## 2HE Switch

## ESD/ESL SERIES <br> END-STACKABLE SMT TYPE



ESD


ESL

## FEATURES

- End stackable for standard 0.1" integrated circuit pitch.
- Molded 0.3 " integrated circuit packing outline allowing automatic insertion.
- Smaller size makes better heat convection during PC board reflow wave soldering.
- Top tape sealed to withstand wave soldering, board washing.
- All plastics are UL 94V-0 grade fire retardant.
- Twin contacts designed to ensure stable contact.
- Gold plated contact to ensure low contact resistance and Tin plated terminals to prevent contamination during soldering.
- RoHS Compliant


## APPLICATIONS

- Numerical setting for computer terminal equipment
- Price setting for vending machines
- Programming for game machines
- Programming for industrial equipment and measuring instruments


## SPECIFICATIONS

## 1.ELECTRICAL

| - Contact rating | switching | $25 \mathrm{~mA}, 24 \mathrm{VDC}$ |
| :--- | :--- | :--- |
|  | non-switching | 100 mA |
| • Contact resistance | initial | $50 \mathrm{~m} \Omega$ Max. |
|  | after life test | $100 \mathrm{~m} \Omega$ Max. |
| - Insulation resistance | $1000 \mathrm{M} \Omega$ Min. at 100 VDC |  |
|  | 500 VDC Min. for 60 seconds |  |
| $\bullet$ Capacitance between adjacent switches 5pF Max. |  |  |

## 2.MECHANICAL and ENVIRONMENTAL

| Temperature rating | operating | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| :--- | :--- | :--- |
|  | storage | $-40^{\circ} \mathrm{C}$ to $+85^{\circ} \mathrm{C}$ |
| - Operation force | 800 g Max. |  |
| - Mechanical life | 2000 operations |  |
| - Humidity | $95 \% \mathrm{RH}, 40^{\circ} \mathrm{C}$ for 96 Hrs. |  |
| - Vibration | $10 \mathrm{Hz-55Hz-10Hz} \mathrm{for} \mathrm{6Hrs}$. |  |
| - Resistance to soldering heat | Solder reflow:peak temperature $260^{\circ} \mathrm{C}$ Max. |  |
| - Reflow soldering process for SMT <br> type | Reference IEC 61760 |  |
|  |  |  |

## PART NUMBERING SYSTEM



## EnE Switch

## CONSTRUCTION

ESD


## ESL

3.Top Tape Sealed

1.Special marking is available
2.Extended Actuator


## PACKAGING

1.Tape \& Reel Packaging (per EIA STANDARD)


## ErE - 䦔 Switch

## DIMENSIONS AND CIRCUITRY

## ESD SERIES



## ESL SERIES

Dimension A
UNIT: mm(inch)

| Positions | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| A | 2.5 <br> $(0.098)$ | 5.04 <br> $(0.198)$ | $\underset{\substack{7.58 \\ (0.298)}}{ }$ | 10.12 <br> $(0.398)$ | 12.66 <br> $(0.498)$ | 15.2 <br> $(0.598)$ | 17.74 <br> $(0.698)$ | 20.28 <br> $(0.798)$ | 22.82 <br> $(0.898)$ | 25.36 <br> $(0.998)$ | 30.43 <br> $(1.198)$ |

CIRCUIT DIAGRAM

*ESL series: 1 pole switch is unavailable

(E)TYPE

P.C.B. LAYOUT (TOP VIEW)


