

General Specifications

Electrical Capacity (Resistive Load)

Power Level (silver): 0.1A @ 30V DC
Logic Level (gold): 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: 20 milliohms maximum for power level; 40 milliohms maximum for logic level
Insulation Resistance: 100 megohms minimum @ 500V DC
Dielectric Strength: 500V AC minimum 1 minute minimum
Mechanical Life: 10,000 operations minimum
Electrical Life: 10,000 operations minimum
Contact Timing: SS12S & SS22S – Shorting (make-before-break); SS14M – Nonshorting (break-before-make)
Total Travel: .079" (2.0mm)

Materials & Finishes

Actuator: Polyamide
Upper Case: Polyester for 3-On models; polyacetal for all other models
Lower Case: Glass fiber reinforced polyester for 3-On models;
 glass fiber reinforced polybutylene terephthalate (thermoplastic) for other models
Movable Contactor: Phosphor bronze with silver plating (code 2) or
 phosphor bronze with gold plating (code 4)
Interior Base: Phenolic resin (thermoset)
Terminals: Brass with silver plating over copper plating or brass with gold plating

Environmental Data

Operating Temp Range: -15°C through +60°C (+5°F through +140°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/s²) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

PCB Processing

Soldering: Wave Soldering: For non-supported through-hole, see Profile B in Supplement section.
 For supported through-hole, 5 seconds maximum @ 250°C maximum.
 Manual Solder: See Profile B in Supplement section.
Cleaning: These devices are not process sealed. Hand clean locally using alcohol based solution.

Standards & Certifications

The SS 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

Top or side actuation permits flexible board design.

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

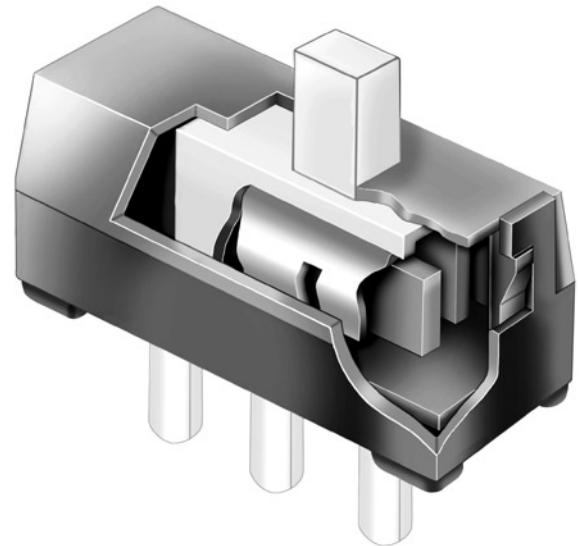
Crisp actuation positively indicates circuit status.

Double molded thermoset base and thermoplastic housing prevent loosening of terminals due to high soldering temperatures.

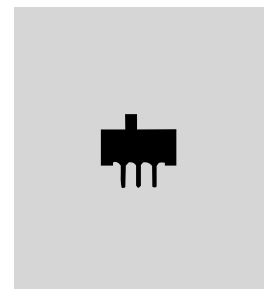
Award-winning STC mechanism with benefits unavailable in conventional mechanisms: smoother, positive detent actuation, increased contact stability, and unparalleled logic-level reliability. (Additional STC details in Terms and Acronyms in the Supplement section.)

Insert molded terminals lock out flux, solvents, and other contaminants.

Inch or metric terminal spacing for standard PC board grid (.100" x .100" or 2.0mm x 2.0mm).



Actual Size



TYPICAL SWITCH ORDERING EXAMPLE

SS 12S D P 2

Poles & Circuits				
12S	SPDT	ON	NONE	ON
SS12S model has shorting contacts.				
* 14M	SP3T	ON	ON	ON
SS14M model has nonshorting contacts.				
22S	DPDT	ON	NONE	ON
SS22S model has shorting contacts.				
See Poles & Circuits chart below.				
* 14M Circuit with silver contacts only.				

Terminal Spacing	
B	Metric 2.0mm x 2.0mm
D	Inch .100" x .100"

Contact Material & Ratings	
2	Silver Rated 0.1A @ 30V DC
*4	Gold Rated 0.4VA maximum @ 28V AC/DC maximum
* Gold not available with SS14M.	

Actuation	
P	Top Actuated
H	Side Actuated

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

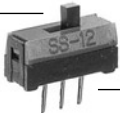
SS12SDP2

Top Actuated

SPDT ON-NONE-ON Circuit

Silver Contacts Rated 0.1A @ 30V DC

Terminals with .100" Spacing



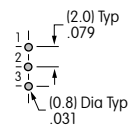
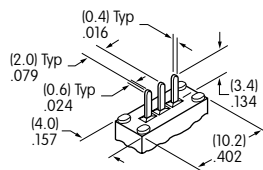
POLES & CIRCUITS

		Slide Position			Connected Terminals			Throw & Schematics	
Pole	Model	Right	Center	Left	Right	Center	Left	Note: Terminal numbers are not actually on switch.	
SP	SS12S	ON	NONE	ON	2-1	NONE	2-3	SPDT	
SP	SS14M	ON	ON	ON	3-4	3-2	3-1	SP3T	 Make-Before-Break ON-OFF-ON circuit can be created by not connecting terminal 2.
DP	SS22S	ON	NONE	ON	2-1 5-4	NONE	2-3 5-6	DPDT	

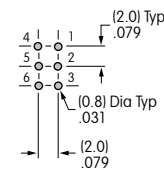
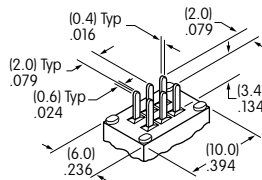
TERMINAL SPACING

B

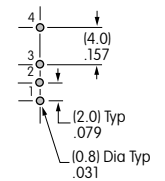
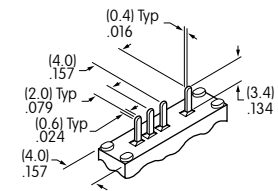
Metric 2.0mm x 2.0mm with Black Base



On-None-On Single Pole Models



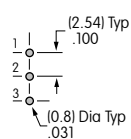
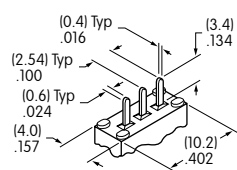
On-None-On Double Pole Models



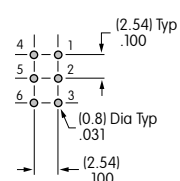
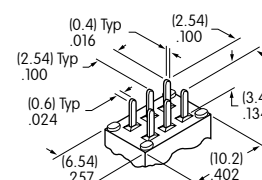
3-On Models

D

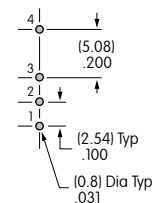
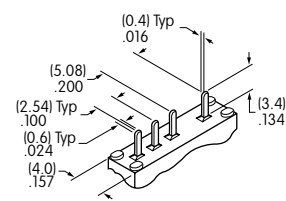
Inch .100" x .100" with Gray Base



On-None-On Single Pole Models



On-None-On Double Pole Models

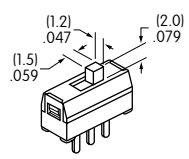


3-On Models

ACTUATION

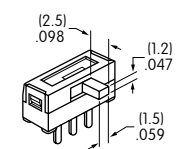
P

Top Actuated



H

Side Actuated



CONTACT MATERIALS & RATINGS

2

Silver over Phosphor Bronze

Power Level

0.1A @ 30V DC

4

Gold over Silver/Phosphor Bronze

Logic Level

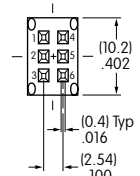
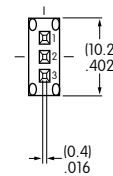
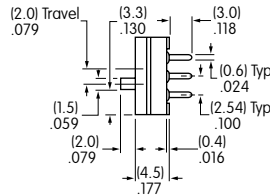
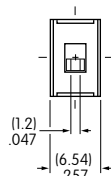
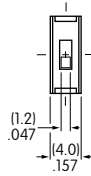
0.4VA max @ 28V AC/DC max

Complete explanation of operating range in Supplement section.

TYPICAL SWITCH DIMENSIONS

Top Actuated

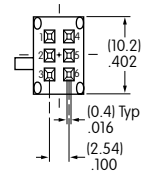
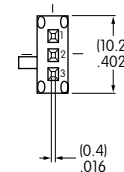
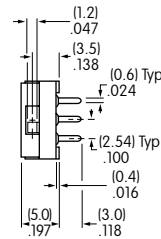
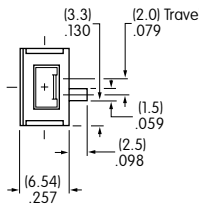
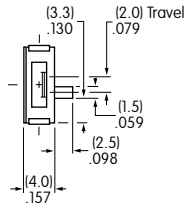
Single & Double Pole



SS12SDP2

Side Actuated

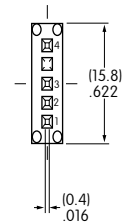
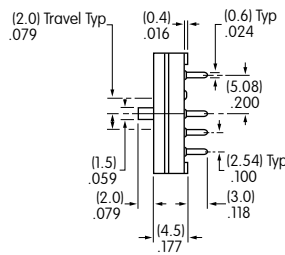
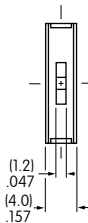
Single & Double Pole



SS12SDH2

3-On Circuit • Top Actuated

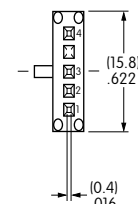
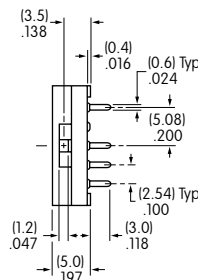
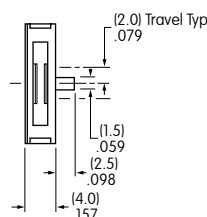
Single Pole



SS14MDP2

3-On Circuit • Side Actuated

Single Pole



SS14MDH2

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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