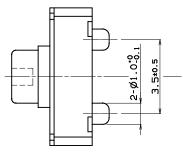


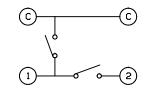
| MODEL NO | CODE | O/FORCE | STEM COLOR | REMARKS |
|----------|----------|--------------------------------|------------|---------|
| P 2100SW | 12B97000 | (1st)100±40gf (2nd)250±80gf | IVORY | |
| | | | | |

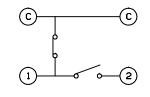


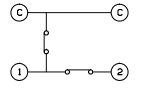
NORMAL POSITION

1ST MOVEMENT

2ND MOVEMENT







CIRCUIT DIAGRAM

NOTE

1.RATING; DC 30V, 20mA

2.CONTACT RESISTANCE : 200mm Max

3.STROKE : 1ST - 0.3±0.1, 2ND - 0.55±0.15

4.LIFE CYCLE : 10,000

5.GENERAL TOLERANCE : ±0.3

6.MANUFACTURING SPECIFICATION WOULD BE ACCORDANCE WITH JT 0122

| No | | PART NAME | | O'TY | MATERIA | ıL | SIZE | | | REMARKS |
|-----------|------|-----------|------------|-----------|---------|----------------|-------------------|---------|--------|----------------|
| <u>\$</u> | | | | 3RD_ANGLE | UNIT | SCALE | V()('K(' D2100SW) | | | |
| <u> </u> | | | PROJECTION | m/m | 5 1 | 1 QCRG-121003W | | | | |
| 3 | | | | APPROVED | CHECKED | DESIGNED | DWG.NAME | 4CC / Y | ' DIAG | _Б М |
| 2 | | | | | | | | ا دد۸ | טואנט | IN/AIM |
| <u> </u> | | | | | | | DWG.NO. | | | |
| NO. | DATE | NOTE | SIGN | | | | | | | |

| SPECIFICATION | Page: 1 / 4 |
|----------------------|-------------|
| DOUBLE ACTION SWITCH | |

1. GENERAL

- 1.1 Application: This specification is applied to low current circuit tactile switch for electronic equipment.
- 1.2 Operating temperature range: -20~70°C, 45~85% RH
- 1.3 Storage temperature range: -30~80℃ However, 96 hours maximum for continuous storage over a range -20~-30℃ and a range 70~80℃
- 1.4 Test conditions: The standard test conditions shall be 5~35℃ in temperature, 45~85% RH and 860~1060mbar in atmospheric pressure. Should any doubt arise in judgement, test shall be conducted at 20±2℃, 65±5% RH and 860~1060mbar.

2. RATED VOLTAGE AND CURRENT.

DC 30V 20mA

3. ELECTRICAL PERFORMANCE

| | PROPERTY | TEST CONDITIONS | PERFORMANCE |
|-----|-------------|---|-----------------------------|
| 3.1 | Contact | | *1 pole, 2 throw |
| 3.1 | arrangement | | |
| | Contact | Measured at DC 5V 10mA or by ohmmeter allowing | *less than 200mΩ |
| 3.2 | resistance | a small current at 1KHz with a load of twice of | |
| | | the actuating force. | |
| 3.3 | Insulation | DC 100V is applied between across terminals and between | *greater than 50MΩ |
| 3.3 | resistance | terminals and cover for 1 minute \pm 5 seconds. | |
| 3.4 | Dielectric | AC 250V (50~60Hz) is applied between across terminals | *No insulation defect shall |
| 5.4 | strength | and between terminals and cover for 1 minute. | be observed. |
| 3.5 | Bounce | Measured by lightly striking the center of the stem at a rate | *less than 10m sec |
| 0.5 | | of 3 operations/sec | |

| | | | | | | APPD | CHKD | DSGD | TITLE | YQCKG-P2100SW |
|------|------|------|------|------|------|------|------|------|----------|---------------|
| | | | | | | | | | | 1QCNG=F21005W |
| | | | | | | | | | DOCUMENT | 0122 |
| ZONE | SYMB | DATE | APPD | CHKD | DSGD | | | | NO. | 0122 |

| SPECIFICATION | Page: 2 / 4 |
|----------------------|-------------|
| DOUBLE ACTION SWITCH | |

4. MECHANICAL PERFORMANCE

| | PROPERTY | TEST CONDITIONS | PERFORMANCE |
|-----|-----------------|--|---------------------------|
| 4.1 | Operating force | A gradually increasing load is applied to the center of the | *As per individual |
| 4.1 | | stem. | manufactured drawing. |
| 4.2 | Travel | | |
| 4.2 | | | |
| | Stop strength | A static force of 3Kgf shall be applied to the direction of | *Shall be free from |
| 4.3 | | the stem operation for 3 seconds. | mechanical and electrical |
| | | | abnormalities. |
| | Stem withdrawal | A static load of 500gf is applied to the direction of the stem | *Shall be free from |
| 4.4 | force | pulling for 3 seconds. | mechanical and electrical |
| | | | degradation. |
| 4.5 | Arrangement of | | *Tactile feed-back. |
| 4.5 | action | | |

5. DURABILITY

| | PROPERTY | TEST CONDITIONS | PERFORMANCE | | | |
|-----|-----------------|--|-------------------------|--|--|--|
| | Operating life | 10,000 cycles operation with a maximum value of actuating | *Contact resistace: | | | |
| 5.1 | | force at a rate of 2 cycles/sec. With a resistive load | 300mΩ max. | | | |
| 3.1 | | supplying DC 30V 20mA. | | | | |
| | | | *Insulation resistance: | | | |
| | Cold heat proof | After testing at -30±2℃ for 96hours, the sample is allowed | 10MΩ min. | | | |
| 5.2 | | to stand under normal temperature and humidity conditions | *Dielectric strength: | | | |
| 5.2 | | for 1hour and measurement is performed within 1hour after | same as item 3.4. | | | |
| | | that. Water drops should be wiped off. | | | | |

| | | | | | | APPD | CHKD | DSGD | TITLE | YQCKG-P2100SW |
|------|------|------|------|------|------|------|------|------|----------|---------------|
| | | | | | | | | | | 1QCNG=F21005W |
| | | | | | | | | | DOCUMENT | 0122 |
| ZONE | SYMB | DATE | APPD | CHKD | DSGD | | | | NO. | 0122 |

| SPECIFICATION | Page: 3 / 4 |
|----------------------|-------------|
| DOUBLE ACTION SWITCH | |

5. DURABILITY

| | PROPERTY | TEST CONDITIONS | PERFORMANCE |
|-----|-----------------|---|----------------------------|
| | Dry heat proof | After testing at 85±2℃ for 96hours, the sample is allowed | *Contact resistace: |
| 5.3 | | to stand under normal temperature and humidity conditions | 300mΩ max. |
| 5.5 | | for 1hour and measurement is performed within 1hour after | *Bounce: 10m sec max. |
| | | that. | *Actuating force: within |
| | | | ±30% of the initial value. |
| | Damp heat proof | After test at 60±2℃ and 90~95% in relative humidity for | *Insulation resistance: |
| | | 96hours, the sample is allowed to stand under normal | 10MΩ min. |
| 5.4 | | *Dielectric strength: | |
| | | measurement is performed within 1hour after that. | same as item 3.4. |
| | | Water drops should be wiped off. | |
| | Thermal cycling | | |
| 5.5 | | After the test conducted under 5 cycles the sample is allowed to stand under normal temperature and humidity conditions for 1 hour, and the measurement is performed within 1 hour. | |

| | | | | | | APPD | CHKD | DSGD | TITLE | VOCKC_D2100CW | |
|------|------|------|------|------|------|------|------|------|----------|---------------|--|
| | | | | | | | | | | YQCKG-P2100SW | |
| | | | | | | | | | DOCUMENT | 0122 | |
| ZONE | SYMB | DATE | APPD | CHKD | DSGD | | | | NO. | 0122 | |

| SPECIFICATION | Page: 4 / 4 | | |
|----------------------|-------------|--|--|
| DOUBLE ACTION SWITCH | | | |

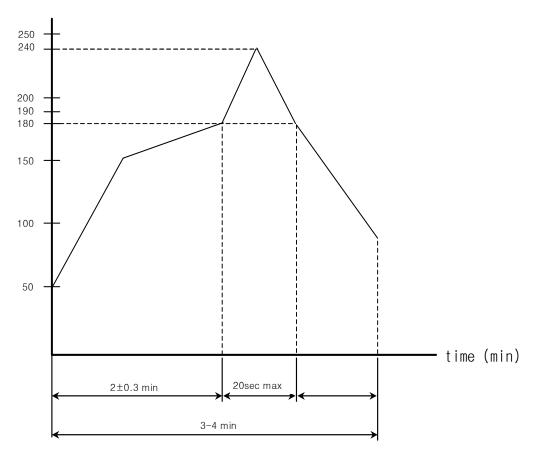
6. Refolw soldering

6.1 Reflow soldering conditions

Preheat --- Temperature on the copper foil surface should reach 180℃, 2±0.3 minutes after the PWB entered into the soldering heat zone.

Soldering heat --- Temperture on the copper foil surface should reach the peak temperature of 240°C within 20 seconds after PWB entered into soldering heat zone.

copper foil surface temp. (℃)



<Temperature profile>

| | | | | | | APPD | CHKD | DSGD | TITLE | YQCKG-P2100SW |
|------|------|------|------|------|------|------|------|------|----------|---------------|
| | | | | | | | | | | 1QCNG-F21005W |
| | | | | | | | | | DOCUMENT | 0122 |
| ZONE | SYMB | DATE | APPD | CHKD | DSGD | NO. | NO. | 0122 | | |