

General Specifications

Electrical Capacity (Resistive Load)

| | |
|-----------------------------|---------------|
| Switching Rating: | 25mA @ 24V DC |
| Nonswitching Rating: | 0.1A @ 50V DC |

Other Ratings

| | |
|-------------------------------|--|
| Contact Resistance: | 50 milliohms maximum |
| Insulation Resistance: | 100 megohms minimum @ 500V DC |
| Dielectric Strength: | 500V AC minimum for 1 minute minimum |
| Mechanical Life: | 2,000 operations minimum |
| Electrical Life: | 2,000 operations minimum |
| Total Travel: | For slide actuator: .031" (0.8mm); for piano actuator: .114" (2.9mm) |

Materials & Finishes

| | JS01 Slide DIP | JS03 Piano DIP |
|-------------------|--|--------------------------------------|
| Actuator: | Glass fiber reinforced polyamide | Glass fiber reinforced PBT |
| Cover: | Glass fiber reinforced polyamide (UL94V-0) | Glass fiber reinforced PBT (UL94V-0) |
| Base: | Glass fiber reinforced polyamide (UL94V-0) | Glass fiber reinforced PBT (UL94V-0) |
| Contacts: | Beryllium copper with gold plating | Phosphor bronze with gold plating |
| Terminals: | Brass with gold plating | Phosphor bronze with gold plating |

Environmental Data

| | |
|------------------------------|--|
| Operating Temp Range: | -25°C through +70°C (-13°F through +158°F) |
| Humidity: | 90 ~ 95% humidity for 96 hours @ 40°C (104°F) |
| Vibration: | 10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 1 minute; 3 right angled directions for 2 hours |
| Shock: | 50G (490m/s ²) 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: See Profile A in Supplement section. Note: Switches are packaged in OFF position and should be soldered in OFF position. |
| Cleaning: | These devices are not process sealed. Hand clean locally using alcohol based solution. |

Standards & Certifications

| | |
|--------------------------------|--|
| Flammability Standards: | UL 94V-0 rated cover & base The JS series devices have not been tested for UL recognition and CSA certification. These switches are designed for use in a low-voltage, low-current circuit. When used as intended in a low-voltage, low-current circuit, the results do not produce hazardous energy. |
|--------------------------------|--|

Distinctive Characteristics

Slide type and piano type actuators available.

Twin sliding contact mechanism with self-cleaning action (JS01) provides smooth actuation and produces high contact reliability.

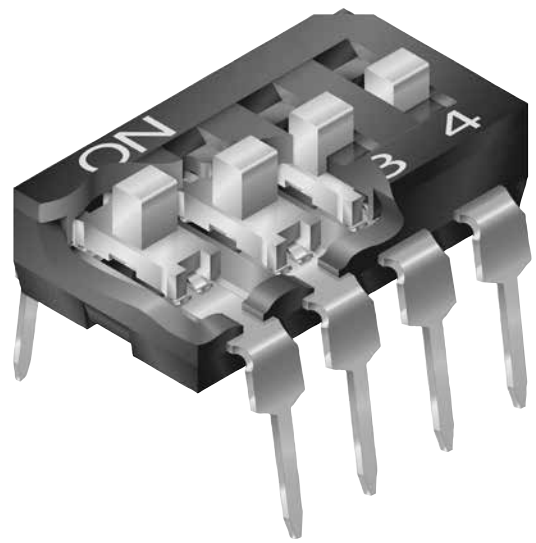
Gold plated contacts prevent oxidation and sulfide effect and provide stable contact resistance.

Use of self-extinguishing UL94V-0 certified material in cover and base provides high arc resistance and high insulation resistance.

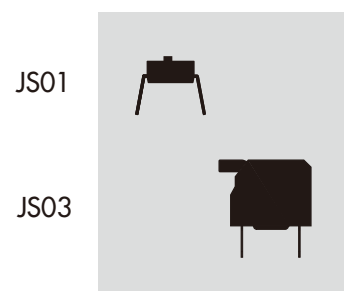
Slanted terminals ensure secure PCB mounting and prevent dislodging during wave soldering.

Terminal spacing conforms to standard .100" (2.54mm) PCB grid.

End-to-end stackable.

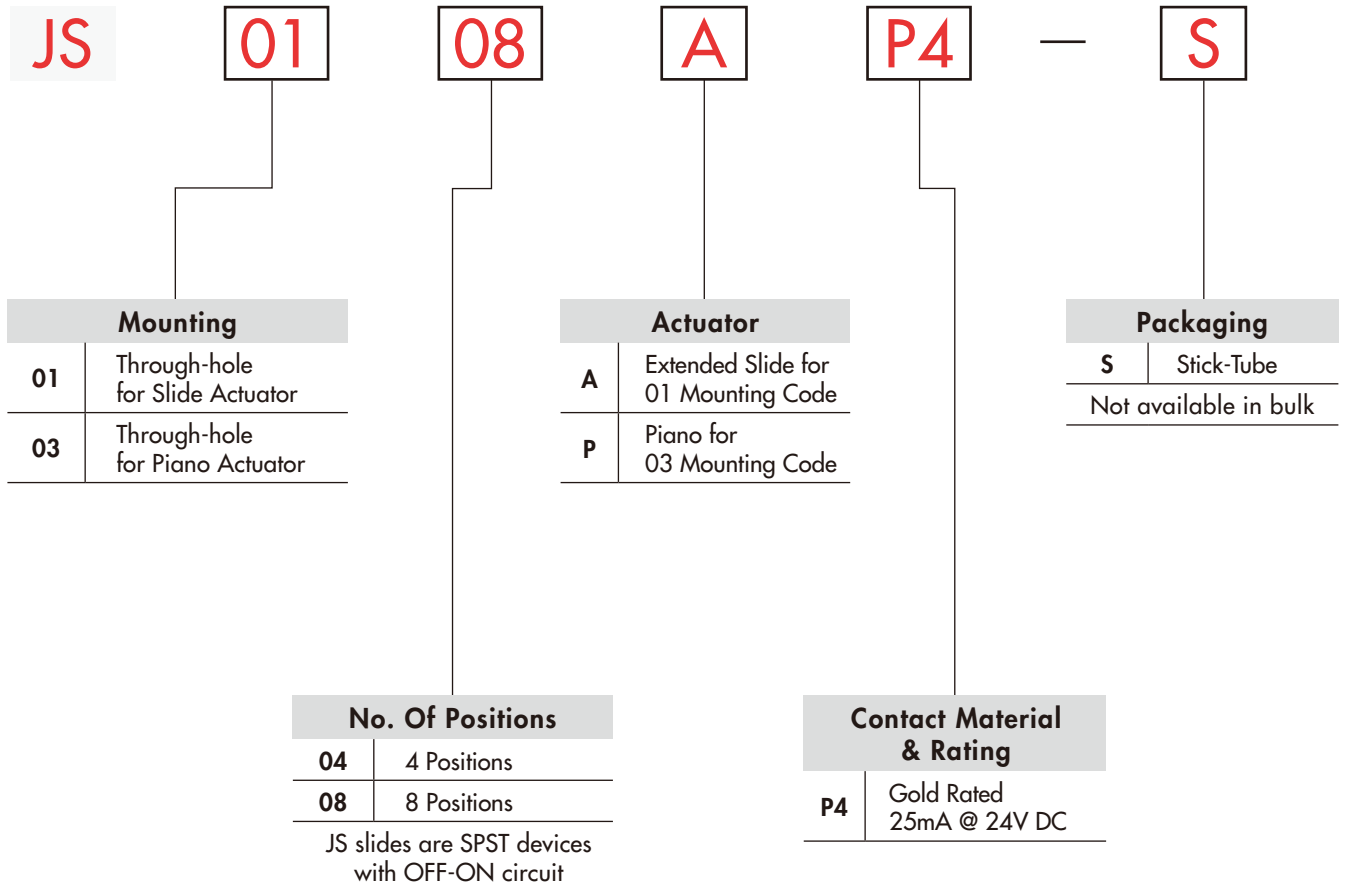


Actual Sizes



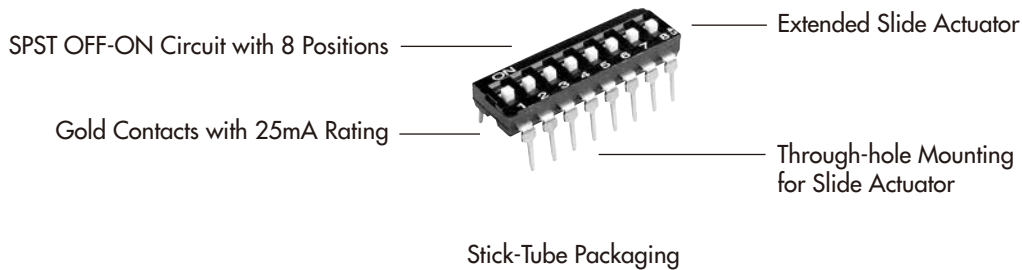
Toggles
Rockers
Pushbuttons
Illuminated PB
Programmable
Keylocks
Rotaries
Slides **H**
Tactiles
Tilt
Touch
Indicators
Accessories
Supplement

TYPICAL SWITCH ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

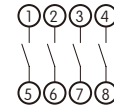
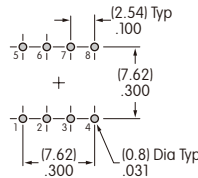
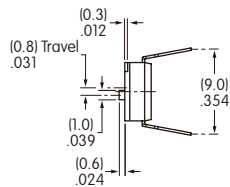
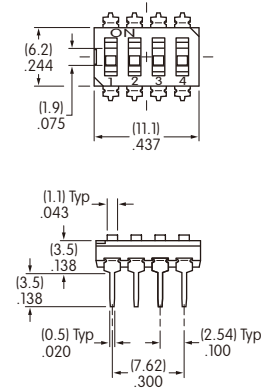
JS0108AP4-S



TYPICAL SWITCH DIMENSIONS

Slide Actuator

4 Positions



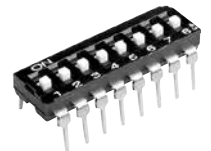
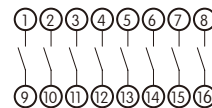
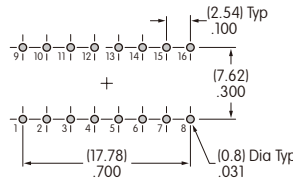
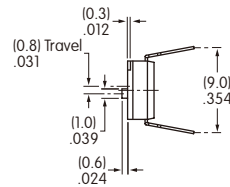
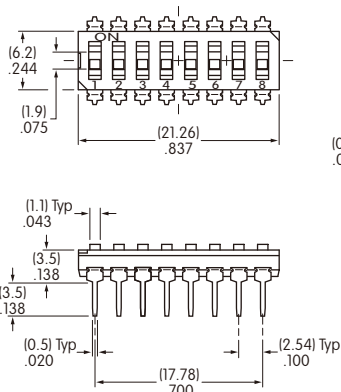
End View

Schematic

JS0104AP4

Slide Actuator

8 Positions



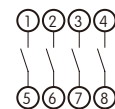
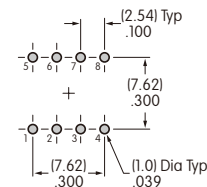
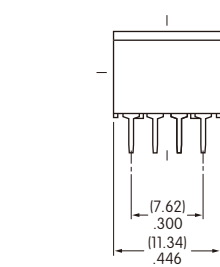
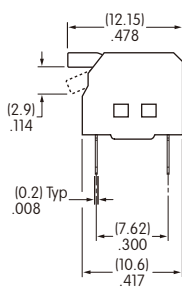
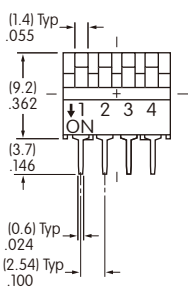
End View

Schematic

JS0108AP4

Piano Actuator

4 Positions

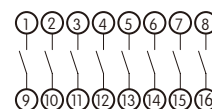
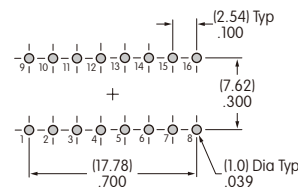
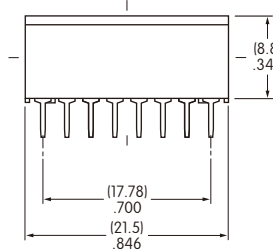
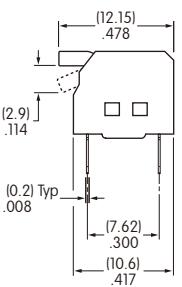
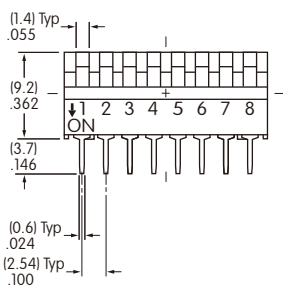


Schematic

JS0304PP4

Piano Actuator

8 Positions



Schematic

JS0308PP4

Toggle
Rockers
Pushbuttons
Illuminated PB
Programmable
Keylocks
Rotaries
Slides
Tactiles
Tilt
Touch
Indicators
Accessories
Supplement

Toggles
Rocker
Pushbuttons
Illuminated PB
Programmable
Keylocks
Rotaries
Slides
Tactiles
Tilt
Touch
Indicators
Accessories
Supplement

PACKAGING

S

Stick-Tube Packaging

Switches are not available in bulk and must be ordered in increments of:

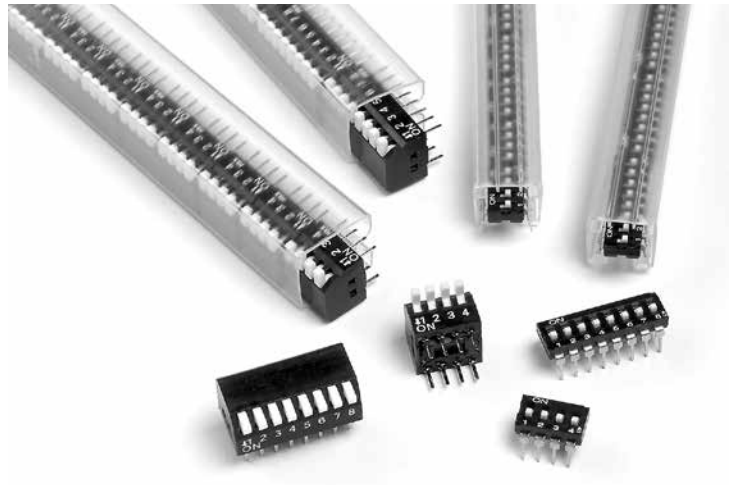
Slide Actuator

JS0104AP4-S: 46 pieces per stick-tube
JS0108AP4-S: 24 pieces per stick-tube

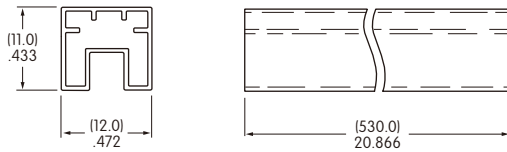
Piano Actuator

JS0304PP4-S: 44 pieces per stick-tube
JS0308PP4-S: 23 pieces per stick-tube

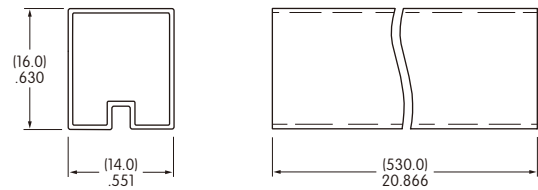
Switches are packaged in OFF position.



**Stick-Tube Dimensions for Slide Actuator
JS0104AP4-S & JS0108AP4-S**



**Stick-Tube Dimensions for Piano Actuator
JS0304PP4-S & JS0308PP4-S**



General Specifications

Electrical Capacity (Resistive Load)

| | |
|-----------------------------|---------------|
| Switching Rating: | 25mA @ 24V DC |
| Nonswitching Rating: | 0.1A @ 50V DC |

Other Ratings

| | JS02 Extended Actuator | JS04 Flush Actuator |
|-------------------------------|--------------------------------------|--------------------------------------|
| Contact Resistance: | 50 milliohms maximum | 50 milliohms maximum |
| Insulation Resistance: | 100 megohms minimum @ 500V DC | 100 megohms minimum @ 100V DC |
| Dielectric Strength: | 500V AC minimum for 1 minute minimum | 300V AC minimum for 1 minute minimum |
| Mechanical Life: | 2,000 operations minimum | 2,000 operations minimum |
| Electrical Life: | 2,000 operations minimum | 2,000 operations minimum |
| Total Travel: | .031" (0.8mm) | .026" (0.65mm) |

Materials & Finishes

| | JS02 Extended Actuator | JS04 Flush Actuator |
|-------------------|--|--|
| Actuator: | Glass fiber reinforced polyamide | Glass fiber reinforced polyamide |
| Cover: | Glass fiber reinforced polyamide (UL94V-0) | Glass fiber reinforced polyamide (UL94V-0) |
| Base: | Glass fiber reinforced polyamide (UL94V-0) | Glass fiber reinforced polyamide (UL94V-0) |
| Contacts: | Beryllium copper with gold plating | Copper alloy with gold plating |
| Terminals: | Brass with gold plating | Brass with gold plating |

Environmental Data

| | |
|------------------------------|--|
| Operating Temp Range: | JS02 Extended Actuator: -20°C through +70°C (-4°F through +158°F) JS04 Flush Actuator: -30°C through +85°C (-22°F through +185°F) |
| Humidity: | 90 ~ 95% humidity for 96 hours @ 40°C (104°F) |
| Vibration: | 10 ~ 55Hz with peak-to-peak amplitude of 1.5mm traversing the frequency range & returning in 1 minute; 3 right angled directions for 2 hours |
| Shock: | 50G (490m/s ²) acceleration (tested in 6 right angled directions, with 5 shocks in each direction) |

PCB Processing

| | |
|-------------------|---|
| Soldering: | Reflow Soldering Recommended. See Profile A in Supplement section. Manual Soldering: See Profile A in Supplement section. Note: Switches are packaged in OFF position and should be soldered in OFF position. |
| Cleaning: | These devices are not process sealed. Hand clean locally using alcohol based solution. |

Standards & Certifications

| | |
|--------------------------------|--|
| Flammability Standards: | UL 94V-0 rated cover & base The JS Series slides have not been tested for UL recognition or CSA certification. These switches are designed for use in a low-voltage, low-current circuit. When used as intended in a low-voltage, low-current circuit, the results do not produce hazardous energy. |
|--------------------------------|--|

Toggle
Rockers
Pushbuttons
Illuminated PB
Programmable
Keylocks
Rotaries
Slides
Tactiles
Tilt
Touch
Indicators
Accessories
Supplement

Distinctive Characteristics

Extended and flush slide actuators available.

Twin sliding contact mechanism with self-cleaning action (JS02) provides smooth actuation and produces high contact reliability.

Gold plated contacts prevent oxidation and sulfide effect and provide stable contact resistance.

Use of self-extinguishing UL94V-0 certified material in cover and base provides high arc resistance and high insulation resistance.

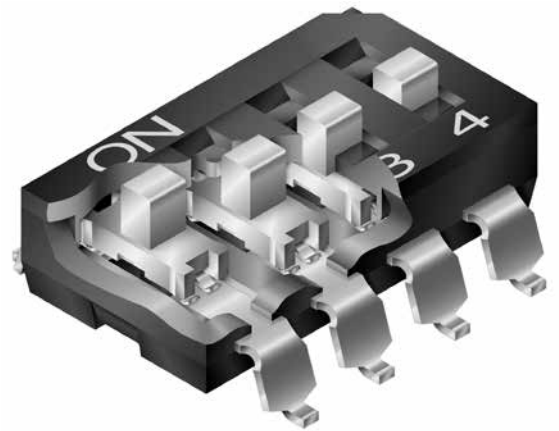
Gull-wing terminals ensure secure PCB mounting and prevent dislodging during vapor phase and infrared convection reflow soldering.

Terminal spacing conforms to standard PCB grid.
For JS02: .100" (2.54mm)
For JS04: .050" (1.27mm)

End-to-end stackable.

Packaged in tape-reel or stick-tube. Tape-reel packaging meets EIA-481-D Standard.

Coplanarity: all considered surfaces must lie between two parallel planes that are a maximum distance apart of .0059" (0.15mm). (Additional coplanarity details in Terms and Acronyms in the Supplement section.)



Actual Sizes

JS02

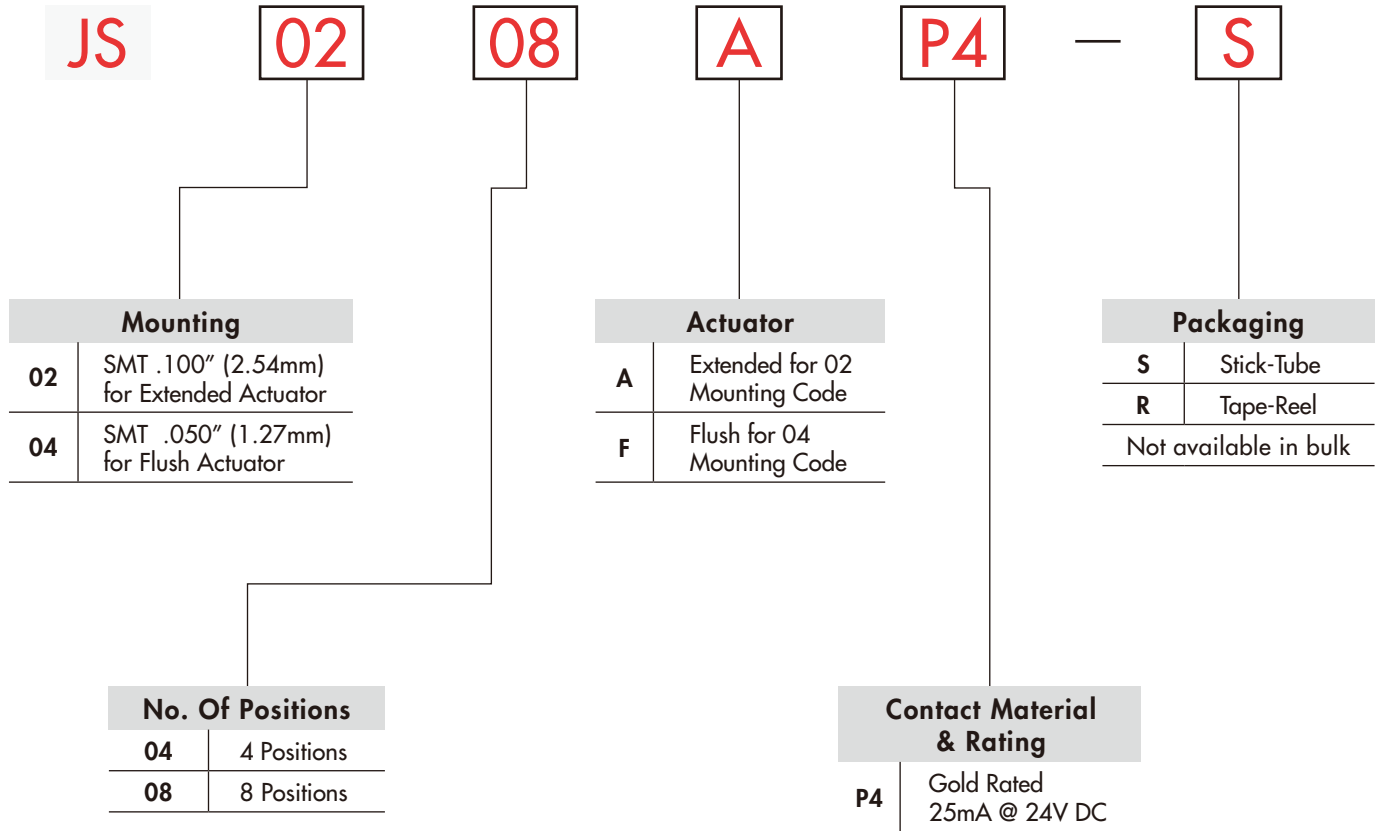


JS04



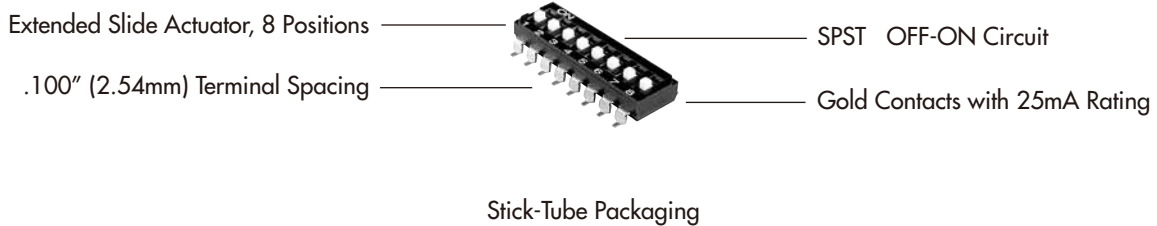
Toggles
Rocker
Pushbuttons
Illuminated PB
Programmable
Keylocks
Rotaries
Slides **H**
Tactiles
Tilt
Touch
Indicators
Accessories
Supplement

TYPICAL SWITCH ORDERING EXAMPLE



DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

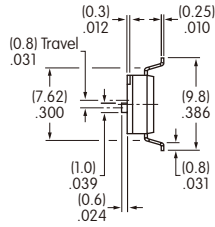
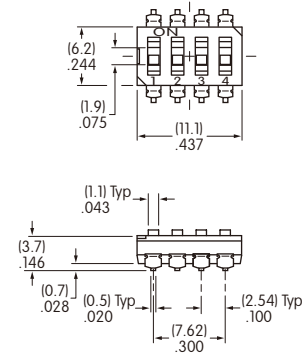
JS0208AP4-S



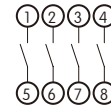
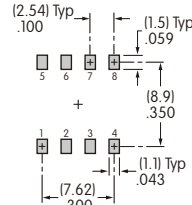
TYPICAL SWITCH DIMENSIONS

Single Pole

4 Positions • Extended Actuator



End View

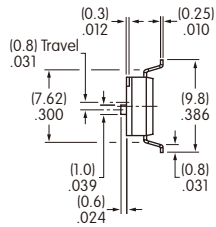
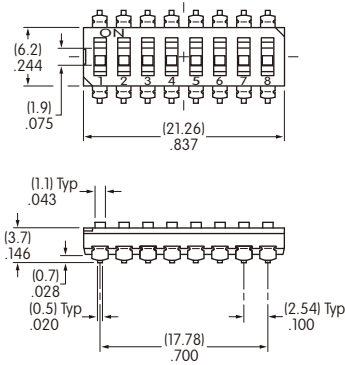


Schematic

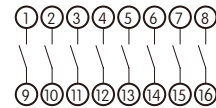
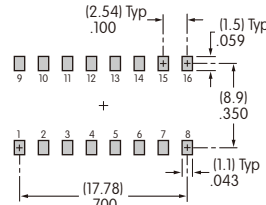
JS0204AP4

Single Pole

8 Positions • Extended Actuator



End View

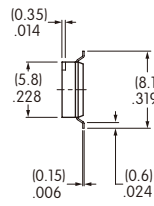
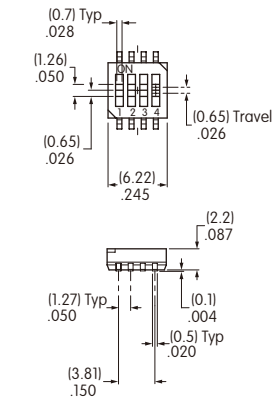


Schematic

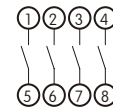
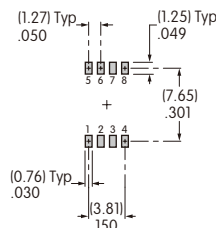
JS0208AP4

Single Pole

4 Positions • Flush Actuator



End View

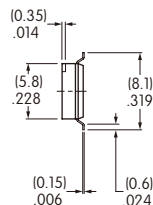
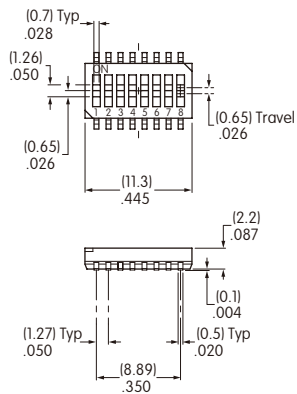


Schematic

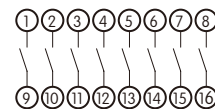
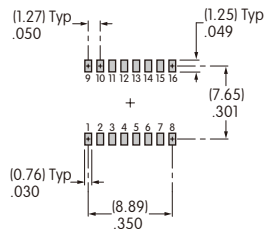
JS0404FP4

Single Pole

8 Positions • Flush Actuator



End View



Schematic

JS0408FP4

PACKAGING

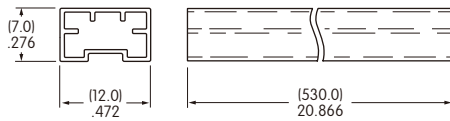
S

Stick-Tube Packaging

Switches are packaged in OFF position. Switches are not available in bulk and must be ordered in the following increments:

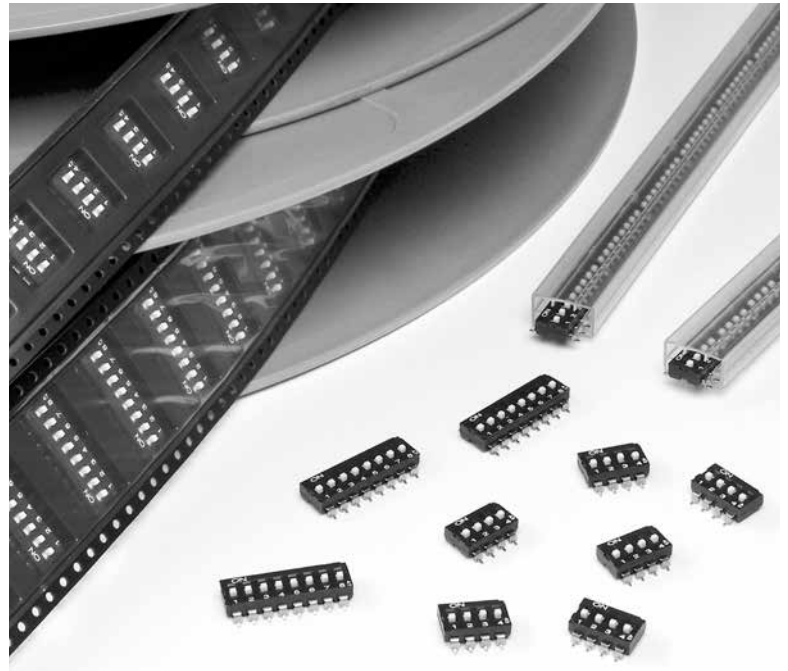
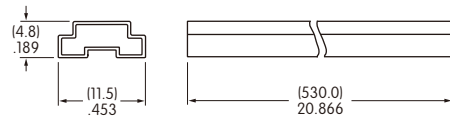
Extended Actuator

JS0204AP4-S: 46 pieces per stick-tube
 JS0208AP4-S: 24 pieces per stick-tube



Flush Actuator

JS0404FP4-S: 80 pieces per stick-tube
 JS0408FP4-S: 45 pieces per stick-tube



R

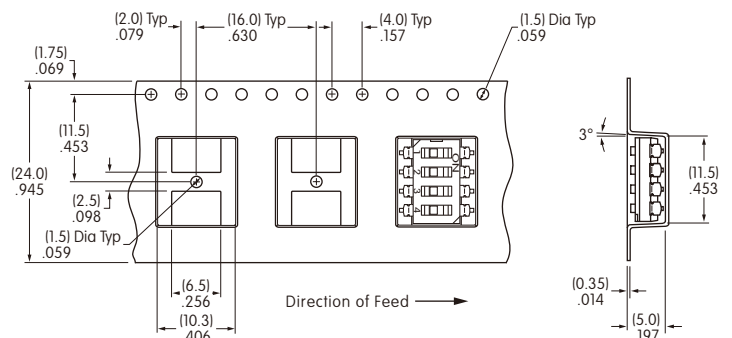
Tape-Reel Packaging for Extended Actuator

Switches are packaged in OFF position. Switches are not available in bulk and must be ordered in the following increments:

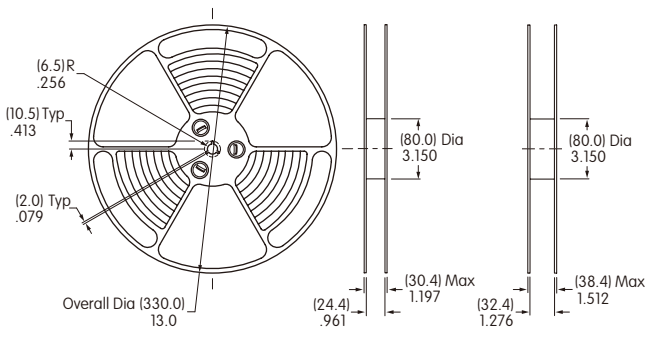
JS0204AP4-R: 500 pieces per tape-reel
 JS0208AP4-R: 500 pieces per tape-reel

Minimum Leader Length: 15.75" (400mm)
 Minimum Trailer Length: 6.3" (160mm)

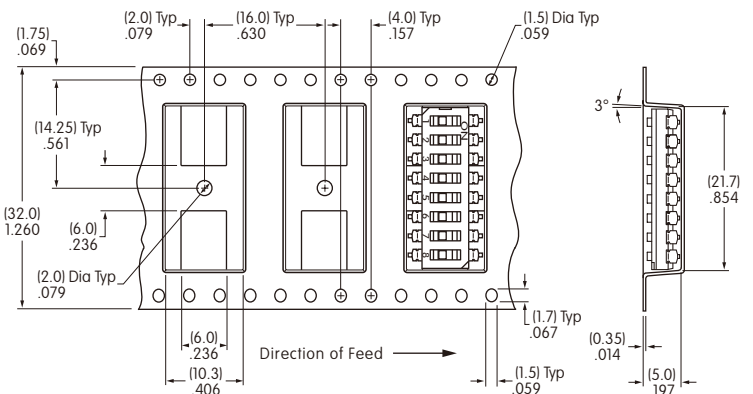
Tape-reel packaging meets EIA-481-D Standard.



Tape Dimensions for JS0204AP4-R



Reel Dimensions JS0204AP4-R JS0208AP4-R



Tape Dimensions for JS0208AP4-R

PACKAGING (CONTINUED)



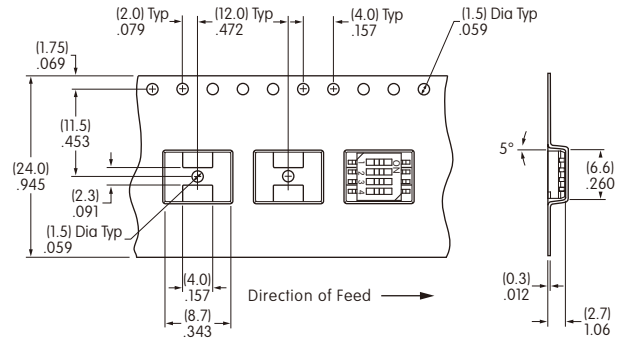
Tape-Reel Packaging for Flush Actuator

Switches are packaged in OFF position. Switches are not available in bulk and must be ordered in the following increments:

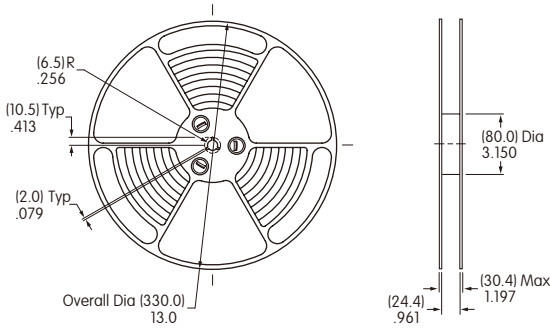
- JS0404FP4-R: 2,000 pieces per tape-reel
- JS0408FP4-R: 2,000 pieces per tape-reel

Minimum Leader Length: 15.75" (400mm)
 Minimum Trailer Length: 6.3" (160mm)

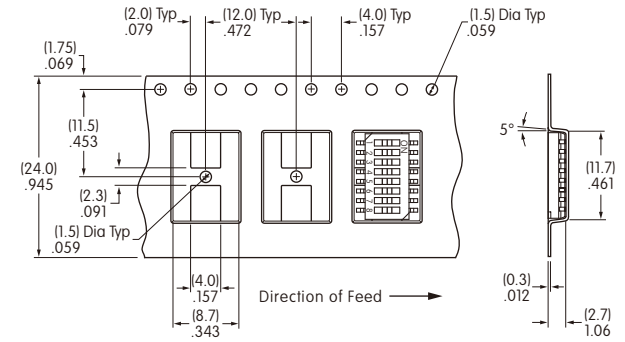
Tape-reel packaging meets EIA-481-D Standard.



Tape Dimensions for JS0404FP4-R



Reel Dimensions for JS0404FP4-R & JS0408FP4-R



Tape Dimensions for JS0408FP4-R