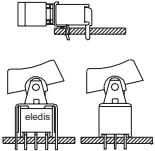




SERIES 4B

- Sealed Sub-miniature Rocker switch



AGENCY APPROVALS

IP67

- In conformity with:
- EN 60529: 1991
 - IEC 529: 1989

CHARACTERISTICS

- Tiny and sealed switch suitable for environmentally hard usage.
- Carries up to 3 Amps @ 120 VAC or 28 VDC.

SPECIFICATIONS

Contact Rating: **S** (silver) - 3A with resistive load @ 125 VAC or 28 VDC - 1A with resistive load @ 250 VAC - **A** (gold) or **K*** (gold/tin-lead) - 0.4 VA max @ 20 VAC or DC max

Electrical life: 30,000 cycles at full load

Contact Resistance: <20 mΩ max. initial @ 2-4 DVC; 100 mA for both coin silver and gold plated contacts

Insulation Resistance: 1000 MΩ min.

Dielectric Strength: 1500 VRMS @ sea level

Operating Temperature: -30°C to 85°C

MATERIALS

Case & Bushing: Glass filled nylon 6/6, flame retardant, heat stabilized (UL94V-0)

Actuator: Nylon, blk std., Internal o-ring seal std. with all actuators

Frame: Spring steel, black std.

Switch support: Brass, tin plated

Contacts & terminals: Copper alloy with gold over nickel plated

Terminal seal: Epoxy

HOW TO ORDER



N° OF POLES

- 1 SPDT
- 2 DPDT

TERMINATIONS

- PC PCB
- H9 90° horizontal
- H9S 90° horizontal snap-in
- V9 90° vertical
- V9S 90° vertical snap-in
- U2 U bracket 11.68mm
- U2S U bracket snap-in 11.68 mm

COLOUR CODE FOR ACTUATORS

- 1 White
- 2 Black (std)
- 3 Red
- 4 (Δ) Orange
- 5 (Δ) Yellow
- 6 (Δ) Green
- 7 (Δ) Blue
- 8 (Δ) Brown
- 9 (Δ) Gray

ELECTRICAL FUNCTIONS

1	on	none	on
2	on	none	(on)
3	on	off	on
4	(on)	off	(on)
5	on	off	(on)

CONTACT MATERIAL

- S Silver (std)
- A Gold
- G Gold on Silver
- T(Δ) Tinned Silver
- K(Δ) Tinned Gold
- V(Δ) Tinned Gold on Silver

ACTUATORS

- B0 Extra small rocker
- B1 Small rocker

SEALING

- E Seal

(Δ) Min qty required

(Δ) Please enquire

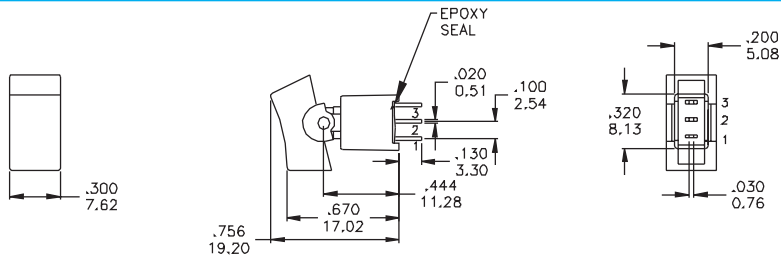


SERIES 4B

ELECTRICAL FUNCTIONS

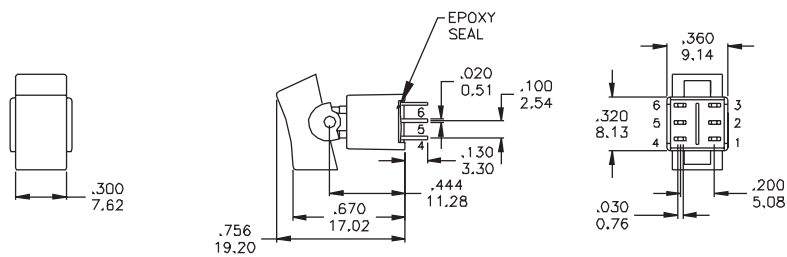
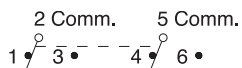
DIMENSIONS

SPDT	Type		
1	on	none	on
2	on	none	(on)
3	on	off	on
4	(on)	off	(on)
5	on	off	(on)
	2-3	open	2-1



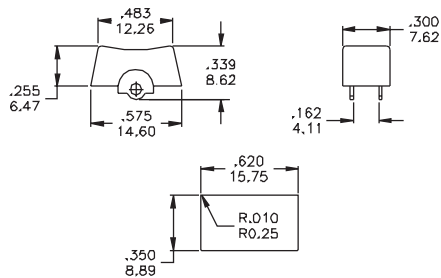
Part N° shown: 4B11-B1PCE

DPDT	Type		
1	on	none	on
2	on	none	(on)
3	on	off	on
4	(on)	off	(on)
5	on	off	(on)
	2-3,5-6	open	2-1,5-4

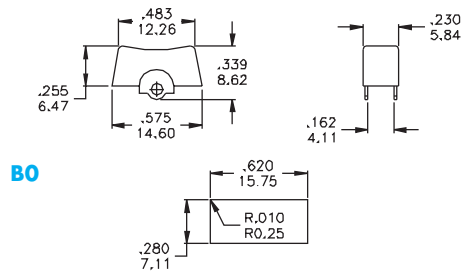


Part N° shown: 4B21-B1PCE

ACTUATORS



B1



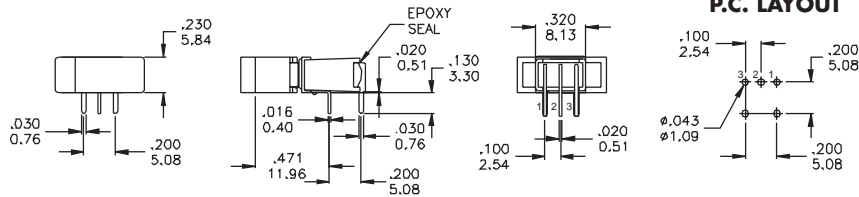
B0

ACTUATOR COLOURS OPTIONS

- 1 White
- 2 Black (std)
- 3 Red
- 4 (Δ) Orange
- 5 (Δ) Yellow
- 6 (Δ) Green
- 7 (Δ) Blue
- 8 (Δ) Brown
- 9 (Δ) Gray

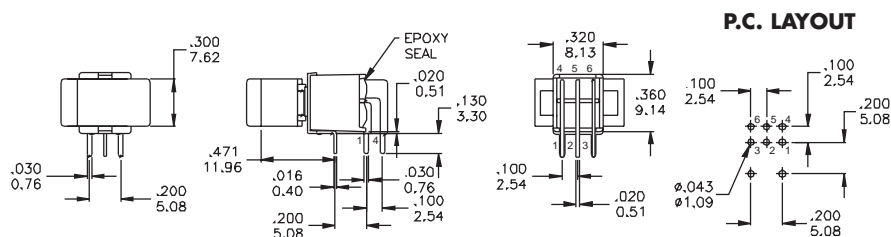
TERMINATIONS

H9 SPDT



Part N° shown: 4B11-B0H9AE2

H9 DPDT

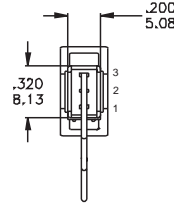
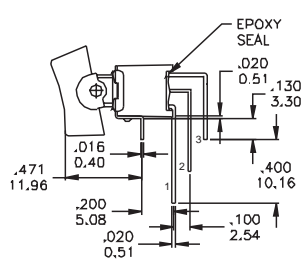
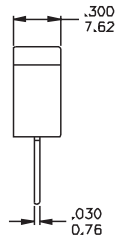


Part N° shown: 4B21-B1H9AE2

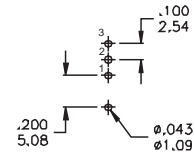
SERIES 4B

TERMINATIONS

**V9
SPDT**

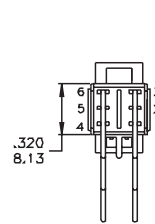
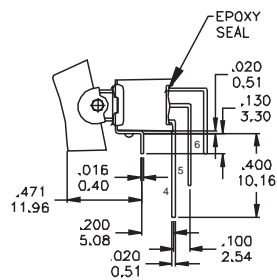
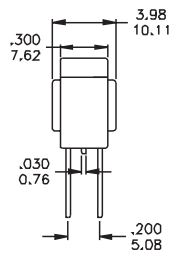


P.C. LAYOUT

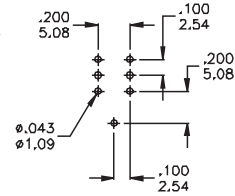


Part N° shown: 4B11-B1V9AE2

**V9
DPDT**

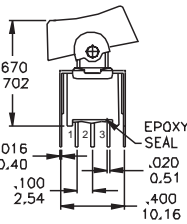
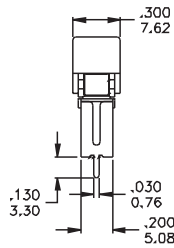


P.C. LAYOUT

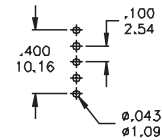


Part N° shown: 4B21-B1V9AE2

**U2
SPDT**

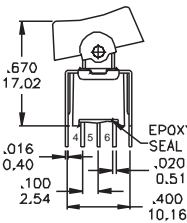
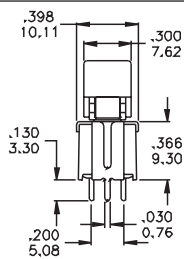


P.C. LAYOUT

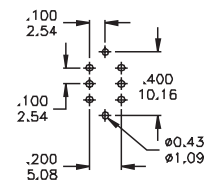


Part N° shown: 4B11-B1U2AE2

**U2
DPDT**



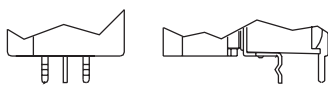
P.C. LAYOUT



Part N° shown: 4B21-B1U2AE2

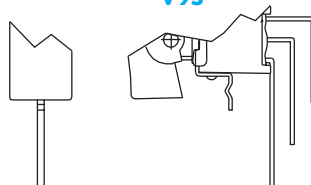
Snap-in Terminal Mounting

H9S



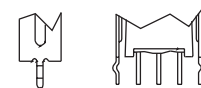
Snap-in Terminal Mounting

V9S



Snap-in Terminal Mounting

U2S



H9S V9S U2S have the same P.C mounting but with snap-in bracket



SERIES 4B

CONTACT MATERIALS

CONTACT RATINGS

- S** **Moving Contacts:** coin silver
Terminals: copper alloy, silver plated
Rating: 3 Amps @ 125 VAC or 28 VDC
 1 Amps @ 250 VAC

- A** **Moving Contacts:** copper alloy with gold plating over nickel
Terminals: copper alloy with gold plating over nickel
Rating: 0.4 Volts/Amps max @ 20 Volts max (AC or DC)

- G** **Moving Contacts:** coin silver gold plated
Terminals: copper alloy with gold plating over nickel
Note: **G** option used for either "high" (2 Amps @ 250 VAC) or "low" (0.4 Volts/Amps max) contact rating (one exclude the other)

PACKAGING

MARKING (on products)

LABELLING (on packaging)

Transparent Trays 15x21x4 cm



Qty per tray: (ST, PC Terminals)
 Series 4B1x 500 pcs
 4B2x 200 pcs

The switches are individually marked with the following information:

- Side 1** TRADE MARK
 SERIES AND MODEL
 DATE CODE

- Side 2** RATING
 CONTACTS

Note: Not all information may be available on some products.

The label on each tray gives full information on the products contained.

P/N: ELFNC.: Q.TY: DATE CODE:	
<small>Made in Taiwan</small>	
Remarks	

A Bar code indicating Model, Quantity, Date Code enables easy traceability.