General Specifications

Electrical Capacity (Resistive Load)

Logic Level: 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: 50 milliohms maximum
Insulation Resistance: 500 megohms minimum @ 500V DC
Dielectric Strength: 500V AC minimum for 1 minute minimum
Mechanical Life: 100,000 operations minimum for On-None-On & On-Off-On
50,000 operations minimum for other circuits
Electrical Life: 50,000 operations minimum
Nominal Operating Force: 2.73N (momentary); 1.84N (maintained)
Contact Timing: Nonshorting (break-before-make)
Angle of Throw: 26°

Materials & Finishes

Actuator or Toggle: Nickel plated brass
Case Housing: Glass fiber reinforced polyamide
Support Bracket: Tin plated phosphor bronze
Movable Contact: Phosphor bronze with gold plating
Stationary Contacts: Brass with gold plating
Terminals: Brass with gold plating

Environmental Data

Operating Temperature Range: –30°C through +85°C (–22°F through +185°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: 50G (490m/s^2) acceleration (tested in 6 right angled directions, with 5 shocks in each direction)

Installation

Cap Installation Force: 39.23N (8.82 lbf) maximum downward force on actuator

PCB Processing

Soldering: Wave Soldering Recommended: See Profile A in Supplement section.
Manual Soldering: See Profile B in Supplement section.
Cleaning: Automated cleaning. See Cleaning specifications in Supplement section.

Standards & Certifications

The A Series rockers have not been tested for UL recognition 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.

Distinctive Characteristics

Subminiature size saves space on PC boards.

Specifically developed for logic-level applications.

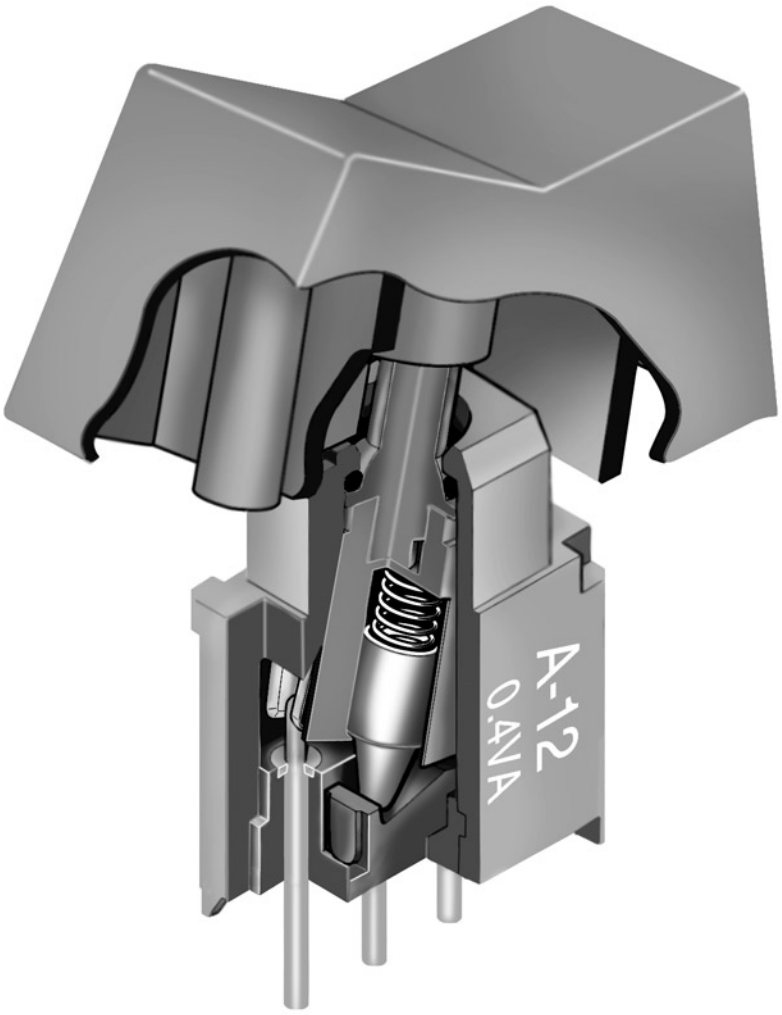
Totally sealed body construction prevents contact contamination and allows time- and money-saving automated soldering and cleaning.

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

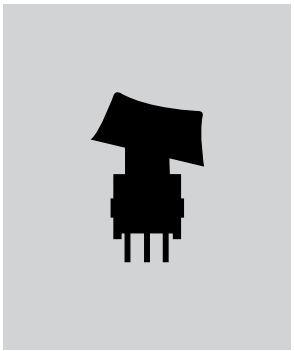
Molded-in, epoxy sealed or ultrasonically welded terminals lock out flux, solvents, and other contaminants.

.100" x .100" (2.54mm x 2.54mm) terminal spacing conforms to standard PC board grid spacing.

Matching indicators available.



Actual Size



TYPICAL SWITCH ORDERING EXAMPLE

A 2 2 K1 H — D A

Poles

1	SPDT
2	DPDT SP3T

Circuits

2	ON	NONE	ON
3	ON	OFF	ON
5	ON	NONE	(ON)
R	(ON)	NONE	ON
8	(ON)	OFF	(ON)
9	ON	OFF	(ON)
S	(ON)	OFF	ON
*4	ON	ON	ON
*6	(ON)	ON	(ON)
*7	ON	ON	(ON)

( ) = Momentary

*3-ON circuits

Actuators

K	Snap Top for Rocker Code C
* K1	Snap Top for Rockers Codes D & E

*Available in Americas only

PC Terminals

P	Straight
B	Straight with Bracket
B1	Straight with Inline Bracket (Single Pole only)
H	Right Angle with Bracket
V	Vertical with Bracket
V1	Vertical with Inline Bracket (Single Pole only)

Rockers

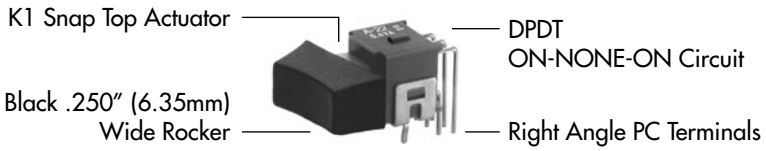
C	.260″ (6.6mm) Wide (K only)
D	.250″ (6.35mm) Wide (K1 only)
E	.300″ (7.6mm) Wide (K1 only)

Colors

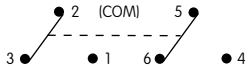
Rocker C		Rockers D & E
A	Black	A
B	White	B
C	Red	C
E	Yellow	—
F	Green	—
G	Blue	—
H	Gray	—

DESCRIPTION FOR TYPICAL ORDERING EXAMPLE

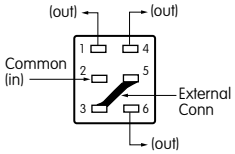
A22K1H-DA



POLES & CIRCUITS

Pole	Model	Rocker Position ( ) = Momentary			Connected Terminals			Throw & Schematics
		Up	Center	Down	Up	Center	Down	
		Slot			Slot			Note: Terminal numbers are not actually on the switch.
SP	A12 A13 A15 A1R A18 A19 A1S	ON ON ON (ON) (ON) ON (ON)	NONE OFF NONE NONE OFF OFF OFF	ON ON (ON) ON (ON) (ON) ON	2-3	OPEN	2-1	SPDT 
DP	A22 A23 A25 A2R A28 A29 A2S	ON ON ON (ON) (ON) ON (ON)	NONE OFF NONE NONE OFF OFF OFF	ON ON (ON) ON (ON) (ON) ON	2-3 5-6	OPEN	2-1 5-4	DPDT 

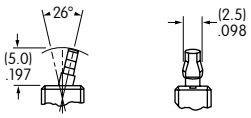
For 3 Throw (3-On)

Pole	Model	Connected Terminals & Schematics			External Connection
		Up	Center	Down	
SP	A24 A26 A27	ON (ON) ON	ON ON ON	ON (ON) (ON)	The SP3T model utilizes a double pole base. External connections must be made during field installation. 
		External Connection 2 (in) 5 — 1 (out) 3 4 (out) 6 (out)	External Connection 2 (in) 5 — 1 (out) 3 4 (out) 6 (out)	External Connection 2 (in) 5 — 1 (out) 3 4 (out) 6 (out)	
		2-3 5-6	2-3 5-4	2-1 5-4	

ACTUATORS

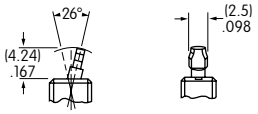
K **Snap Top**

For Rocker AT469



K1 **Snap Top**

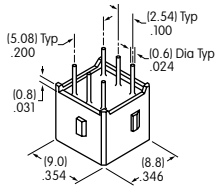
For Rockers AT062 and AT066



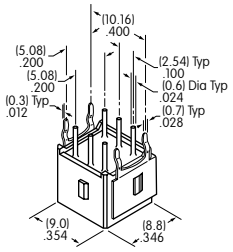
PC TERMINALS

Use of a support bracket is recommended to increase PCB mounting strength and stability.

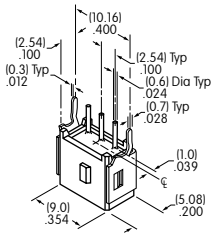
P Straight



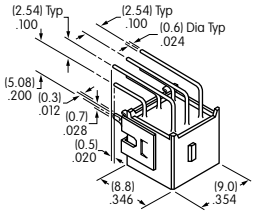
B Straight with Bracket



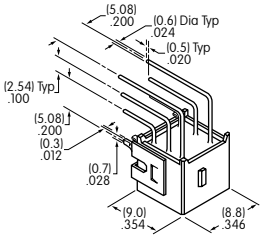
B1 Straight with Inline Bracket Single Pole only



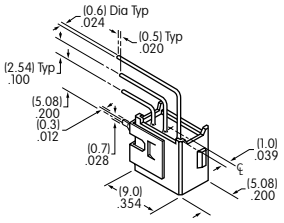
H Right Angle with Bracket



V Vertical with Bracket



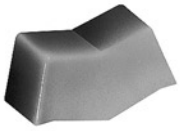
V1 Vertical with Inline Bracket Single Pole only

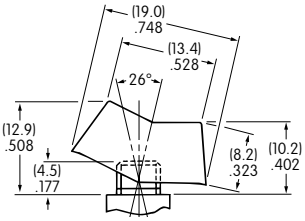


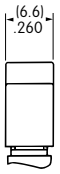
ROCKERS & COLORS

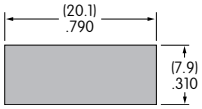
C AT469 .260" (6.6mm) Wide Rocker

Antirotational
Material: Polyamide
Colors Available:
A, B, C, E, F, G, H



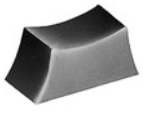


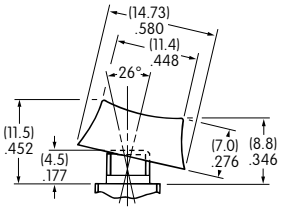


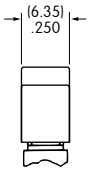


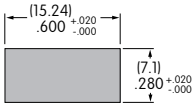
D AT062 .250" (6.35mm) Wide Rocker

Antirotational
Material: Polyamide
Colors Available:
A, B, C



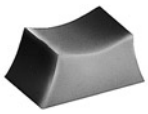


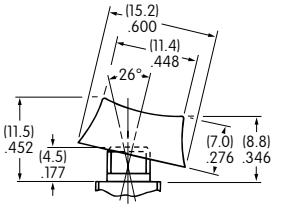


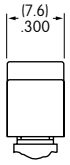


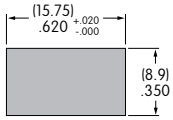
E AT066 .300" (7.6mm) Wide Rocker

Antirotational
Material: Polyamide
Colors Available:
A, B, C





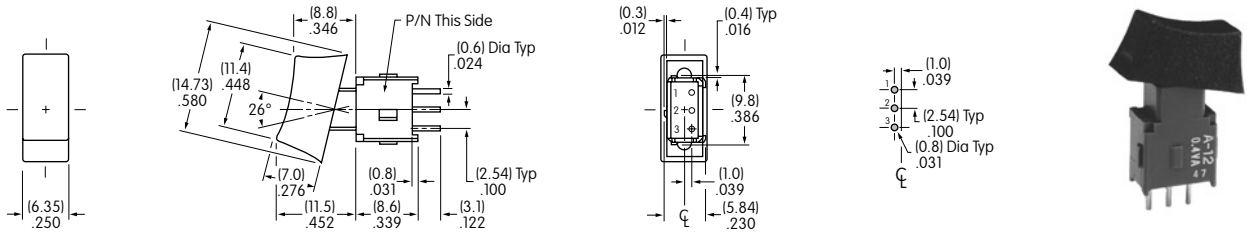




Color Codes: A Black · B White · C Red · E Yellow · F Green · G Blue · H Gray

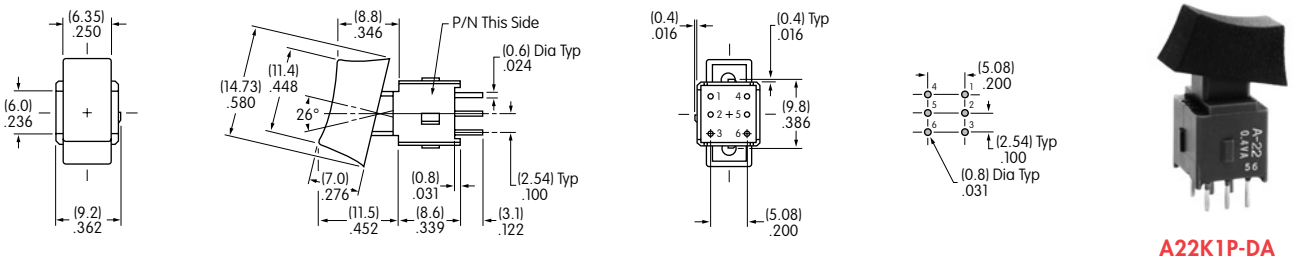
TYPICAL SWITCH DIMENSIONS

Single Pole — Straight PC



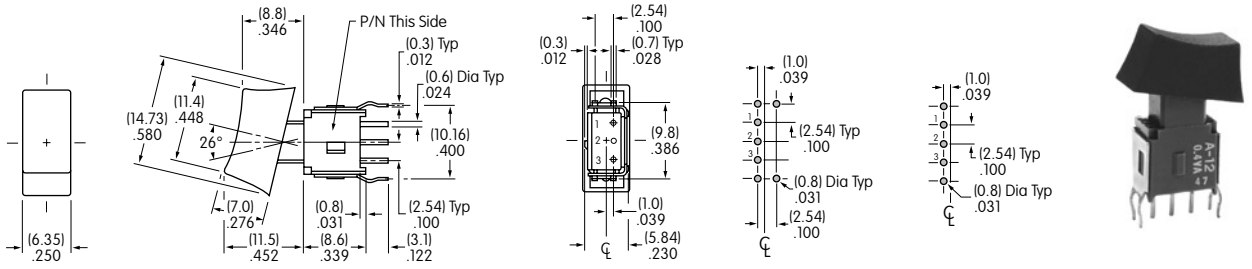
A12K1P-DA

Double Pole — Straight PC



A22K1P-DA

Single Pole — Straight PC • Bracket

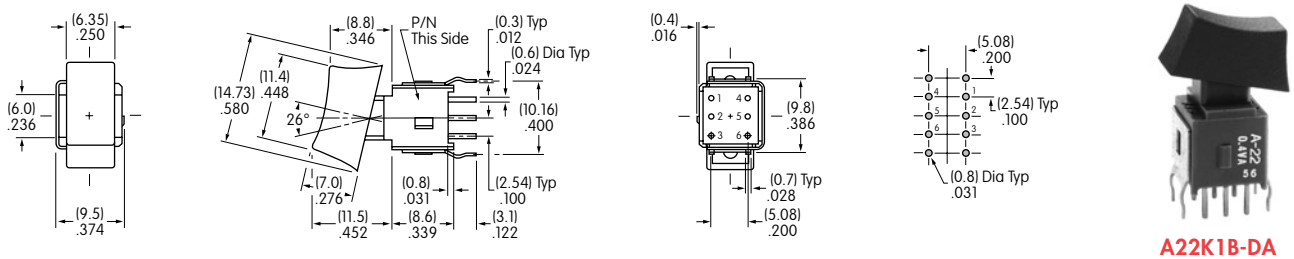


B Terminals

B1 Terminals

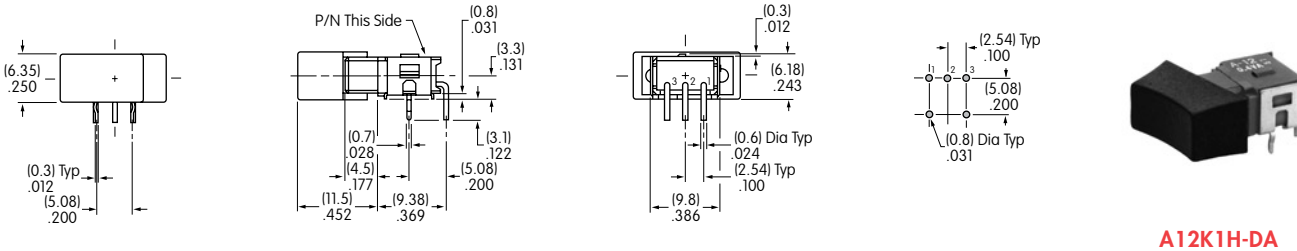
A12K1B-DA

Double Pole — Straight PC • Bracket



A22K1B-DA

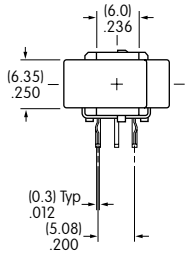
Single Pole — Right Angle PC



A12K1H-DA

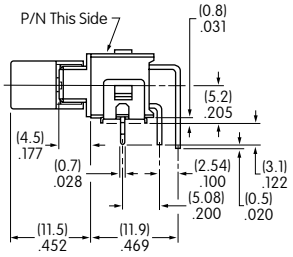
TYPICAL SWITCH DIMENSIONS

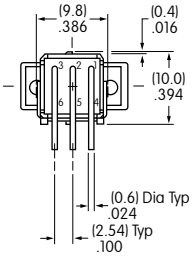
Right Angle PC

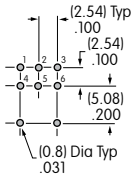


A22K1H-DA

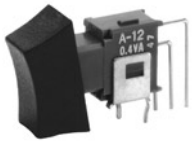
Double Pole

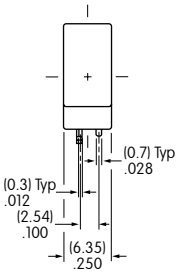






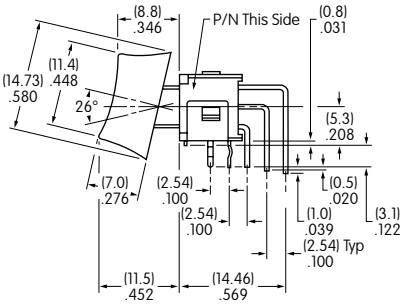
Vertical PC

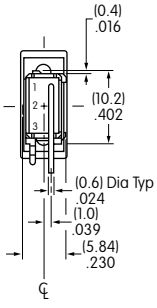




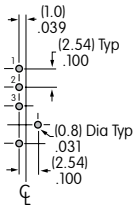
A12K1V-DA

Single Pole

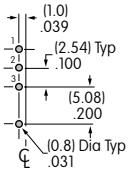




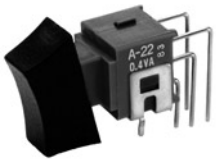
V Terminals

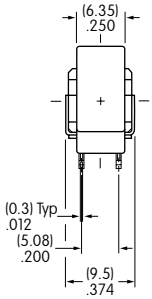


V1 Terminals



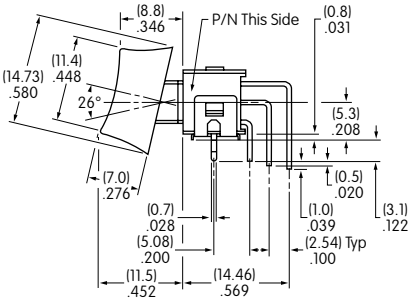
Vertical PC

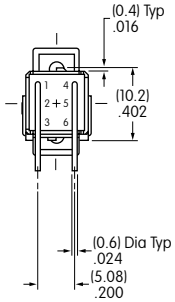


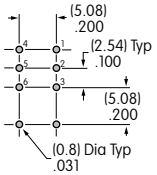


A22K1V-DA

Double Pole







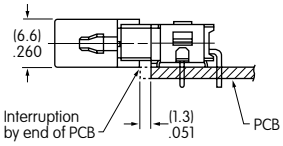
ROCKER MOUNTING PRECAUTION

Rocker switches with vertical and right angle terminals must be mounted so that extension of the PC board beyond the top of the switch housing does not interrupt rocker movement, in turn causing incomplete switching operation.

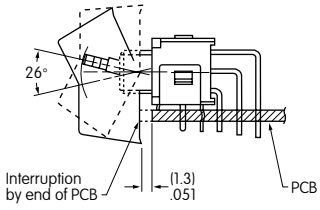
The MAXIMUM limit of the PC board extension is .051" (1.3mm), as illustrated below.

This precaution does not apply to the double pole switch with right angle terminals due to the extra width of the switch allowing the rocker to clear the PC board.

Side View of Rocker
Right Angle Mounting PC
Single Pole Only



Side View of Rocker
Vertical Mounting PC
Single Pole and
Double Pole



Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001
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Данный компонент на территории Российской Федерации

Вы можете приобрести в компании MosChip.

Для оперативного оформления запроса Вам необходимо перейти по данной ссылке:

http://moschip.ru/get-element

Вы можете разместить у нас заказ для любого Вашего проекта, будь то серийное производство или разработка единичного прибора.

В нашем ассортименте представлены ведущие мировые производители активных и пассивных электронных компонентов.

Нашей специализацией является поставка электронной компонентной базы двойного назначения, продукции таких производителей как XILINX, Intel (ex.ALTERA), Vicor, Microchip, Texas Instruments, Analog Devices, Mini-Circuits, Amphenol, Glenair.

Сотрудничество с глобальными дистрибьюторами электронных компонентов, предоставляет возможность заказывать и получать с международных складов практически любой перечень компонентов в оптимальные для Вас сроки.

На всех этапах разработки и производства наши партнеры могут получить квалифицированную поддержку опытных инженеров.

Система менеджмента качества компании отвечает требованиям в соответствии с ГОСТ Р ИСО 9001, ГОСТ РВ 0015-002 и ЭС РД 009

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