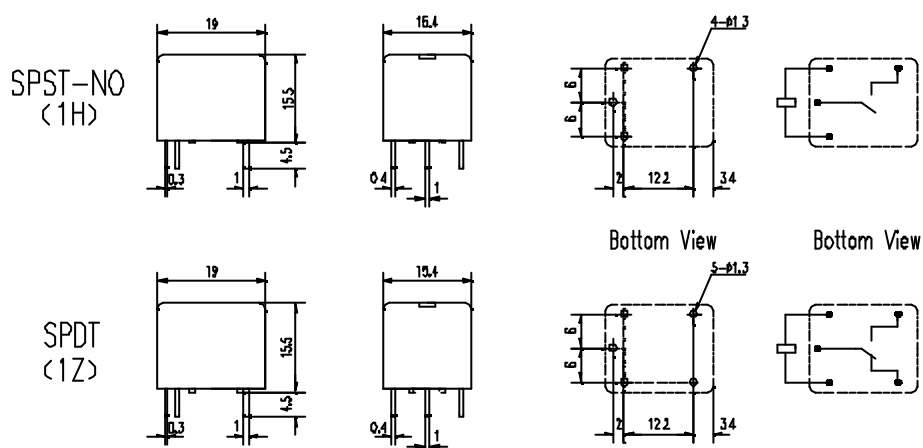
### Coil Specifications

| Nominal Voltage VDC | Pick-up Voltage VDC | Drop-out Voltage VDC | Max. allowable Voltage ( at 20 °C ) | Coil Resistance Tolerance: ± 10% |
|---------------------|---------------------|----------------------|-------------------------------------|----------------------------------|
| 5                   | 3.8                 | 0.5                  | 6.0                                 | 70                               |
| 6                   | 4.5                 | 0.6                  | 7.2                                 | 100                              |
| 9                   | 6.8                 | 0.9                  | 10.8                                | 225                              |
| 12                  | 9.0                 | 1.2                  | 14.4                                | 400                              |
| 18                  | 13.5                | 1.8                  | 21.6                                | 900                              |
| 24                  | 18.0                | 2.4                  | 28.8                                | 1600                             |
| 48                  | 36.0                | 4.8                  | 57.6                                | 6400                             |

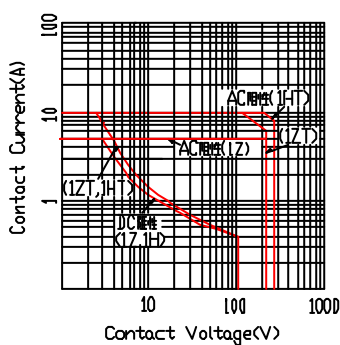
## ORDERING INFORMATION

|                                            |   |     |   |    |   |   |
|--------------------------------------------|---|-----|---|----|---|---|
| JQC-3FF                                    | / | OXX | - | 1Z | S | T |
| Basic Designation                          |   |     |   |    |   |   |
| Coil Voltage: 3, 5, 6, 9, 12, 18, 24, 48   |   |     |   |    |   |   |
| Contact Arrangement: 1H: SPST-NO; 1Z: SPDT |   |     |   |    |   |   |
| Enclosure: S-sealed (IP67) Nil-unsealed    |   |     |   |    |   |   |
| Contact material: T-AgSn Nil-AgNi10        |   |     |   |    |   |   |

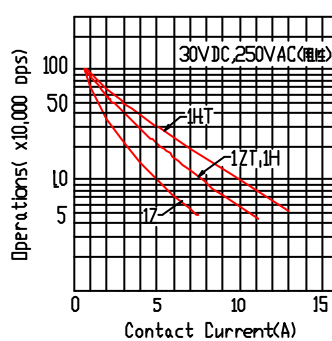
## OUTLINE DIMENSIONS , WIRING DIAGRAM AND PC BOARD LAYOUT



Maximum Switch Power



Life Curve



Coil Temperature Rise

