

General Specifications

Toggles

Rockers

Pushbuttons

Illuminated PB

Programmable

Keylocks

Rotaries

Slides

Tactiles

Tilt

Touch

Indicators

Accessories

Supplement

Electrical Capacity (Resistive Load)

| | |
|------------------------------|---|
| Power Level (silver): | 3VA maximum @ 28V DC maximum (Applicable Range 10mA ~ 125mA @ 0.1V ~ 28V) |
| Logic Level (gold): | 0.4VA maximum @ 28V AC/DC maximum (Applicable Range 0.1mA ~ 0.1A @ 20mV ~ 28V) |
| | Note: See Supplement for further explanation of operating range. |

Other Ratings

| | |
|---------------------------------|---|
| Contact Resistance: | 100 milliohms maximum |
| Insulation Resistance: | 100 megohms minimum @ 100V DC |
| Dielectric Strength: | 250V AC minimum for 1 minute minimum between contacts & between contacts & case |
| Mechanical Life: | 500,000 operations minimum |
| Electrical Life: | 500,000 operations minimum |
| Nominal Operating Force: | 1.60N |
| Total Travel: | .008" (0.2mm) |

Materials & Finishes

| | |
|-----------------------------|---|
| Actuator: | Glass fiber reinforced polyamide (UL94V-0) |
| Case: | Stainless steel |
| Base: | Glass fiber reinforced polyamide (UL94V-0) |
| Movable Contacts: | Stainless steel with silver or gold plating |
| Stationary Contacts: | Brass with silver or gold plating |
| Terminals: | Brass with silver or gold plating |

Environmental Data

| | |
|-------------------------------------|--|
| Operating Temperature Range: | -20°C through +70°C (-4°F through +158°F) |
| Humidity: | 90 ~ 95% humidity for 240 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: | 100G (981m/s ²) acceleration (tested in 6 right angled directions, with 5 shocks in each direction) |

Processing

| | |
|-------------------|--|
| Soldering: | Reflow Soldering Recommended. See Profile A in Supplement section. Manual Soldering: See Profile A in Supplement section. |
| Cleaning: | These devices are not process sealed. Hand clean locally using alcohol based solution. |

Standards & Certifications

| | |
|--------------------------------|--|
| Flammability Standards: | UL94V-0 actuator and base These switches are designed for use in a low-voltage, low-current circuit. When used as intended, the results do not produce hazardous energy. |
|--------------------------------|--|

Distinctive Characteristics

.244" (6.2mm) square body allows compact mounting.

Heat resistant resin body meets lead-free solder processing requirements and UL flammability rating of 94V-0.

Stick-tube and tape-reel packaging allow rapid automated placement of devices.

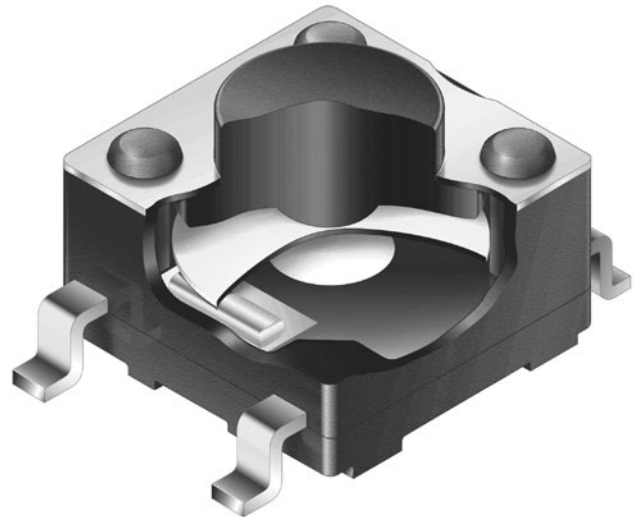
Gold plated contacts available for very low voltage/current applications offer advantages of little or no oxidization or sulfurization and stable contact resistance.

Gull-winged terminals ensure mechanical stability during soldering and simplified solder joint inspection.

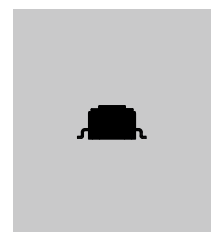
Insert molded terminals lock out flux, solvents, and other contaminants and allow automated soldering.

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

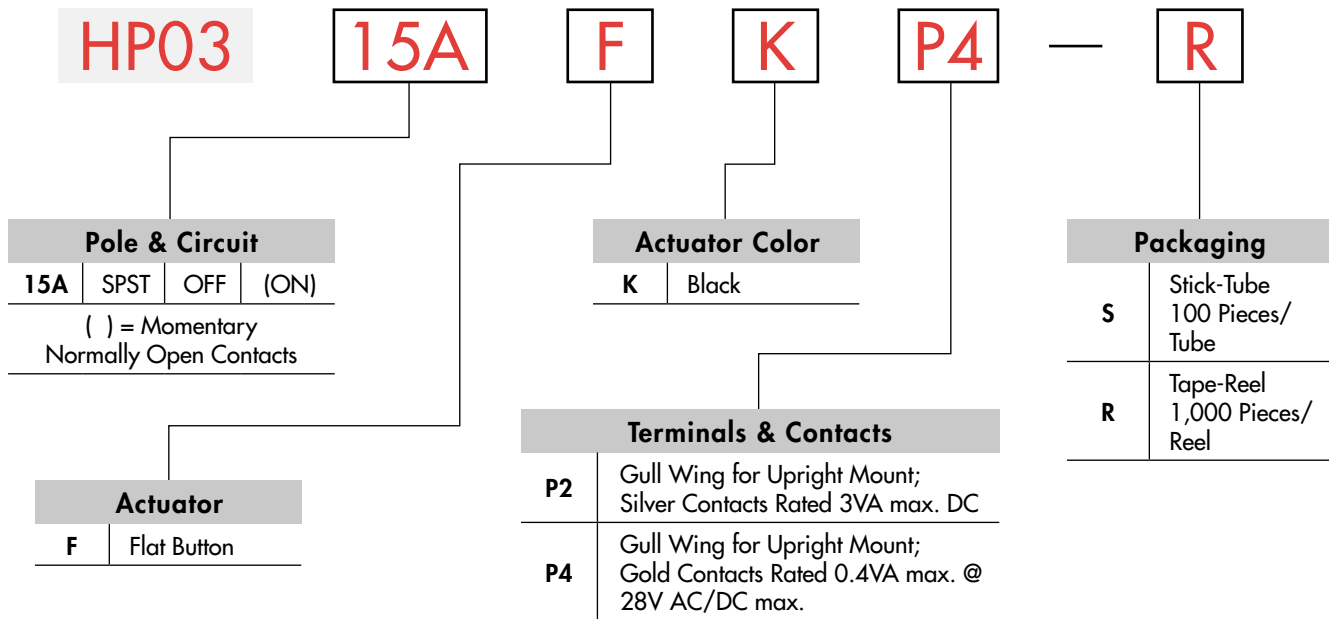
Coplanarity: all considered surfaces must lie between two parallel planes that are a maximum distance apart of .0039" (0.10mm). (Additional coplanarity details in Terms and Acronyms in the Supplement section.)



Actual Size



TYPICAL SWITCH ORDERING EXAMPLE

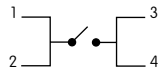


DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

HP0315AFKP4-R



POLE & CIRCUIT

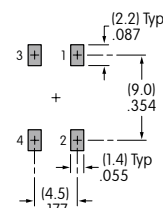
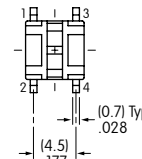
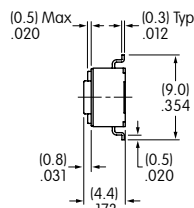
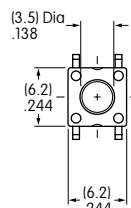
| Pole | Model | Actuator Position () = Momentary | | Switch Throw & Schematic | Note: Terminal numbers are not actually on the switch. |
|------|---------|--------------------------------------|------|---|--|
| | | Normal | Down | | |
| SP | HP0315A | OFF | (ON) | SPST  | |

TYPICAL SWITCH DIMENSIONS

Gull-winged



HP0315AFKP4



PACKAGING

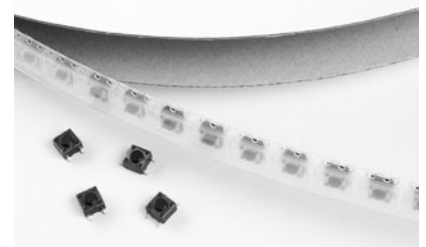
S Stick-Tube

Switches must be ordered in 100-piece increments when stick-tube packaging is selected.



R Tape-Reel

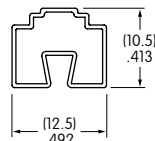
Switches must be ordered in 1,000-piece increments when tape-reel packaging is selected.



Packaging meets EIA-481-D Standard.

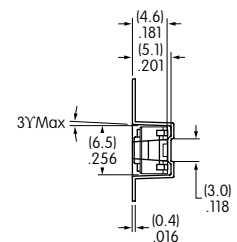
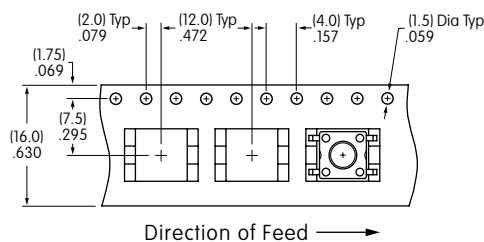
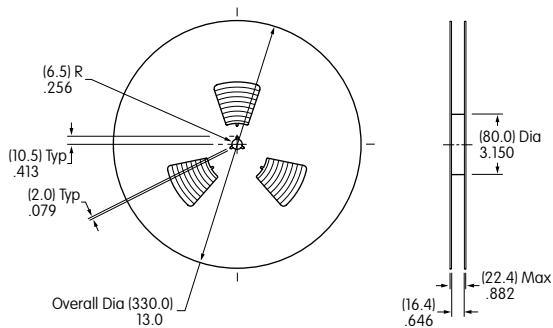
Stick-Tube Dimensions

Each stick-tube contains 100 switches



Tape-Reel Dimensions

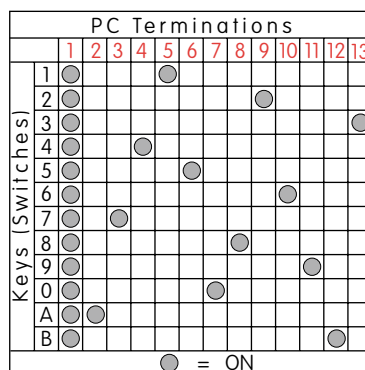
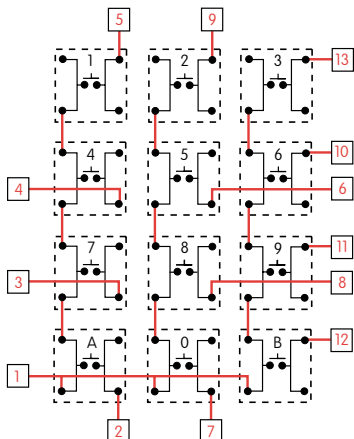
Each tape-reel of 1,100 pockets contains 1,000 switches.
Minimum Leader Length: 15.748" (400mm). Minimum Trailer Length: 6.299" (160mm).



KEYBOARD MATRIX

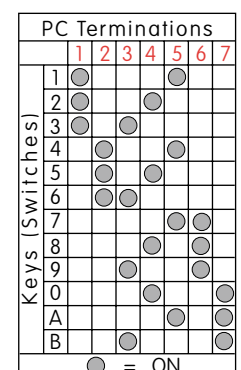
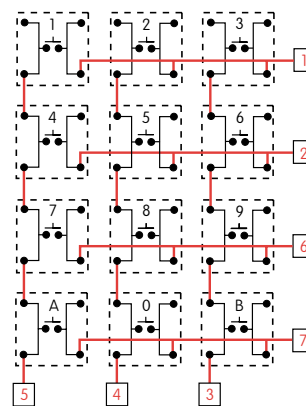
Common Bus Matrix

These single pole, single throw switches can be used in a keyboard matrix and, using strapped terminals, achieve a common bus electrical configuration on a single-sided PC board.



X-Y Matrix

These single pole, single throw switches can be arranged on a single-sided PC board matrix with strapped terminals to achieve an X-Y type electrical interconnection.



Red = PCB Trace Black = Switch Circuit

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



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

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.