# 1000 Series Miniature Slide Switches

#### Features/Benefits

- Variety of actuators and terminations
- Panel mount tabs available
- Epoxy terminal seal—compatible with bottom-wash cleaning
- RoHS compliant



## **Typical Applications**

- Test & measurement equipment
- Telecommunications
- Computer & peripherals



### **Specifications**

CONTACT RATING: B contact material: 0.4 VA max. @ 20 V AC or DC max. Q contact material: 6 AMPS @ 120 V AC or 28 V DC, 3 AMPS @ 250 V AC. See page J-15 for additional ratings.

ELECTRICAL LIFE: 100,000 make-and-break cycles at full load on models with B, K or P contact material; 40,000 cycles on models with G, Q, L, M, S or R contact material.

CONTACT RESISTANCE: Below 10 m  $\Omega$  typ. initial @ 2-4 V DC, 100 mA, for both silver and gold plated contacts.

INSULATION RESISTANCE:  $10^9 \Omega$  min.

DIELECTRIC STRENGTH: 1,000 Vrms min. @ sea level.

OPERATING TEMPERATURE: -30°C to 65°C

SOLDERABILITY: Per MIL-STD-202F method 208D, or EIA RS-186E method 9 (1 hour steam aging).

#### **Materials**

CASE: diallyl phthalate (DAP), (UL 94V-0). ACTUATOR: Nylon, black, standard.

HOUSING: Stainless steel.

SWITCH SUPPORT: Brass or steel, matte-tin plated.

END CONTACTS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Coin silver, silver plated. See page I-16 for additional contact materials.

CENTER CONTACT & ALL TERMINALS: B contact material: Copper alloy, with gold plate over nickel plate. Q contact material: Copper alloy, silver plated. See page I-16 for additional contact materials.

TERMINAL SEAL: Epoxy. Refer to Soldering and Cleaning in Technical Data chapter

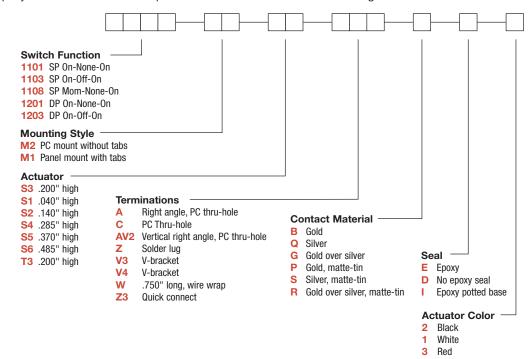
NOTE: Any models supplied with Q, B, G, P, S or R contact material are RoHS compliant.

NOTE: Specifications and materials listed above are for switches with standard options.

For information on specific and custom switches, consult Customer Service Center.

#### **Build-A-Switch**

To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages I–12 through I–16. For additional options not shown in catalog, consult Customer Service Center. All models have epoxy terminal seal and are compatible with all "bottom-wash" PCB cleaning methods.





Dimensions are shown: Inches (mm) Specifications and dimensions subject to change **SWITCH FUNCTION** 

|  | SWITCH FUNCTION |          |             | CONNECTED TERMINALS |         |        |         |                         |  |
|--|-----------------|----------|-------------|---------------------|---------|--------|---------|-------------------------|--|
|  |                 | POS. 1   | POS. 2      | POS. 3              | POS. 1  | POS. 2 | POS. 3  |                         |  |
| NO.<br>POLES   | MODEL<br>NO.    | •        |             |                     | -       |        | 4       | SCHEMATIC               |  |
|  | 1101            | ON       | NONE        | ON                  |         | N/A    |         | ●2 (COMM)               |  |
| SP   | 1103            | ON       | OFF         | ON                  | 1-2     | OPEN   | 2-3     | 1 • 3                   |  |
|  | 1108            | мом.     | NONE        | ON                  |         | N/A    |         | SPDT                    |  |
| SPDT  (5,08)  (5,08)  (5,08)  (6,60)  (6,60)  (7,70)  (1,27)  (1,27)  (1,27)  TERM. WIDTH  Terminal Nos.  For Reference Only   |                 |          |             |                     |         |        |         | al Nos.                 |  |
| DP   | 1201<br>1203    | ON<br>ON | NONE<br>OFF | ON<br>ON            | 2-1,5-4 | OPEN   | 2-3,5-6 | DPDT 1 • 2 (COMM) 5 • 6 |  |
| DPDT  (200 (5,08) (5,08) (2,16) TRAVEL (11,43) (0,76) (0,76) (11,43) ( |                 |          |             |                     |         |        |         |                         |  |

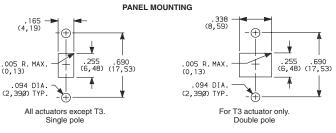
MOM. = Momentary

Part number shown: 1201M2S3CQE2

All models , with all options when ordered with G, Q, S or R contact material.



Terminal Nos. For Reference Only





Specifications and dimensions subject to change

Dimensions are shown: Inch (mm)

Third Angle Projection

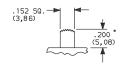


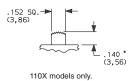
**S3** .200" HIGH

\$2 .140" HIGH

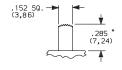
**S1** .040" HIGH

**S4** .285" HIGH





.152 SQ. - .040 \* .040 \* (1,02)



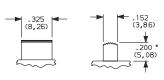
**\$5** .370" HIGH



**T3** .200" HIGH







120X models only.

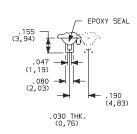
| OPTION<br>CODE | ACTUATOR<br>COLOR |  |  |
|----------------|-------------------|--|--|
| 2              | BLACK             |  |  |
| 1              | WHITE             |  |  |
| 3              | RED               |  |  |
| 7              | BLUE              |  |  |
| 9              | GRAY              |  |  |

Other colors available, consult Customer Service Cente

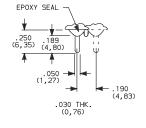
<sup>\*</sup> Subtract .014 (0,36) from actuator height, all models with A, AV2, V3, V4 terminations.

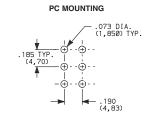


Z SOLDER LUG



C PC THRU-HOLE



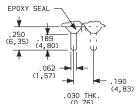


**SPDT & DPDT** 

Not available with P, S or R contact materials.

SPDT & DPDT

Z3 QUICK CONNECT

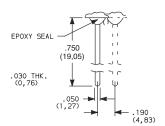


THK.

6)

Not available with P, S or R contact materials.
Mating quick connector available; order part number 530100000, page I-16.

W WIRE WRAP



SPDT & DPDT



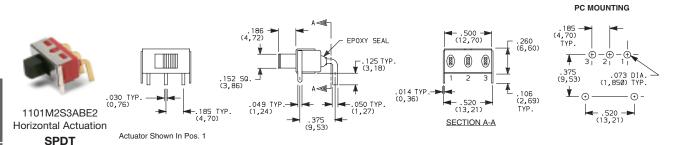
Dimensions are shown: Inches (mm) Specifications and dimensions subject to change

SPDT & DPDT



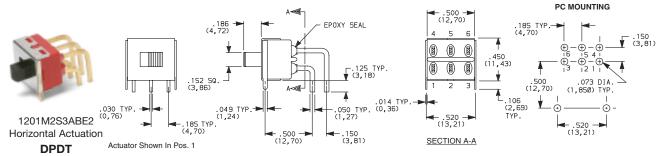
www.ck-components.com

A RIGHT ANGLE, PC THRU-HOLE



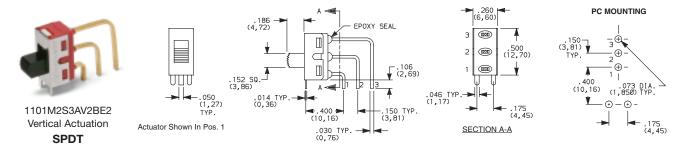
Not available with M1 mounting style, I seal option. Terminal bend radii and lead-in manufacturing option.

A RIGHT ANGLE, PC THRU-HOLE



Not available with M1 mounting style, I seal option. Terminal bend radii and lead-in manufacturing option.

AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



Not available with M1 mounting style, I seal option. Terminal bend radii and lead-in manufacturing option.

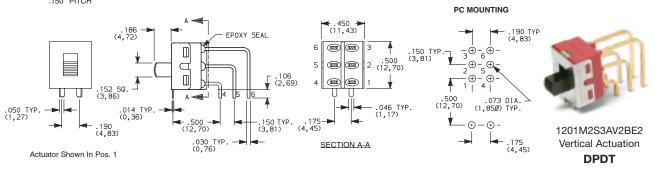


Dimensions are shown: Inch (mm) Specifications and dimensions subject to change



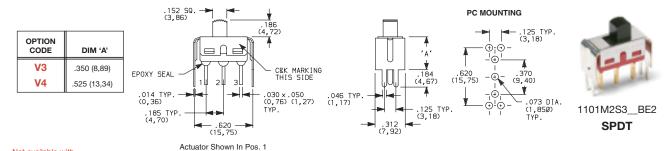
## **TERMINATIONS**

AV2 VERTICAL RIGHT ANGLE, PC THRU-HOLE, .150" PITCH



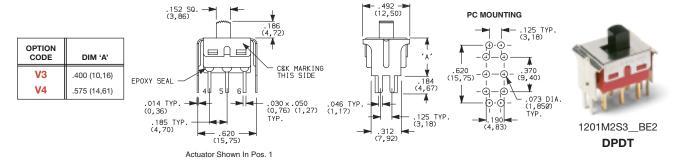
Not available with M1 mounting style, I seal option. Terminal bend radii and lead-in manufacturing option.

# V3, V4 VERTICAL MOUNT, V-BRACKET



Not available with M1 mounting style and I seal.

# V3, V4 VERTICAL MOUNT, V-BRACKET



Not available with M1 mounting style and I seal.



Dimensions are shown: Inches (mm) Specifications and dimensions subject to change



## CONTACT MATERIAL

| OPTION<br>CODE | CONTACT TERMINAL PLATING |                        | RATINGS          |   |  |  |
|----------------|--------------------------|------------------------|------------------|---|--|--|
| В              | GOLD <sup>1</sup>        | GOLD <sup>3</sup>      | LOW LEVEL/       | 0.4 VA MAX. @ 20 V AC OR DC MAX.  |  |  |
| P              | 3025                     | MATTE-TIN 6            | DRY CIRCUIT      |   |  |  |
| Q              | SILVER <sup>4,5</sup>    | GOLD <sup>3</sup>      | POWER            | 6 AMPS @ 120 V AC OR 28 V DC; 3 AMPS @ 250 V AC.  |  |  |
| S              |                          | MATTE-TIN <sup>6</sup> | FOWLN            | U AIVIFO W 120 V AO ON 20 V DO, 3 AIVIFO W 200 V AO.  |  |  |
| G              | GOLD OVER                | GOLD 3                 | LOW LEVEL/DRY    | 0 4 VA MAX @ 20 V AC OR DC MAX OR 6 AMPS @ 120 V AC OR 0.4 MAX. 28 V DC; 3 AMPS @ 250 V AC. |  |  |
| R              | GILVEN                   | MATTE-TIN <sup>6</sup> | CINCUIT OR POWER | 5.4 NEW 25 V 55, 57 NEW 5 G 250 V AG.   |  |  |



- <sup>1</sup> CONTACTS & TERMINALS: Copper alloy, with gold plate over nickel plate.
- <sup>2</sup> END CONTACTS: Coin silver, with gold plate over nickel plate.
- <sup>3</sup> CENTER CONTACTS & ALL TERMINALS: Copper alloy, with gold plate over nickel plate.
- <sup>4</sup> END CONTACTS: Coin silver, silver plated.
- $^{\rm 5}$  CENTER CONTACT & ALL TERMINALS: Copper alloy, silver plated.
- <sup>6</sup> TERMINALS: Copper alloy, with matte-tin over nickel plate.

All models  $_{\otimes}$   $\mbox{\ \ }$   $\mbox{\ \ }$  with all options when ordered with G, Q, S or R contact material.

B contact material standard with all terminations except C, Z, Z3..

Q contact material standard with C, Z, Z3 terminations.

P, S or R contact materials not available with Z, Z3 terminations.

**NOTE:** Any models supplied with Q, B, G, P, S or R contact material are RoHS compliant.



# **AVAILABLE HARDWARE**

Fits Z3 Termination female connector



# PART NO. 530100000

Available in loose pieces.



Dimensions are shown: Inch (mm) Specifications and dimensions subject to change



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