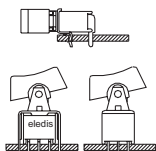


## ROCKER SWITCHES

**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

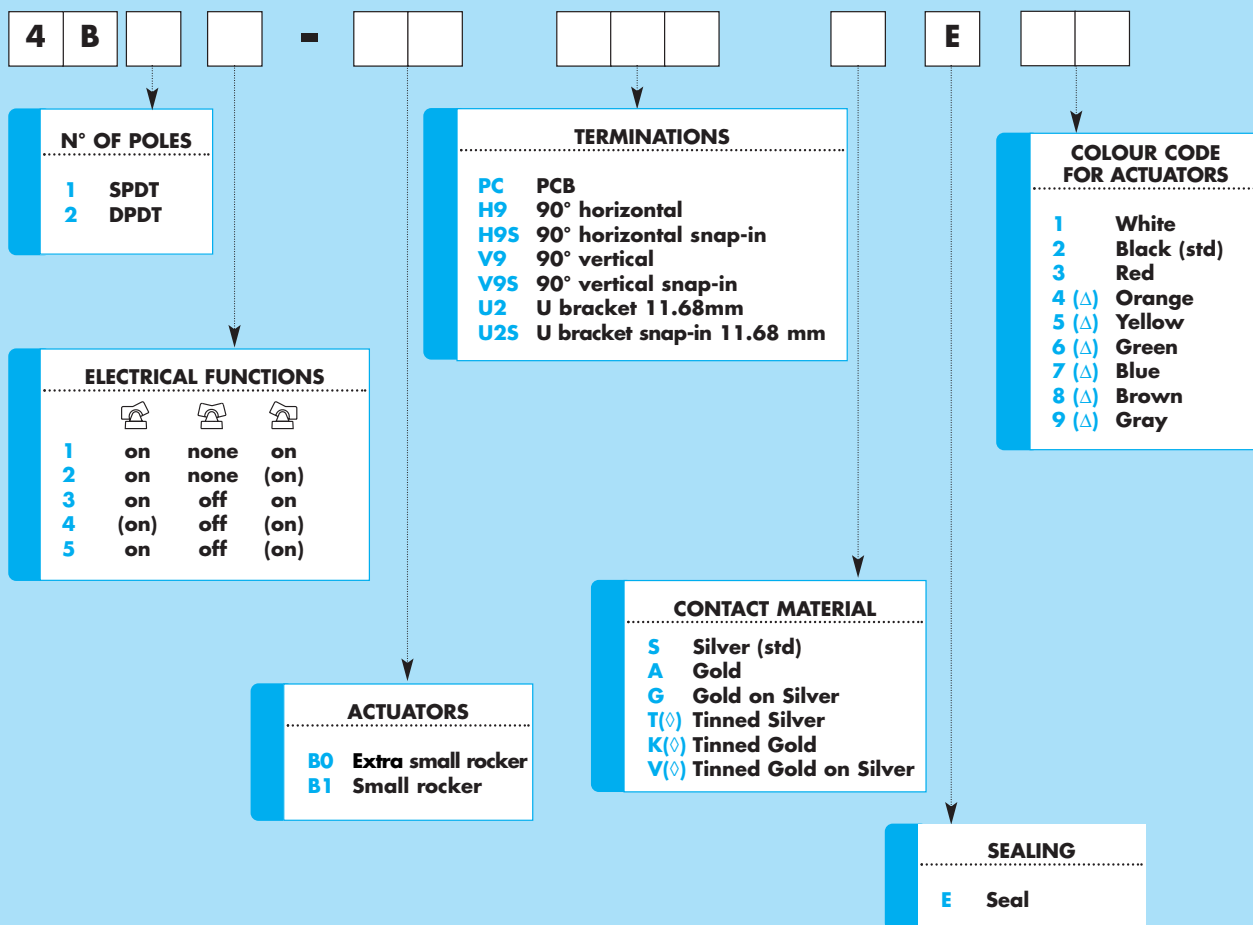
**Frame:** Spring steel, black std.

**Switch support:** Brass, tin plated

**Contacts & terminals:** Copper alloy with gold over nickel plated

**Terminal seal:** Epoxy

## HOW TO ORDER



**(Δ) Min qty required**

(◇) Please enquire



## SERIES 4B

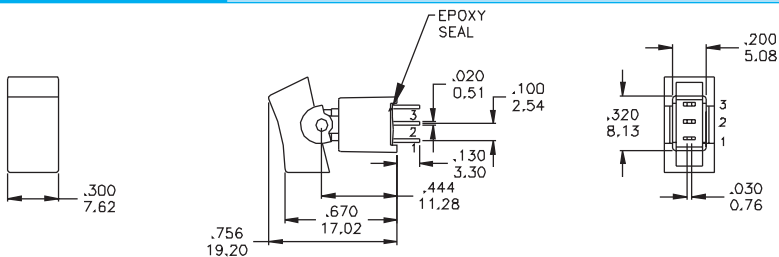
### ELECTRICAL FUNCTIONS

SPDT	Type	Type	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	

2 Comm.



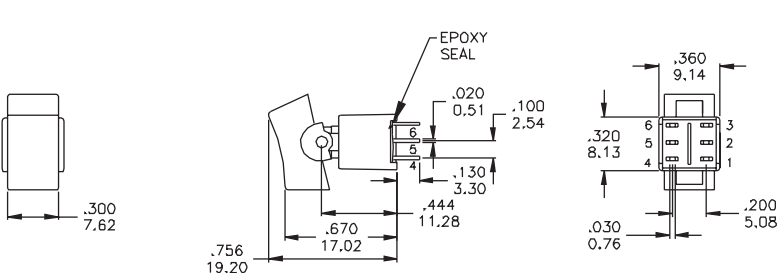
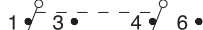
### DIMENSIONS



Part N° shown: 4B11-B1PCAE

DPDT	Type	Type	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	

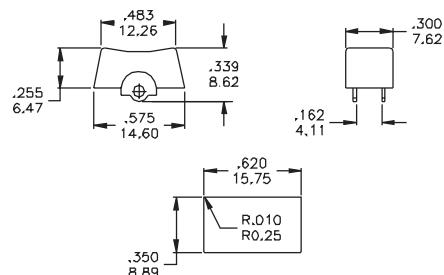
2 Comm. 5 Comm.



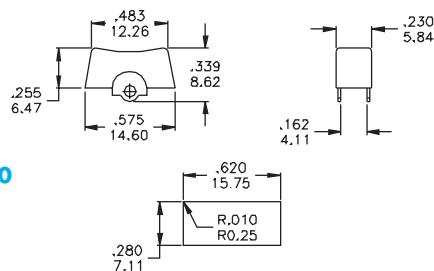
Part N° shown: 4B21-B1PCAE

### ACTUATORS

B1



B0

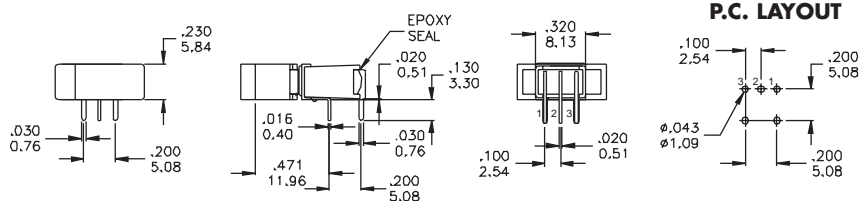


### ACTUATOR COLOURS OPTIONS

- 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

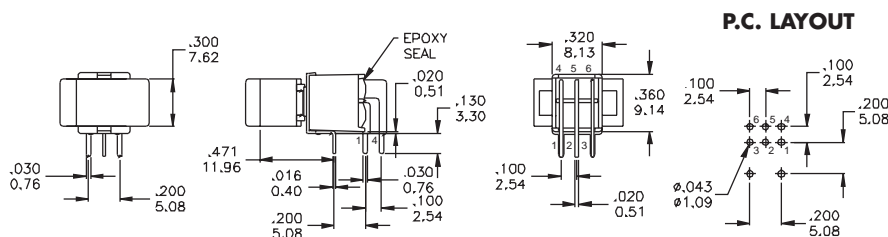
### TERMINATIONS

H9  
SPDT



Part N° shown: 4B11-B0H9AE2

H9  
DPDT

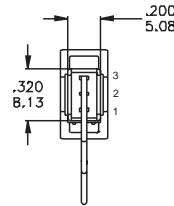
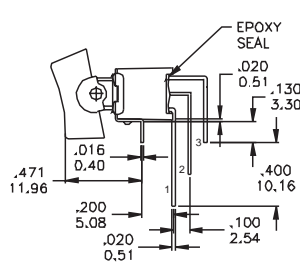
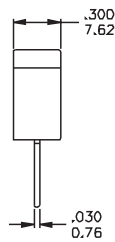


Part N° shown: 4B21-B1H9AE2

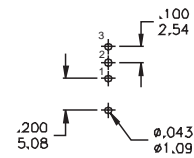
## SERIES 4B

### TERMINATIONS

#### V9 SPDT

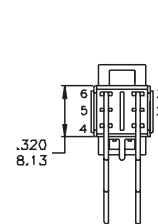
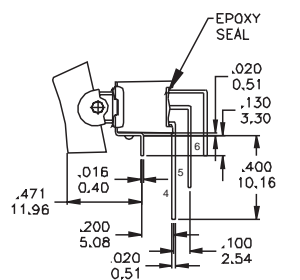
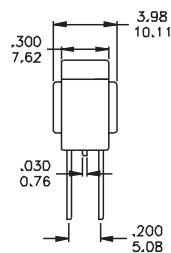


#### P.C. LAYOUT

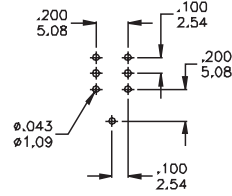


Part N° shown: 4B11-B1V9AE2

#### V9 DPDT

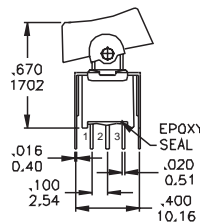
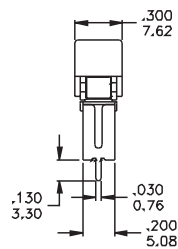


#### P.C. LAYOUT

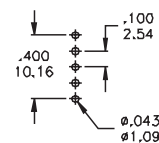


Part N° shown: 4B21-B1V9AE2

#### U2 SPDT

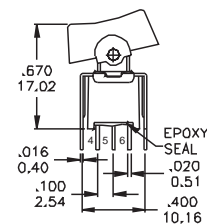
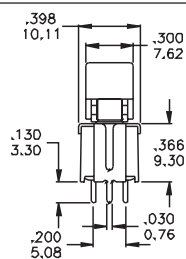


#### P.C. LAYOUT

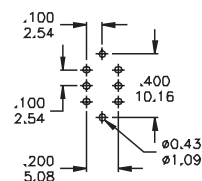


Part N° shown: 4B11-B1U2AE2

#### U2 DPDT



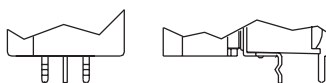
#### P.C. LAYOUT



Part N° shown: 4B21-B1U2AE2

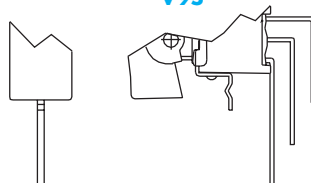
Snap-in Terminal Mounting

#### H9S



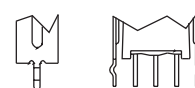
Snap-in Terminal Mounting

#### 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:  Made in Taiwan	
Remarks	

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