## DIP Switch (Rotary Type)

## Internally Sealed DIL-IC Type Rotary DIP Switch

- A precision rotary cam and contact driving mechanisms facilitate miniaturization.
- Reductions of $72 \%$ in height, $66 \%$ vertically, $90 \%$ horizontally and $43 \%$ in overall volume compared with the A6A allow for higher density mounting.
- Insert-molded terminals and an O-ring sealed rotor provide an airtight structure that keeps out dust, dirt and flux.

■ Offset between terminal pins and side of case allows simple circuit inspection.


RoHS Compliant (Refer to page 8 for details.)

## Ordering Information

| No. of switching positions | Type | Top actuated type | Side actuated type |
| :---: | :---: | :---: | :---: |
|  | Appearance <br> Output code |  |  |
| 10 | $\begin{aligned} & \text { BCD/hexadecimal } \\ & 1-2-4-8 \end{aligned}$ | A6C-10R (N) | A6CV-10R |
| 16 | BCD/hexadecimal $1-2-4-8$ | A6C-16R (N) | A6CV-16R |

Note: A6Cs are packaged 55 units to a stick. A6CVs are packaged 100 to a box.

## Specifications

## Ratings/Characteristics

| Switching capacity | 1 mA to 0.1 A (switching capacity) at 5 to 30 VDC <br> Minimum permissible load of $10 \mu \mathrm{~A}$ (resistor load) at 3.5 VDC <br> Ambient temperature |
| :--- | :--- |
| Operating: -20 to $70^{\circ} \mathrm{C}$ (no icing) |  |
| Ambient humidity | 35 to $95 \%$ |
| Insulation resistance | $100 \mathrm{M} \Omega$ min. (at 250 VDC ) |
| Contact resistance | $200 \mathrm{~m} \Omega$ max. |
| Dielectric strength | 250 VAC for 1 minute between terminals of the same pole |
| Vibration resistance | Malfunction: 10 to $55 \mathrm{~Hz}, 1.5 \mathrm{~mm}$ double amplitude |
| Shock resistance | Malfunction: Approx. $300 \mathrm{~m} / \mathrm{s}^{2}$ |
| Life expectancy | Mechanical: 10,000 operations min. <br> Electrical: 2000 operations min. |
| Operating torque | $0.98 \times 10^{-2} \mathrm{~N} \cdot \mathrm{~m}$ max. |
| Weight | A6C-10R ( N ): approx. 0.4 g <br> A6CV-10R: approx. 0.7 g |

## Output Code Tables

10-position Models

| Type <br> Code <br> Position | A6C-10R, A6CV-10R |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 4 | 8 |
|  |  |  |  |  |
| 1 | $\bullet$ |  |  |  |
| 2 |  | $\bullet$ |  |  |
| 3 | $\bullet$ | $\bullet$ |  |  |
| 4 |  | $\bullet$ |  | $\bullet$ |
| 5 |  | $\bullet$ | $\bullet$ |  |
| 6 | $\bullet$ | $\bullet$ | $\bullet$ |  |
| 7 |  |  |  |  |
| 8 |  | $\bullet$ |  |  |
| 9 |  |  |  |  |

16-position Models

| Type <br> Code <br> Position | A6C-16R, A6CV-16R |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | BCD/hexadecimal 1-2-4-8 code |  |  |  |
|  | 1 | 2 | 4 | 8 |
| 0 |  |  |  |  |
| 1 | $\bullet$ |  |  |  |
| 2 |  | $\bullet$ |  |  |
| 3 | $\bullet$ | $\bullet$ |  |  |
| 4 |  |  | $\bullet$ |  |
| 5 | $\bullet$ |  | $\bullet$ |  |
| 6 |  | $\bullet$ | $\bullet$ |  |
| 7 | $\bullet$ | $\bullet$ | $\bullet$ |  |
| 8 |  |  |  | - |
| 9 | $\bullet$ |  |  | $\bullet$ |
| A |  | $\bullet$ |  | $\bullet$ |
| B | $\bullet$ | $\bullet$ |  | $\bullet$ |
| C |  |  | $\bullet$ | $\bullet$ |
| D | $\bullet$ |  | $\bullet$ | $\bullet$ |
| E |  | $\bullet$ | $\bullet$ | $\bullet$ |
| F | $\bullet$ | $\bullet$ | $\bullet$ | $\bullet$ |

Note: " $\bullet$ " in the above tables shows the output terminal No. that has continuity with the common terminal (C).

## Dimensions

Note: All units are in millimeters unless otherwise indicated.

Top Actuated, 10 Positions A6C-10R (N)


Top Actuated, 16 Positions A6C-16R (N)



Side Actuated, 16 Positions
A6CV-16R


## Terminal Arrangement

Top Actuated Models
Terminal arrangement (top view)


Side Actuated Models
Terminal arrangement (top view)


## Installation

Note: All units are in millimeters unless otherwise indicated.

Internal connections (top view)


Actuator surface (A6CV)

Mounting holes (top view)
(One-sided PCB, $\mathrm{t}=1.2$ to 1.6 )


## Precautions

Be sure to refer to General Precautions on pages 5 to 7 for details on proper use.

