Slide	1	H	TELE	100 MM		*	*
Series	ES	TS	1000	GS	L	LP	S
Switch Type	Tiny	Tiny	Miniature	Ultra- miniature	Miniature	Miniature	Power
Poles	1 & 2	1	1 & 2	1	1 & 2	1 & 2	1 & 2
Momentary			•		•		•
Process Sealed	•			•			
Splashproof	•				•		
Screwdriver Slot					•		•
Housing Marking						•	•
Tape & Reel	•			•			
Max. Current	0.4 VA	3 A	6 A	0.4 VA	4 A	11 A	15 A
Terminations					•		
Wire Wrap		•	•		•		
Quick Connect			•				•
Wire Lead					•	•	•
Solder Lug			•		•	•	•
PC	•	•	•	•	•		•
PCB Mount Options							
Thru-hole	•	•	•	•	•	•	•
Vertical	•	•	•	•	•	•	•
Right Angle	•	•	•	•			•
Surface Mount	•			•			
Panel Mount Options							
Snap-in						•	•
Mounting Ears			•		•		•
Right Angle	•	•	•	•			•
Page No.	J-4	J-8	J-11	J-17	J-19	J-25	J-28



### 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 J-16 for additional contact materials.

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

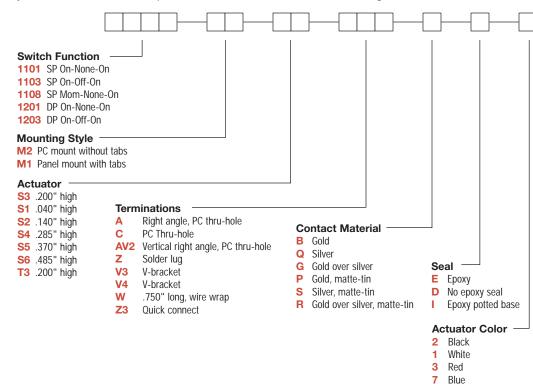
NOTE: Any models supplied with Q, B, G, P, S or R contact material are RoHS compliant.

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 J-12 through J-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.





# **Miniature Slide Switches**

**SWITCH FUNCTION** 

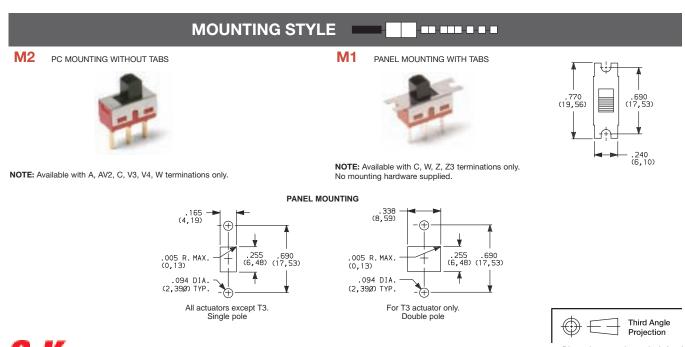
			ITCH FUNCT	ION	CONNECTED TERMINALS				
		POS. 1	POS. 2	POS. 3	POS. 1	POS. 2	POS. 3		
NO.	MODEL	4	4		_	_			
POLES	NO.							SCHEMATIC	
	1101	ON	NONE	ON		N/A		23 (20)80	
SP	1103	ON	OFF	ON	1-2	OPEN	2-3	2 (COMM)	
	1108	мом.	NONE	ON		N/A		SPDT	
SPD1	SPDT .200 EPOXY SEAL .260 (6, 60) (5, 08) .030 TYP. (0, 76) .33 (19) .75 (2, 16) .75 (2, 1								
			tuator shown	.152 SQ (3,86)	.250	.185 TYP. (4,70)  C&K MARKII THIS SIDE 250 (6,35)	.050 TYP. → (1,27) TERM.WIDTH		
Part nu	ımber shown: 1101M	2S3CQE2						nal Nos. rence Only	
	1201	ON	NONE	ON		OPEN	2-3,5-6	<b>₱</b> 2 (COMM) 5 <b>₱</b>	
DP	1203	ON	OFF	ON	2-1,5-4			DPDT 1 0 2 (COMM) 5 0 6	
DPD	Г		Actuator shows	(5,085 (2,16) TRAVEL .152.5 (3,86)		.060 (1,52) EPOXY SE .0 (0, (0, (4,70)	30 TYP. ,76) 6 ( ,500 5 ( 12,70) 5 (	(11, 450 <b>)</b> (11, 43)  (10) (11, 43)  (11) (11) (11) (11) (12) (13) (14) (15) (15) (16) (17) (17) (17) (17) (17) (17) (17) (17	

.050 TYP.→ (1,27) TERM. WIDTH Terminal Nos. For Reference Only

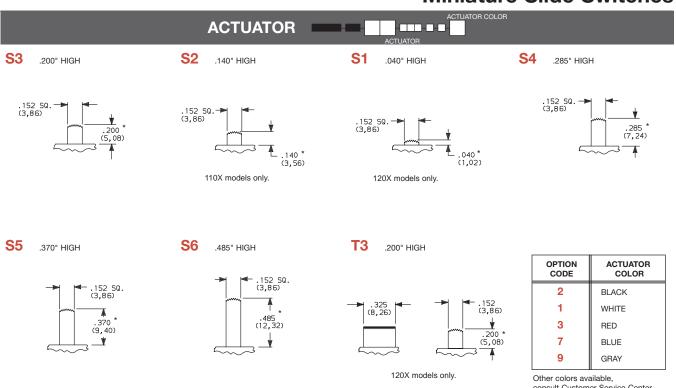
Part number shown: 1201M2S3CQE2

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

Actuator shown in position 1

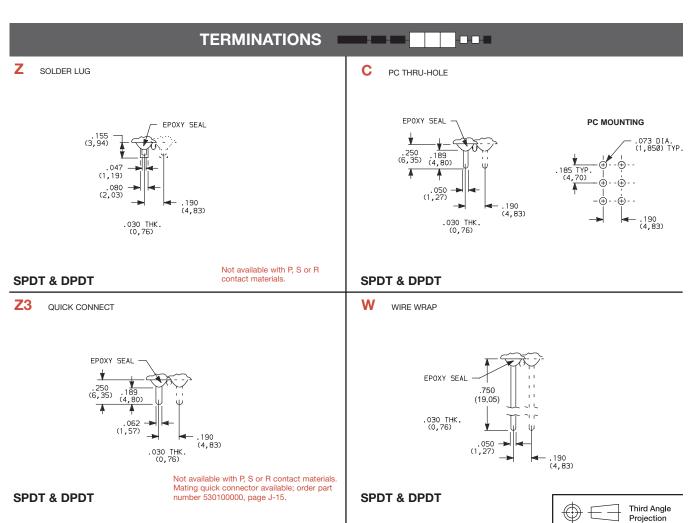






<sup>\*</sup> Subtract .014 (0,36) from actuator height, all models with A, AV2, V3, V4 terminations.

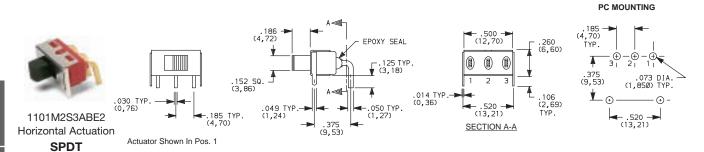
consult Customer Service Center.





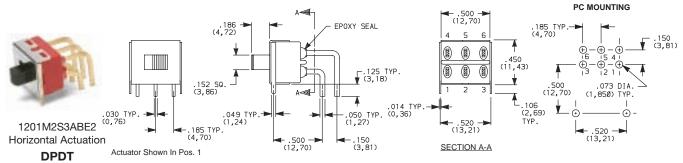
### TERMINATIONS ----

A RIGHT ANGLE, PC THRU-HOLE



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

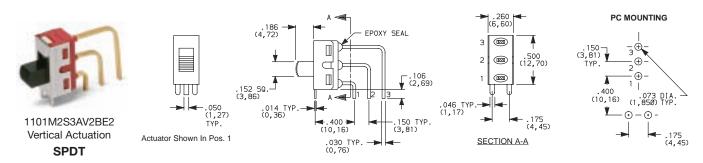
A RIGHT ANGLE, PC THRU-HOLE



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.





### CONTACT MATERIAL

OPTION CODE	CONTACT MATERIAL	TERMINAL PLATING	RATINGS			
В	GOLD <sup>1</sup>	GOLD <sup>3</sup>	LOW LEVEL/			
P		MATTE-TIN <sup>6</sup>	DRY CIRCUIT	0.4 VA MAX. @ 20 V AC OR DC MAX.		
Q	SILVER 4,5	GOLD <sup>3</sup>	POWER	6 AMPS @ 120 V AC OR 28 V DC; 3 AMPS @ 250 V AC.		
S	SILVEN ","	MATTE-TIN <sup>6</sup>	FOWER	0 AIVIF 3 @ 120 V AO ON 20 V DO, 3 AIVIF 3 @ 230 V AO.		
G	GOLD OVER	GOLD <sup>3</sup>	LOW LEVEL/DRY	0 4 VA MAX @ 20 V AC OR DC MAX OR 6 AMPS @ 120 V AC OR		
R	SILVER <sup>2,3</sup>	MATTE-TIN <sup>6</sup>	CIRCUIT OR POWER	0.4 MAX. 28 V DC; 3 AMPS @ 250 V AC.		



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

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

All models  $_{\otimes}$  with all options when ordered with G, L, M, 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.

K, L and M options represent Non RoHS tin lead product and are not recommended for new designs. For additional information please contact Customer Service.



## **AVAILABLE HARDWARE**

Fits Z3 Termination female connector



### PART NO.

#### 530100000

Available in loose pieces.



