

## Distinctive Characteristics

Compact dimensions and low profile allow high density mounting and close stacking of PC boards.

Crisp actuation positively indicates circuit status.

Heat resistant resin allows vapor phase and infrared convection reflow soldering.

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

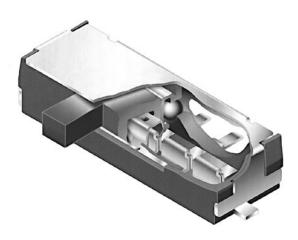




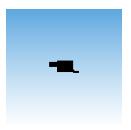
Gull-wing terminals provide mechanical stability during soldering and simplified solder joint inspection.

Packaged in tape-reel or partitioned tray. Tape-reel packaging meets EIA-481-2 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 Size





# General Specifications

## **Electrical Capacity (Resistive Load)**

Logic Level (code 4): 0.4VA maximum @ 28V AC/DC maximum

(Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V)

0.1A@12VDC

Note: Find additional explanation of operating range in Supplement section.

## 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: 10,000 operations minimum **Electrical Life:** 10,000 operations minimum

SS312S ~ Shorting (make-before-break); SS314M ~ Nonshorting (break-before-make) Contact Timina:

Total Travel: .079" (2.0mm)

## **Materials & Finishes**

Polyphenylene sulfide Actuator:

Phosphor bronze with tin plating (UL94V-0) Housina:

Polyphenylene sulfide (UL94V-0) Base:

Phosphor bronze with gold plating over silver plating (code 4) Movable Contactor:

Phosphor bronze with gold plating Terminals:

#### **Environmental Data**

**Operating Temp Range:** -25°C through +85°C (-13°F through +185°F)

> 90 ~ 95% humidity for 240 hours @ 40°C (104°F) **Humidity:**

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<sup>2</sup>) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

#### Installation

Reflow Soldering Recommended. See Profile A in Supplement section. **Soldering:** 

Manual Soldering: See Profile A in Supplement section.

These devices are not process sealed. Cleaning:

#### **Standards & Certifications**

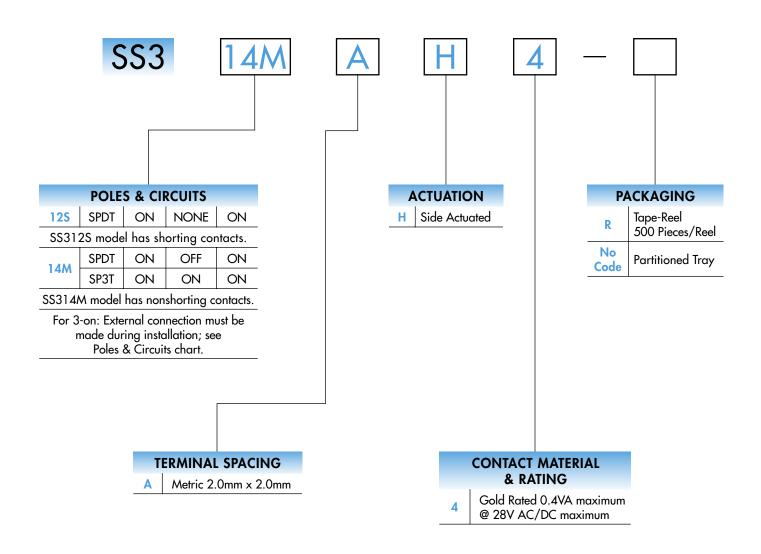
Flammability Standards: UL 94V-0 rated housing & base

**UL Recognition** The SS3 Series slides have not been tested for UL recognition or CSA certification. 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.



## TYPICAL SWITCH ORDERING EXAMPLE



#### **DESCRIPTION FOR TYPICAL ORDERING EXAMPLE**

**SS314MAH4** 





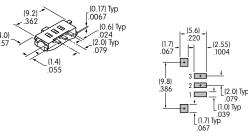


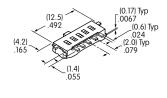
POLES & CIRCUITS								
		Slide Position			Connected Terminals			Throw & Schematics
Pole	Model	Right	Center	Left	Right	Center	Left	Note: Terminal numbers are not actually on switch.
SP	\$\$312\$	ON	NONE	ON	2-1	OPEN	2-3	SPDT 1 2 (COM) 3
SP	\$\$314M	ON	OFF	ON	3-5	4-2	3-1	SPDT
		ON	ON	ON	3-5	3-4	3-1	SP3T  External connection must be made during installation to create ON-ON-ON circuit.

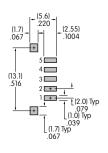
## **TERMINAL SPACING**



## Metric 2.0mm x 2.0mm







SS312

SS314

## **ACTUATION**



Side Actuated



## **CONTACT MATERIALS & RATING**

Gold over Silver/Phosphor Bronze

**Logic Level** 

0.4VA maximum @ 28V AC/DC maximum

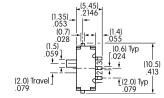
Complete explanation of operating range in Supplement section.



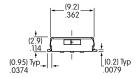
## **TYPICAL SWITCH DIMENSIONS**

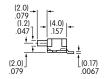
## **Shorting Contacts**

**Single Pole** 

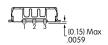








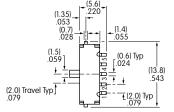
Coplanar Dimension



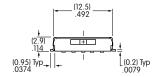
SS312SAH4

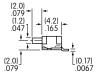
## **Nonshorting Contacts**

Single Pole

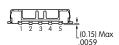








Coplanar Dimension



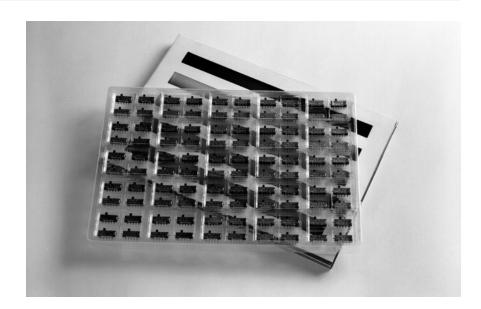
**SS314MAH4** 

## **PACKAGING**



## **Partitioned Tray**

If the SS3 is ordered in less than 500-piece increments, the switches are packaged in a partitioned tray. No code is required.





## **PACKAGING**



## **Tape-Reel Packaging**

Switches must be ordered in 500-piece increments when tape-reel packaging is selected.

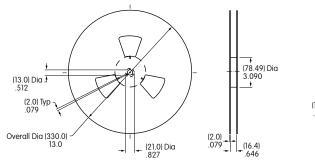
Tape-reel packaging meets EIA-481-2 Standard.

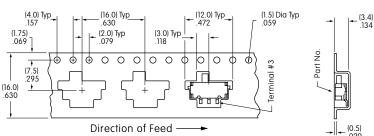


## Tape-Reel Packaging for SS312SAH4

Each tape-reel of 530 pockets contains 500 switches.

Minimum Leader Length: 11.97" (304mm) Minimum Trailer Length: 6.93" (176mm)





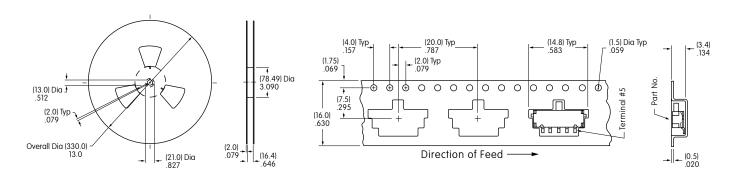
Reel Dimensions

Tape Dimensions

### Tape-Reel Packaging for SS314MAH4

Each tape-reel of 530 pockets contains 500 switches.

Minimum Leader Length: 14.96" (380mm) Minimum Trailer Length: 8.66" (220mm)



Reel Dimensions

Tape Dimensions