General Specifications

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)

PCB Processing

Soldering: Wave 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.

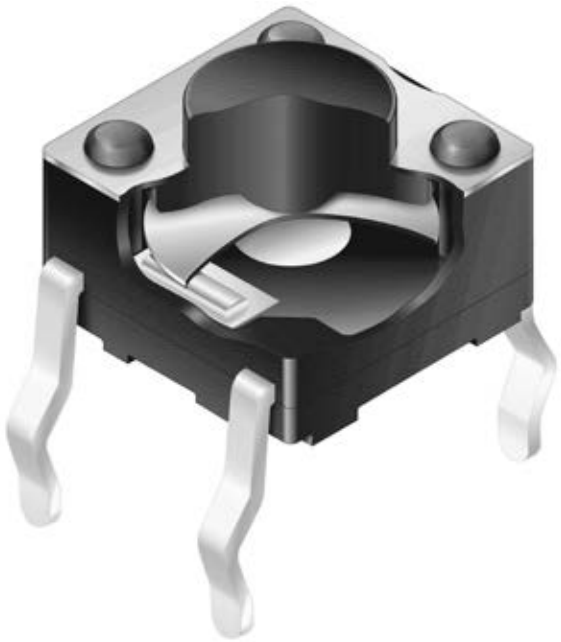
Distinctive Characteristics

.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 packaging allows rapid automated placement of devices.

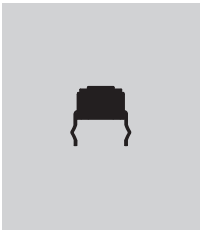
Gold plated contacts available for very low voltage/current applications offer advantages of little or no oxidization or sulfurization and stable contact resistance.



Crimped terminals provide a spring type action which ensures secure mounting and prevents dislodging during automated soldering.

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

Actual Size



TYPICAL SWITCH ORDERING EXAMPLE

HP02 | 15A | F | K | P2 — S

Pole & Circuit

15A	SPST	OFF	(ON)

( ) = Momentary
Normally Open Contacts

Actuator

F	Flat Button

Actuator Color

K	Black

Terminals & Contacts

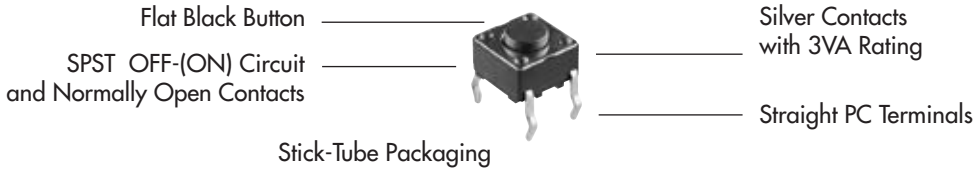
P2	Straight PC; Silver Contacts Rated 3VA max. DC
P4	Straight PC; Gold Contacts Rated 0.4VA max. @ 28V AC/DC max.

Packaging

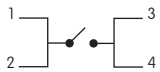
S	Stick-Tube 100 Pieces/ Tube

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

HP0215AFKP2-S



POLE & CIRCUIT

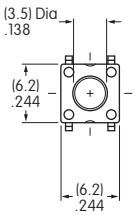
		Actuator Position ( ) = Momentary		Switch Throw & Schematic	
Pole	**Model**	**Normal**	**Down**		
SP	**HP0215A**	OFF	(ON)	SPST 	Note: Terminal numbers are not actually on the switch.

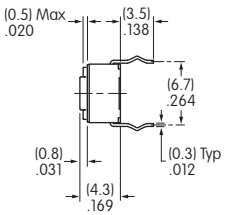
TYPICAL SWITCH DIMENSIONS

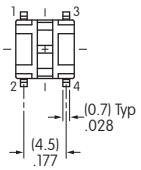
Straight PC

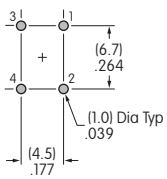


HP0215AFKP2









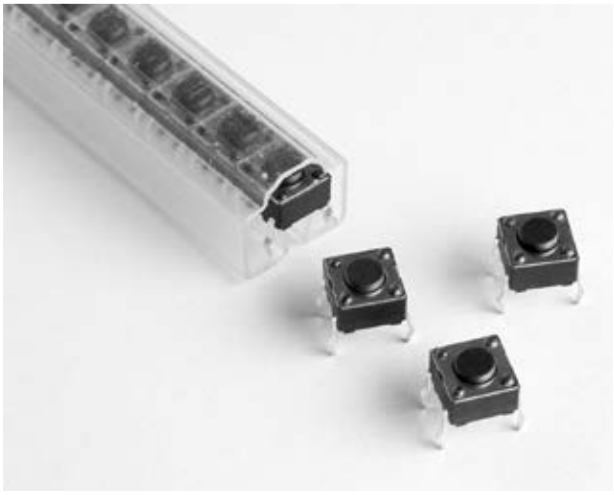
PACKAGING

S

Stick-Tube

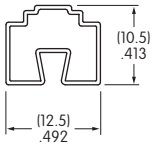
Switches must be ordered in 100-piece increments.

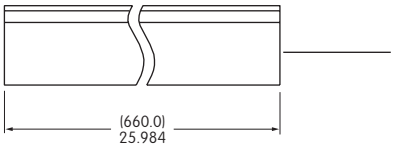
Note: Possible deformation of the Stick-Tube may occur when environmental temperature exceeds 50°C (122°F). It is recommended to store the product on a flat surface within normal temperature and humidity ranges.
Temperature range: 5° ~ 35°C (41° ~ 95°F).
Relative humidity range: 45 ~ 85%.



Stick-Tube Dimensions

Each stick-tube contains 100 switches.

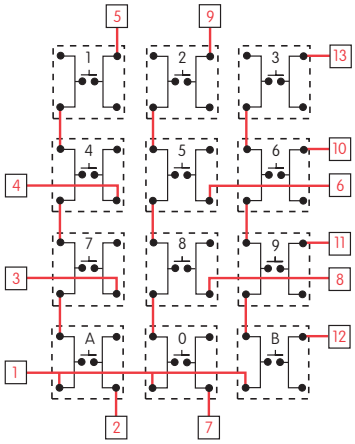


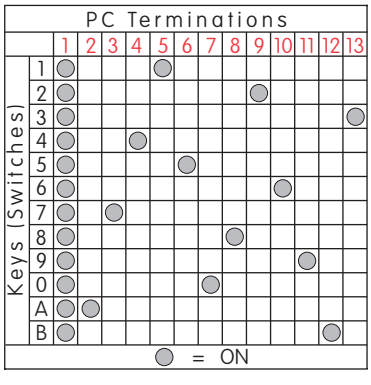


KEYBOARD MATRIX

Common Bus Matrix

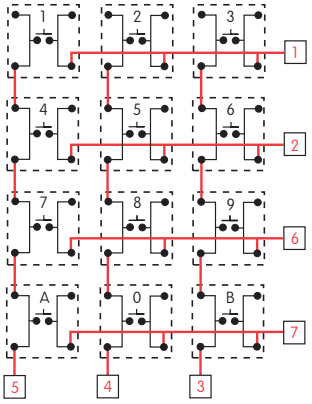
These single pole, single throw switches can be used in a keyboard matrix and, using strapped terminals, achieve a common bus electrical configuration on a single-sided PC board.

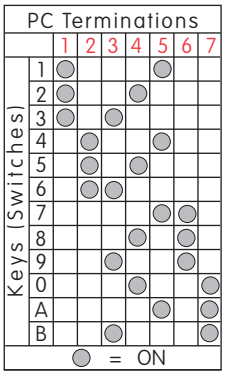




X-Y Matrix

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