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/s²) 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.
Subminiature Slides

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.
### TYPICAL SWITCH ORDERING EXAMPLE

**AS22AH**

**POLES & CIRCUITS**

<table>
<thead>
<tr>
<th>Pole</th>
<th>Model</th>
<th>Left</th>
<th>Center</th>
<th>Right</th>
<th>Left</th>
<th>Center</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP</td>
<td>AS11</td>
<td>ON</td>
<td>NONE</td>
<td>OFF</td>
<td>3-1</td>
<td>OPEN</td>
<td>OPEN</td>
</tr>
<tr>
<td>SP</td>
<td>AS12 AS13</td>
<td>ON</td>
<td>ON</td>
<td>NONE OFF</td>
<td>ON</td>
<td>ON</td>
<td>ON</td>
</tr>
<tr>
<td>DP</td>
<td>AS22 AS23</td>
<td>ON</td>
<td>ON</td>
<td>NONE OFF</td>
<td>ON</td>
<td>2-1 5-4</td>
<td>OPEN OPEN</td>
</tr>
</tbody>
</table>

Note: Terminal numbers are not actually on the switch.

**For 3 Throw (3-On)**

<table>
<thead>
<tr>
<th>Pole</th>
<th>Model</th>
<th>Left</th>
<th>Center</th>
<th>Right</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP</td>
<td>AS24</td>
<td>ON</td>
<td>ON</td>
<td>ON</td>
</tr>
</tbody>
</table>

**Internal Connections**

**External Connections**

The SP3T model utilizes a double pole base.

External connections must be made during field installation.
**Subminiature Slides**

### ACTUATORS

- **A** .098" (2.5mm) Long
- **B** Flush
- **C** .150" (3.8mm) Long

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

### PC TERMINALS

- **P** Straight
- **B** Straight with Bracket
- **H** Right Angle with Bracket
- **V** Vertical with Bracket

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

### TYPICAL SWITCH DIMENSIONS

#### Single Pole

- **Straight PC**

#### Double Pole

- **Straight PC**

#### Single Pole • Bracket

*Actuator shown in LEFT position*