

| ZITEM | DESC. | Q'TY | MATERIALS | TREATMENT | REMARK |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | COVER | 1 | HIGH - TEMP. <br> THERMOPLASTIC <br> NYLON UL94V-0 | MOLDED BLACK | - |
| 2. | ACTUATOR |  | HIGH-TEMP. <br> THERMOPLASTIC <br> LCP | MOLDED WHITE | - |
| 3. | CONTACT |  | PHOSPHOR BRONZE | GOLD PLATED | - |
| 4. | TERMINAL |  | BRASS | GOLD PLATED | - |
| 5. | BASE | 1 | THERMOPTEMP. <br> NYLON UL94V-0 | MOLEDE BLACK | - |
| 6. | TAPE |  | KATPON | - | - |

DHNF TERMINAL LENGTH 8.1 mm DHN TERMINAL LENGTH 6.7 mm

Number Of Position: $\qquad$
$02=2$ Position
$04=4$ Position
$06=6$ Position
$08=8$ Position
$10=10$ Position


Package Style:
$\square=$ Tube
T/R= Tape \& Reel
V=Lead Free
Seal:
■=Regular
T =Top Tape Sealed
$\mathrm{F}=\mathrm{in}$ 0FF position
ㅁ Gold 3u" MIN A =Gold 10u" MIN



1. Style:

This specification describes "WASHABLE OF DUAL IN-LINE PACKAGE SWITCHES", mainly used as signal switch of electric devices, with the general requirements of mechanical and electrical characteristics.
1.1 Operating Temperature Range : $-40^{\circ} \mathrm{C} \sim+85^{\circ} \mathrm{C}$
1.2 Storage Temperature Range :- $40^{\circ} \mathrm{C} \sim+85^{\circ} \mathrm{C}$
2. Current Range:
2.1 Non-Switching: $100 \mathrm{~mA}, 50 \mathrm{~V}$ DC
2.2 Switching: $25 \mathrm{~mA}, 24 \mathrm{~V}$ DC
3. Type of Actuation: Actuated by sliding
4. Test Sequence:

|  | ITEM | DESCRIPTION | TEST CONDITIONS | REQUIREMENTS |
| :---: | :---: | :---: | :---: | :---: |
|  | 1. | Visual Examination | By visual examination check without any out pressure \& testing. | There shall be no defects that affect the serviceability of the product. |
|  | 2. | Contact Resistance | 1)To be measured between the two terminals associated with each switch pole. <br> 2)Measurements shall be made with a 1 kHz shall current contact resistance meter. | $100 \mathrm{~m} \Omega$ max. (initial) |
|  | 3. | Insulation Resistance | 500 V DC , 1 minute $\pm 5 \mathrm{sec}$. | 100M $\mathrm{M}_{\text {min }}$ |
|  | 4. | Dielectric withstanding Voltage | $300 \mathrm{~V} \mathrm{AC}(50 \mathrm{~Hz}$ or 60 Hz$)$ shall be applied between all the adjacent terminals and between the terminal and the frame for 1 minute. | There shall be no breakdown or flashover. |
|  | 5. | Capacitance | $1 \mathrm{MHz} \pm 10 \mathrm{kHz}$ | 5 pF max. |



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| $\stackrel{\text { l }}{\text { ¢ }}$ | 11 | Operation Life | Measurements shall be made following the test set forth below: <br> 1) $25 \mathrm{~mA}, 24 \mathrm{~V}$ DC resistive load <br> 2)Rate of Operation : 15~20 cycles/minute <br> 3)Cycle of Operation : 1000 cycles | 1)As shown in item 3,4 <br> 2)Contact Resistance: $2 \Omega$ max. (final-after test) |  |
|  | 12 | Resistance Low Temperature | Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made : <br> 1)Temperature : $-40 \pm 3^{\circ} \mathrm{C}$ <br> 2)Time : 96 hours | 1)As shown in item 2~6 <br> 2)Contact Resistance: $2 \Omega$ max. (final-after test) |  |
|  | 13 | Resistance High Temperature | Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made : <br> 1)Temperature : $85 \pm 2^{\circ} \mathrm{C}$ <br> 2)Time : 96 hours | 1)As shown in item 3~6 <br> 2)Contact Resistance : $2 \Omega$ max. <br> (final-after test) |  |
|  | 14 | Resistance Humidity | Following the test set forth below the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made <br> 1)Temperature : $40 \pm 2^{\circ} \mathrm{C}$ <br> 2)Relative Humidity : 90~95\% <br> 3)Time : 96 hours |  | in esist e: n. |
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## 5. SOLDERING CONDITIONS:

- Condition for Soldering


TIME(sec)

- The condition mentioned above is the temperature on the Cu foil of the PCB surface. There are cases where board's temperature greatly differs from switch's surface temperature depending on board's material, size, thickness, etc. Care, therefore, should be used not to allow switch's surface temperature to exceed $260^{\circ} \mathrm{C}$.
- Manual Soldering

| Soldering Temperature | $\mathrm{Max}, 350^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Continuous Soldering Time | $\mathrm{Max}, 5$ seconds |

- Precautions in Handling

1. Care should be exercised so that flux from the upper part of the printed circuit board does not adhere to the switch.
2. Don't clean the switch body except with top tape sealed type, which can only spray of cleaning method from top of $s / w$.
3. Slide the $\mathrm{DHN}(\mathrm{F})$ actuator from Z axial direction with in $30^{\circ} \sim 120^{\circ}$ of max $300 \mathrm{gf} / 10$ sec operation.

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30^{\circ} \sim 12
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4. The suggest tool for actuator adjust is as below. ( example for 4 position )

