

# General Specifications

## Electrical Capacity (Resistive Load)

**Logic Level:** 0.4VA maximum @ 28V AC/DC maximum  
(Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)  
Note: Find additional explanation of operating range in Supplement section.

## Other Ratings

**Contact Resistance:** 50 milliohms maximum  
**Insulation Resistance:** 500 megohms minimum @ 500V DC  
**Dielectric Strength:** 500V AC minimum for 1 minute minimum  
**Mechanical Life:** 50,000 operations minimum  
**Electrical Life:** 50,000 operations minimum  
**Nominal Operating Force:** 2.55N  
**Contact Timing:** Nonshorting (break-before-make)  
**Travel:** Pretravel: .082" (2.1mm); Overtravel: .016" (0.4mm); Total Travel: .098" (2.5mm)

## Materials & Finishes

**Actuator:** Glass fiber reinforced polyamide  
**Upper Case Housing:** Carbon blended polyacetal (antistatic)  
**Lower Case Housing:** Glass fiber reinforced polyamide  
**Support Bracket:** Tin plated phosphor bronze  
**Movable Contact:** Phosphor bronze with gold plating  
**Stationary Contacts:** Brass with gold plating  
**Terminals:** Brass with gold plating

## Environmental Data

**Operating Temperature Range:** -30°C through +85°C (-22°F through +185°F)  
**Humidity:** 90 ~ 95% humidity for 192 hours @ 40°C (104°F)  
**Vibration:** 10 ~ 60Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 5 minutes; 3 right angled directions for 30 minutes  
**Shock:** 50G (490m/s<sup>2</sup>) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

## PCB Processing

**Soldering:** Wave Soldering Recommended. See Profile A in Supplement section.  
Manual Soldering: for single pole see Profile B in Supplement section; for double pole see Profile A.  
**Cleaning:** These devices are not process sealed. Hand clean locally using alcohol based solution.

## Standards & Certifications

The A Series slides have not been tested for UL recognition or CSA certification. These switches are designed for use in a low-voltage, low-current, logic-level circuit. When used as intended in a logic-level circuit, the results do not produce hazardous energy.

# Distinctive Characteristics

Subminiature size (1/3 size of Series M switches) saves space on PC boards.

Specifically developed for logic-level applications.

Award-winning STC contact mechanism with benefits unavailable in conventional mechanisms: smoother, positive detent actuation, increased contact stability and unparalleled logic-level reliability. (Additional STC details in Terms & Acronyms; see Supplement section.)

Available in various actuator lengths.

Antistatic superstructure of carbon blended polyacetal prevents static discharge to the contacts.

Molded-in, epoxy sealed or ultrasonically welded terminals lock out flux, solvents, and other contaminants.

.100" x .100" (2.54mm x 2.54mm) terminal spacing conforms to standard PC board grid spacing.

Matching indicators available.



Actual Size



## TYPICAL SWITCH ORDERING EXAMPLE

**AS**      **2**      **2**      **A**      **H**

| Poles |              | Circuits |    |      |     | Actuators |                    | PC Terminals |                          |
|-------|--------------|----------|----|------|-----|-----------|--------------------|--------------|--------------------------|
| 1     | SPST<br>SPDT | 1        | ON | NONE | OFF | A         | .098" (2.5mm) Long | P            | Straight                 |
| 2     | DPDT<br>SP3T | 2        | ON | NONE | ON  | B         | Flush              | *B           | Straight with Bracket    |
|       |              | 3        | ON | OFF  | ON  | C         | .150" (3.8mm) Long | *H           | Right Angle with Bracket |
|       |              | 4        | ON | ON   | ON  |           |                    | *V           | Vertical with Bracket    |

\*Bracketed models are ESD protected

### DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

**AS22AH**

DPDT  
ON-NONE-ON Circuit

.098" (2.5mm) Long  
Actuator



Right Angle PC Terminals

## POLES & CIRCUITS

| Pole | Model        | Slide Position |             |          | Connected Terminals |              |                    | Throw & Schematics                                                                         |
|------|--------------|----------------|-------------|----------|---------------------|--------------|--------------------|--------------------------------------------------------------------------------------------|
|      |              | Left           | Center      | Right    | Left                | Center       | Right              |                                                                                            |
| SP   | AS11         | ON             | NONE        | OFF      | 3-1                 | OPEN         | OPEN               | SPST  |
| SP   | AS12<br>AS13 | ON<br>ON       | NONE<br>OFF | ON<br>ON | 2-1<br>2-1          | OPEN<br>OPEN | 2-3<br>2-3         | SPDT  |
| DP   | AS22<br>AS23 | ON<br>ON       | NONE<br>OFF | ON<br>ON | 2-1 5-4<br>2-1 5-4  | OPEN<br>OPEN | 2-3 5-6<br>2-3 5-6 | DPDT  |

Note: Terminal numbers are not actually on the switch.

### For 3 Throw (3-On)

| Pole | Model | Connected Terminals & Schematics                                                                     |                                                                                                      |                                                                                                       | External Connection                                                                                                                                                                                   |
|------|-------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|      |       | Left                                                                                                 | Center                                                                                               | Right                                                                                                 |                                                                                                                                                                                                       |
| SP   | AS24  | ON<br><br>2-1 5-4 | ON<br><br>2-3 5-4 | ON<br><br>2-3 5-6 | The SP3T model utilizes a double pole base.<br><br>External connections must be made during field installation.  |

## ACTUATORS



Actuator Color: Gray standard; contact factory for other colors.

## PC TERMINALS



Use of a support bracket is recommended to increase PCB mounting strength and stability.

## TYPICAL SWITCH DIMENSIONS

### Single Pole



Actuator shown in LEFT position

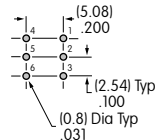
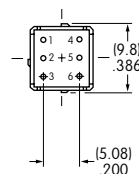
Single throw models do not have terminal 2.

### Straight PC



AS12AP

### Double Pole



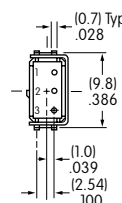
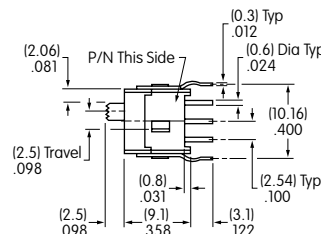
Actuator shown in LEFT position

### Straight PC



AS22AP

### Single Pole



Actuator shown in LEFT position

### Straight PC • Bracket



AS12AB

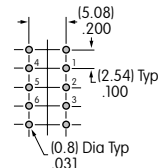
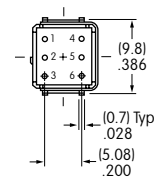
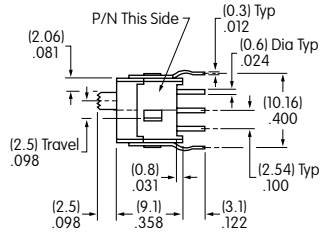
## TYPICAL SWITCH DIMENSIONS

### Straight PC • Bracket



AS22AB

### Double Pole



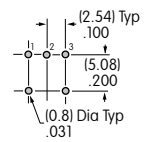
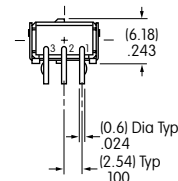
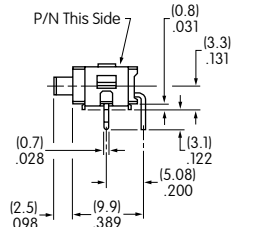
Actuator shown in LEFT position

### Right Angle PC



AS12AH

### Single Pole



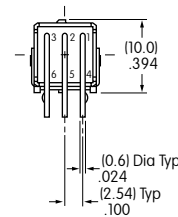
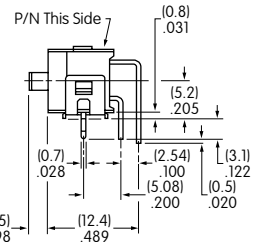
Actuator shown in LEFT position

### Right Angle PC



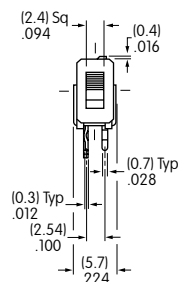
AS22AH

### Double Pole



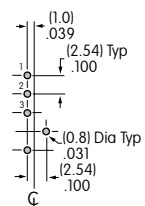
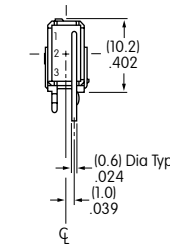
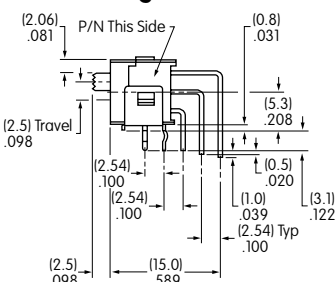
Actuator shown in LEFT position

### Vertical PC



AS12AV

### Single Pole



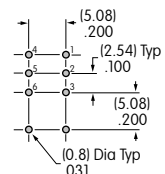
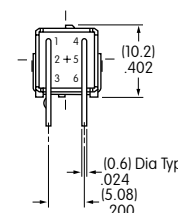
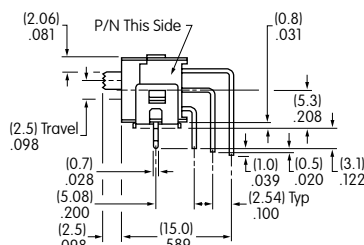
Actuator shown in LEFT position

### Vertical PC



AS22AV

### Double Pole



Actuator shown in LEFT position

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



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