

## ST SERIES - MINIATURE ROCKER & LEVER SWITCHES

B



### FEATURES

- Dry circuit through power ratings .
- Ultra-rugged construction SPDT & DPDT models with numerous options.
- Panel, panel & p.c. and p.c. mounting models, lighted and unlighted.

### SPECIFICATIONS

|                                           |                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Contact ratings (resistive loads):</b> | (Q) power models - coin silver: 6 Amps at 125 VAC, 3 Amps at 250 VAC or 7 Amps at 30 VDC.<br>(B) dry circuit models - gold over nickel over brass: 0.4 VA max. at 20 V max.<br>UL models - coin silver: 6 Amps at 125 VAC or 3 Amps at 250 VAC (75% power factor). UL file no. E66367. CSA models - coin silver: same ratings as UL models. CSA file no. LR54592-1. |
| <b>Initial contact resistance:</b>        | 3 milliohms max. at 3 VDC, 0.1 Amp.                                                                                                                                                                                                                                                                                                                                 |
| <b>Insulation resistance:</b>             | Greater than 200,000 megohms between terminals & case ground.                                                                                                                                                                                                                                                                                                       |
| <b>Dielectric strength:</b>               | Greater than 2000 VAC for 1 minute between terminals & case ground.                                                                                                                                                                                                                                                                                                 |
| <b>Electrical life (resistive loads):</b> | 100,000 cycles min. for ST1-1 & ST2-1. Other models, 40,000 cycles min.                                                                                                                                                                                                                                                                                             |
| <b>Operating temperature range:</b>       | -30°C to +85°C                                                                                                                                                                                                                                                                                                                                                      |

### MATERIALS

|                                 |                                                                                                                                                                                                                                                                          |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Contacts:</b>                | Coin silver for power, UL & CSA models. Gold over nickel over brass for dry circuit models.                                                                                                                                                                              |
| <b>Actuator:</b>                | J1 & J2 - Glass filled polyester. J3 & J4 - Nylon or acetal                                                                                                                                                                                                              |
| <b>Bushing:</b>                 | Nickel plated brass                                                                                                                                                                                                                                                      |
| <b>Strap:</b>                   | Stainless steel                                                                                                                                                                                                                                                          |
| <b>Case:</b>                    | Melamine phenolic, color red                                                                                                                                                                                                                                             |
| <b>Terminal seal:</b>           | Epoxy (optional)                                                                                                                                                                                                                                                         |
| <b>Support bracket:</b>         | Brass or steel, tin plated                                                                                                                                                                                                                                               |
| <b>Spring mounting bracket:</b> | Stainless steel                                                                                                                                                                                                                                                          |
| <b>Bezel:</b>                   | Nylon. Available in black, red & white. Consult factory for other colors.                                                                                                                                                                                                |
| <b>Hardware:</b>                | See 'Miscellaneous' section.                                                                                                                                                                                                                                             |
| <b>LED:</b>                     | Intensity: 2.0 mcd at 10 mA. Forward voltage: 2.0V (3.0V max.). Max. continuous forward current: 15 mA for red, 30 mA for green & 20 mA for yellow. Red is standard. Yellow & green are optional. Specifications are subject to change without notice - consult factory. |

### AGENCY RECOGNITION



UL, & CSA. Marking: Switches ordered by UL model number are supplied with recognition marking. Switches ordered by UL model no. and with 'CSA' added at end of model no. are supplied with both recognized marks.

### ABOUT THIS SERIES

The material in this series is organized in the following sequence:

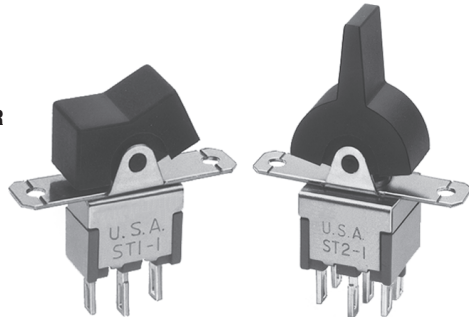
- Completely specified switch models
- Miscellaneous
- 'build your own switch' order format
- Option drawings & information
- Mounting information and panel cut-outs

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

# ST SERIES - MINIATURE ROCKER & LEVER SWITCHES

## Solder lug terminals - panel mounting

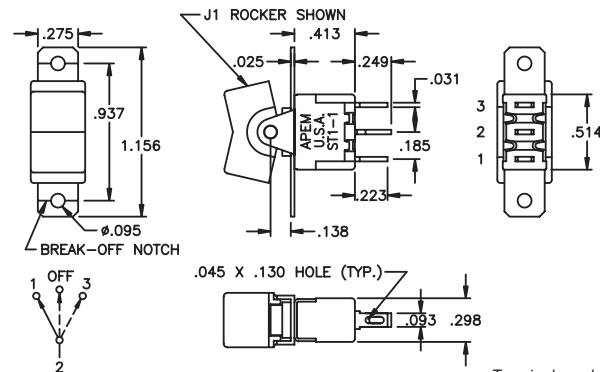
SINGLE  
POLE  
WITH J1  
ROCKER



DOUBLE  
POLE  
WITH J2  
LEVER

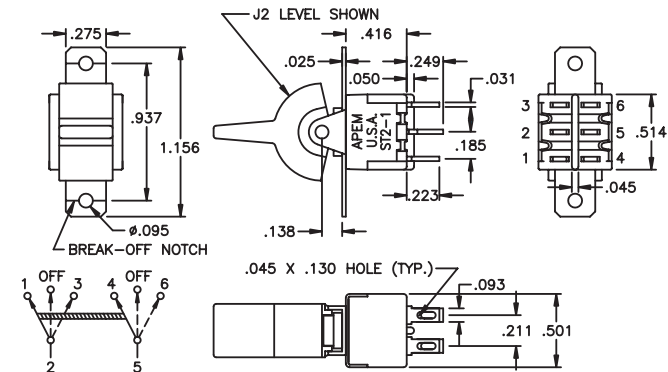
|                                   | POWER CKT.<br>MODEL NO. | UL MODEL NO.  | USA marking on other side |             |             |
|-----------------------------------|-------------------------|---------------|---------------------------|-------------|-------------|
| Single pole                       | ST1-1L4S4ZQJ12          | UL11L4S4ZQJ12 | ON                        | NONE        | ON          |
|                                   | ST1-2L4S4ZQJ12          | UL12L4S4ZQJ12 | ON                        | OFF         | ON          |
|                                   | ST1-3L4S4ZQJ12          | UL13L4S4ZQJ12 | MOM                       | OFF         | MOM         |
|                                   | ST1-4L4S4ZQJ12          | UL14L4S4ZQJ12 | ON                        | OFF         | MOM         |
|                                   | ST1-5L4S4ZQJ12          | UL15L4S4ZQJ12 | ON                        | NONE        | MOM         |
| Double pole                       | ST2-1L4S4ZQJ12          | UL21L4S4ZQJ12 | ON                        | NONE        | ON          |
|                                   | ST2-2L4S4ZQJ12          | UL22L4S4ZQJ12 | ON                        | OFF         | ON          |
|                                   | ST2-3L4S4ZQJ12          | UL23L4S4ZQJ12 | MOM                       | OFF         | MOM         |
|                                   | ST2-4L4S4ZQJ12          | UL24L4S4ZQJ12 | ON                        | OFF         | MOM         |
|                                   | ST2-5L4S4ZQJ12          | UL25L4S4ZQJ12 | ON                        | NONE        | MOM         |
|                                   | ST2-6L4S4ZQJ12          | UL26L4S4ZQJ12 | ON                        | ON          | ON          |
|                                   | ST2-7L4S4ZQJ12          | UL27L4S4ZQJ12 | ON                        | ON          | MOM         |
|                                   | ST2-8L4S4ZQJ12          | UL28L4S4ZQJ12 | MOM                       | ON          | MOM         |
| Terminals connected (-6, -7 & -8) |                         |               | 1-2,<br>4-5               | 1-2,<br>5-6 | 2-3,<br>5-6 |

Above models have black actuator.



SINGLE POLE

Terminal numbers  
for reference only



DOUBLE POLE

## Straight p.c. terminals with bracket - p.c. mounting

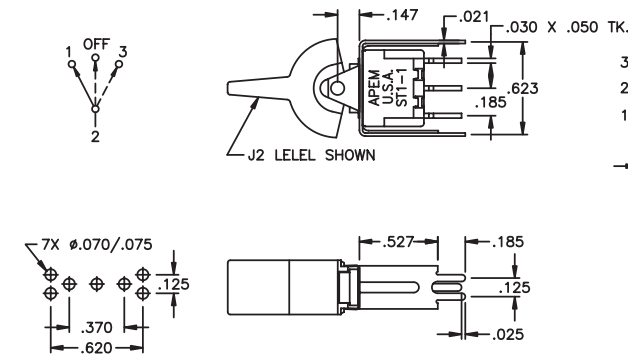
SINGLE  
POLE  
WITH J1  
ROCKER



DOUBLE  
POLE  
WITH J2  
LEVER

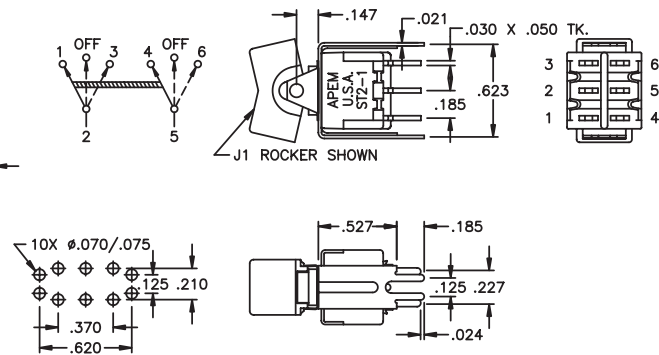
|                                   | DRY CKT.<br>MODEL NO. | UL MODEL NO.    | USA marking on other side |             |             |
|-----------------------------------|-----------------------|-----------------|---------------------------|-------------|-------------|
| Single pole                       | ST1-1L4S4V30BJ12      | UL11L4S4V30QJ12 | ON                        | NONE        | ON          |
|                                   | ST1-2L4S4V30BJ12      | UL12L4S4V30QJ12 | ON                        | OFF         | ON          |
|                                   | ST1-3L4S4V30BJ12      | UL13L4S4V30QJ12 | MOM                       | OFF         | MOM         |
|                                   | ST1-4L4S4V30BJ12      | UL14L4S4V30QJ12 | ON                        | OFF         | MOM         |
|                                   | ST1-5L4S4V30BJ12      | UL15L4S4V30QJ12 | ON                        | NONE        | MOM         |
| Double pole                       | ST2-1L4S4V30BJ12      | UL21L4S4V30QJ12 | ON                        | NONE        | ON          |
|                                   | ST2-2L4S4V30BJ12      | UL22L4S4V30QJ12 | ON                        | OFF         | ON          |
|                                   | ST2-3L4S4V30BJ12      | UL23L4S4V30QJ12 | MOM                       | OFF         | MOM         |
|                                   | ST2-4L4S4V30BJ12      | UL24L4S4V30QJ12 | ON                        | OFF         | MOM         |
|                                   | ST2-5L4S4V30BJ12      | UL25L4S4V30QJ12 | ON                        | NONE        | MOM         |
|                                   | ST2-6L4S4V30BJ12      | UL26L4S4V30QJ12 | ON                        | ON          | ON          |
|                                   | ST2-7L4S4V30BJ12      | UL27L4S4V30QJ12 | ON                        | ON          | MOM         |
|                                   | ST2-8L4S4V30BJ12      | UL28L4S4V30QJ12 | MOM                       | ON          | MOM         |
| Terminals connected (-6, -7 & -8) |                       |                 | 1-2,<br>4-5               | 1-2,<br>5-6 | 2-3,<br>5-6 |

Above models have black actuator.



SINGLE POLE

Terminal numbers  
for reference only

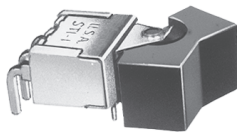


DOUBLE POLE

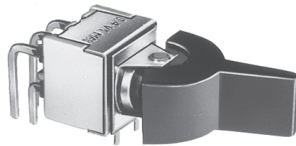
# ST SERIES - MINIATURE ROCKER & LEVER SWITCHES

## Horizontal right angle p.c. terminals - p.c. mounting

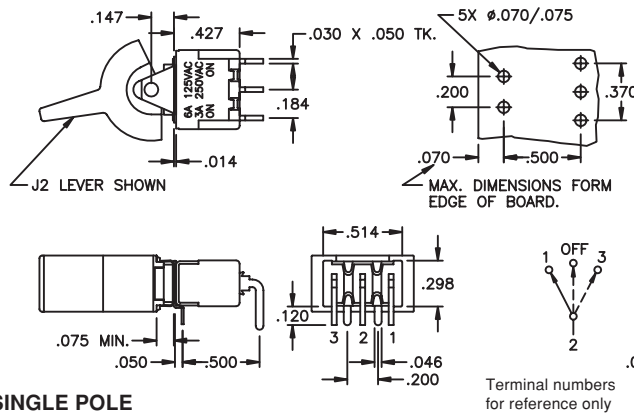
B



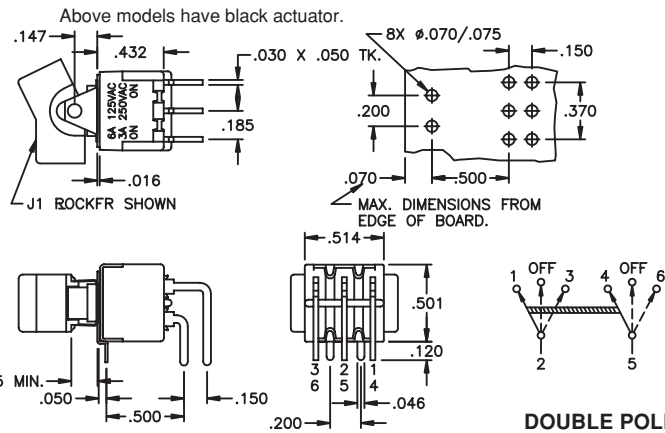
**SINGLE POLE WITH J1 ROCKER**



**DOUBLE POLE WITH J2 LEVER**

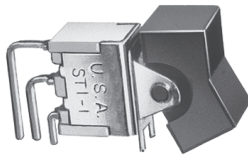


**SINGLE POLE**

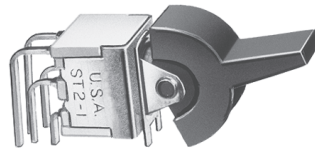


**DOUBLE POLE**

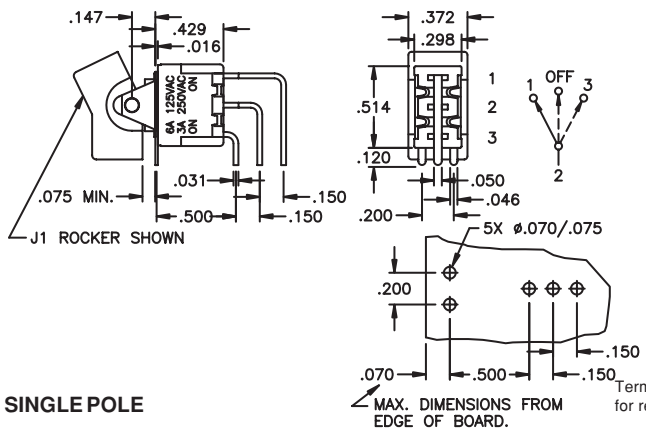
## Vertical right angle p.c. terminals - p.c. mounting



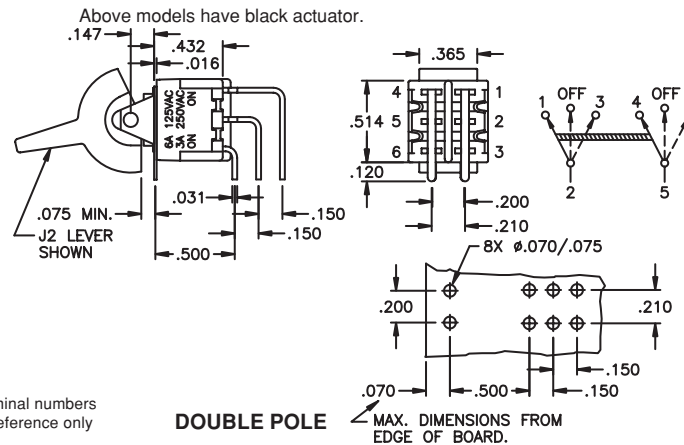
**SINGLE POLE WITH J1 ROCKER**



**DOUBLE POLE WITH J2 LEVER**



**SINGLE POLE**



**DOUBLE POLE**

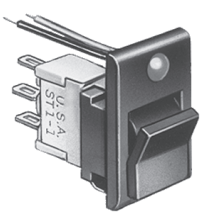
|                                   | DRY CKT. MODEL NO. | UL MODEL NO.    | USA marking on other side |          |          |
|-----------------------------------|--------------------|-----------------|---------------------------|----------|----------|
| Single pole                       | ST1-1L4S4A-1BJ12   | UL11L4S4A-1QJ12 | ON                        | NONE     | ON       |
|                                   | ST1-2L4S4A-1BJ12   | UL12L4S4A-1QJ12 | ON                        | OFF      | ON       |
|                                   | ST1-3L4S4A-1BJ12   | UL13L4S4A-1QJ12 | MOM                       | OFF      | MOM      |
|                                   | ST1-4L4S4A-1BJ12   | UL14L4S4A-1QJ12 | ON                        | OFF      | MOM      |
|                                   | ST1-5L4S4A-1BJ12   | UL15L4S4A-1QJ12 | ON                        | NONE     | MOM      |
| Double pole                       | ST2-1L4S4A-1BJ12   | UL21L4S4A-1QJ12 | ON                        | NONE     | ON       |
|                                   | ST2-2L4S4A-1BJ12   | UL22L4S4A-1QJ12 | ON                        | OFF      | ON       |
|                                   | ST2-3L4S4A-1BJ12   | UL23L4S4A-1QJ12 | MOM                       | OFF      | MOM      |
|                                   | ST2-4L4S4A-1BJ12   | UL24L4S4A-1QJ12 | ON                        | OFF      | MOM      |
|                                   | ST2-5L4S4A-1BJ12   | UL25L4S4A-1QJ12 | ON                        | NONE     | MOM      |
|                                   | ST2-6L4S4A-1BJ12   | UL26L4S4A-1QJ12 | ON                        | ON       | ON       |
|                                   | ST2-7L4S4A-1BJ12   | UL27L4S4A-1QJ12 | ON                        | ON       | MOM      |
|                                   | ST2-8L4S4A-1BJ12   | UL28L4S4A-1QJ12 | MOM                       | ON       | MOM      |
| Terminals connected (-6, -7 & -8) |                    |                 | 1-2, 4-5                  | 1-2, 5-6 | 2-3, 5-6 |

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

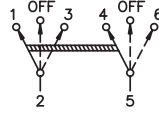
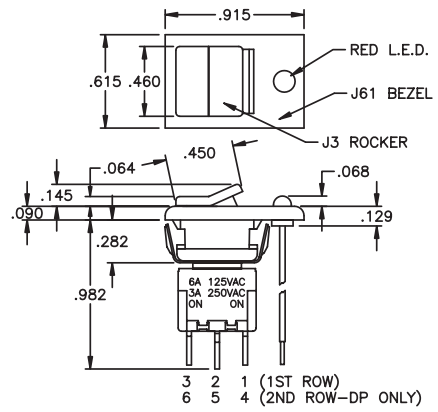
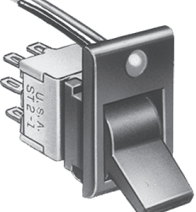
ST SERIES - MINIATURE ROCKER & LEVER SWITCHES

Solder lug terminals - snap-in bezel with outboard LED

SINGLE POLE WITH J3 ROCKER



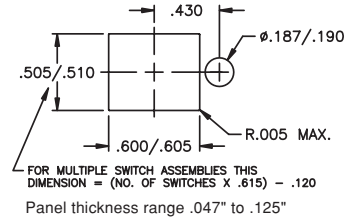
DOUBLE POLE WITH J4 LEVER



Terminal numbers for reference only

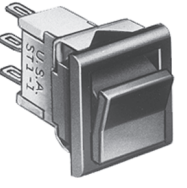
|                                   | POWER CKT. MODEL NO. | UL MODEL NO.      | USA marking on other side |          |          |
|-----------------------------------|----------------------|-------------------|---------------------------|----------|----------|
|                                   |                      |                   |                           |          |          |
| Single pole                       | ST1-1L5S5ZQJ3J6122   | UL11L5S5ZQJ3J6122 | ON                        | NONE     | ON       |
|                                   | ST1-2L5S5ZQJ3J6122   | UL12L5S5ZQJ3J6122 | ON                        | OFF      | ON       |
|                                   | ST1-3L5S5ZQJ3J6122   | UL13L5S5ZQJ3J6122 | MOM                       | OFF      | MOM      |
|                                   | ST1-4L5S5ZQJ3J6122   | UL14L5S5ZQJ3J6122 | ON                        | OFF      | MOM      |
|                                   | ST1-5L5S5ZQJ3J6122   | UL15L5S5ZQJ3J6122 | ON                        | NONE     | MOM      |
| Double pole                       | ST2-1L5S5ZQJ3J6122   | UL21L5S5ZQJ3J6122 | ON                        | NONE     | ON       |
|                                   | ST2-2L5S5ZQJ3J6122   | UL22L5S5ZQJ3J6122 | ON                        | OFF      | ON       |
|                                   | ST2-3L5S5ZQJ3J6122   | UL23L5S5ZQJ3J6122 | MOM                       | OFF      | MOM      |
|                                   | ST2-4L5S5ZQJ3J6122   | UL24L5S5ZQJ3J6122 | ON                        | OFF      | MOM      |
|                                   | ST2-5L5S5ZQJ3J6122   | UL25L5S5ZQJ3J6122 | ON                        | NONE     | MOM      |
|                                   | ST2-6L5S5ZQJ3J6122   | UL26L5S5ZQJ3J6122 | ON                        | ON       | ON       |
|                                   | ST2-7L5S5ZQJ3J6122   | UL27L5S5ZQJ3J6122 | ON                        | ON       | MOM      |
|                                   | ST2-8L5S5ZQJ3J6122   | UL28L5S5ZQJ3J6122 | MOM                       | ON       | MOM      |
| Terminals connected (-6, -7 & -8) |                      |                   | 1-2, 4-5                  | 1-2, 5-6 | 2-3, 5-6 |

Above models have black bezel & actuator.

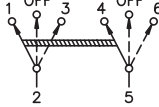
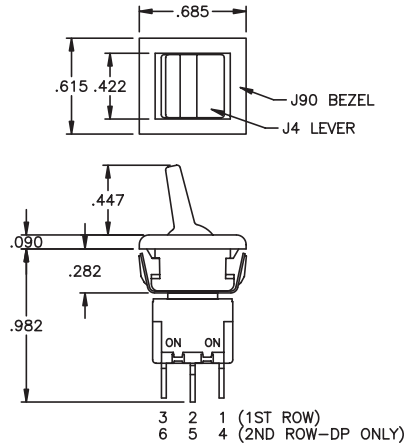
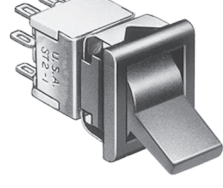


Solder lug terminals - snap-in bezel

SINGLE POLE WITH J3 ROCKER



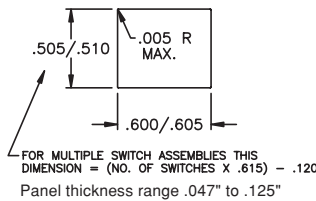
DOUBLE POLE WITH J4 LEVER



Terminal numbers for reference only

|                                   | POWER CKT. MODEL NO. | UL MODEL NO.      | USA marking on other side |          |          |
|-----------------------------------|----------------------|-------------------|---------------------------|----------|----------|
|                                   |                      |                   |                           |          |          |
| Single pole                       | ST1-1L5S5ZQJ4J9022   | UL11L5S5ZQJ4J9022 | ON                        | NONE     | ON       |
|                                   | ST1-2L5S5ZQJ4J9022   | UL12L5S5ZQJ4J9022 | ON                        | OFF      | ON       |
|                                   | ST1-3L5S5ZQJ4J9022   | UL13L5S5ZQJ4J9022 | MOM                       | OFF      | MOM      |
|                                   | ST1-4L5S5ZQJ4J9022   | UL14L5S5ZQJ4J9022 | ON                        | OFF      | MOM      |
|                                   | ST1-5L5S5ZQJ4J9022   | UL15L5S5ZQJ4J9022 | ON                        | NONE     | MOM      |
| Double pole                       | ST2-1L5S5ZQJ4J9022   | UL21L5S5ZQJ4J9022 | ON                        | NONE     | ON       |
|                                   | ST2-2L5S5ZQJ4J9022   | UL22L5S5ZQJ4J9022 | ON                        | OFF      | ON       |
|                                   | ST2-3L5S5ZQJ4J9022   | UL23L5S5ZQJ4J9022 | MOM                       | OFF      | MOM      |
|                                   | ST2-4L5S5ZQJ4J9022   | UL24L5S5ZQJ4J9022 | ON                        | OFF      | MOM      |
|                                   | ST2-5L5S5ZQJ4J9022   | UL25L5S5ZQJ4J9022 | ON                        | NONE     | MOM      |
|                                   | ST2-6L5S5ZQJ4J9022   | UL26L5S5ZQJ4J9022 | ON                        | ON       | ON       |
|                                   | ST2-7L5S5ZQJ4J9022   | UL27L5S5ZQJ4J9022 | ON                        | ON       | MOM      |
|                                   | ST2-8L5S5ZQJ4J9022   | UL28L5S5ZQJ4J9022 | MOM                       | ON       | MOM      |
| Terminals connected (-6, -7 & -8) |                      |                   | 1-2, 4-5                  | 1-2, 5-6 | 2-3, 5-6 |

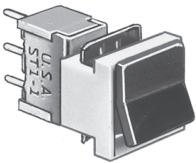
Above models have black bezel & actuator.



ST SERIES - MINIATURE ROCKER & LEVER SWITCHES

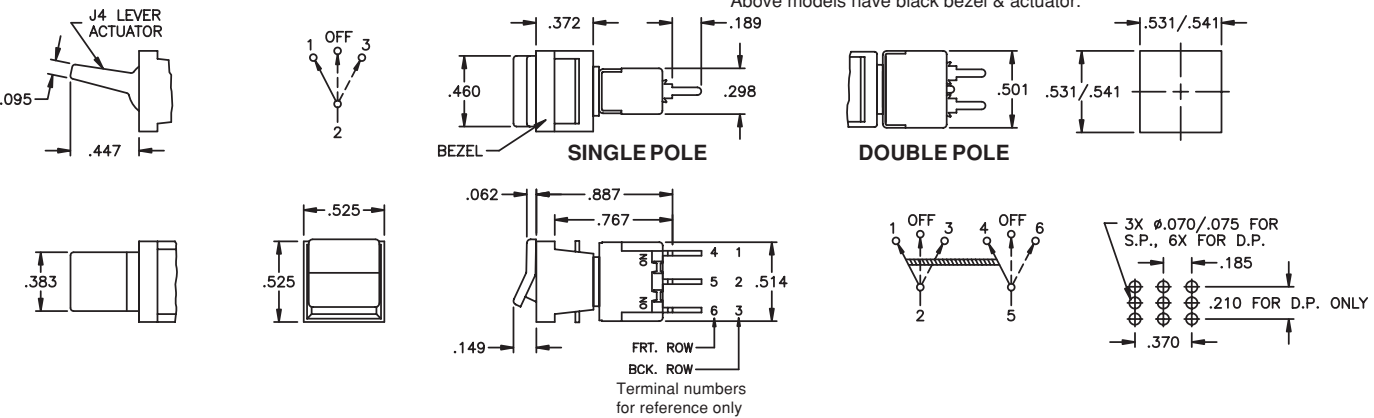
Straight p.c. terminals - p.c. mounting bezel

SINGLE  
POLE  
WITH J3  
ROCKER



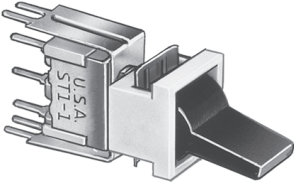
|                                   | DRY CKT.<br>MODEL NO. | UL MODEL NO.      | USA marking on other side |             |             |
|-----------------------------------|-----------------------|-------------------|---------------------------|-------------|-------------|
| Single pole                       | ST1-1L5S5CBJ3J9322    | UL11L5S5CQJ3J9322 | ON                        | NONE        | ON          |
|                                   | ST1-2L5S5CBJ3J9322    | UL12L5S5CQJ3J9322 | ON                        | OFF         | ON          |
|                                   | ST1-3L5S5CBJ3J9322    | UL13L5S5CQJ3J9322 | MOM                       | OFF         | MOM         |
|                                   | ST1-4L5S5CBJ3J9322    | UL14L5S5CQJ3J9322 | ON                        | OFF         | MOM         |
|                                   | ST1-5L5S5CBJ3J9322    | UL15L5S5CQJ3J9322 | ON                        | NONE        | MOM         |
| Double pole                       | ST2-1L5S5CBJ3J9322    | UL21L5S5CQJ3J9322 | ON                        | NONE        | ON          |
|                                   | ST2-2L5S5CBJ3J9322    | UL22L5S5CQJ3J9322 | ON                        | OFF         | ON          |
|                                   | ST2-3L5S5CBJ3J9322    | UL23L5S5CQJ3J9322 | MOM                       | OFF         | MOM         |
|                                   | ST2-4L5S5CBJ3J9322    | UL24L5S5CQJ3J9322 | ON                        | OFF         | MOM         |
|                                   | ST2-5L5S5CBJ3J9322    | UL25L5S5CQJ3J9322 | ON                        | NONE        | MOM         |
|                                   | ST2-6L5S5CBJ3J9322    | UL26L5S5CQJ3J9322 | ON                        | ON          | ON          |
|                                   | ST2-7L5S5CBJ3J9322    | UL27L5S5CQJ3J9322 | ON                        | ON          | MOM         |
|                                   | ST2-8L5S5CBJ3J9322    | UL28L5S5CQJ3J9322 | MOM                       | ON          | MOM         |
| Terminals connected (-6, -7 & -8) |                       |                   | 1-2,<br>4-5               | 1-2,<br>5-6 | 2-3,<br>5-6 |

Above models have black bezel & actuator.



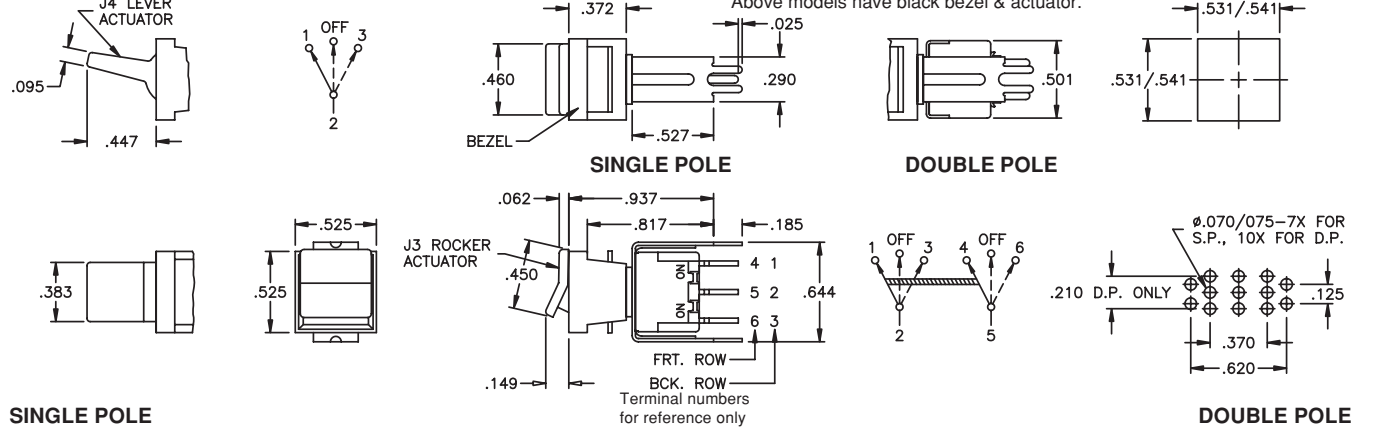
Straight p.c. terminals w/bracket - p.c. mounting bezel

SINGLE  
POLE  
WITH J4  
LEVER



|                                   | DRY CKT.<br>MODEL NO. | UL MODEL NO.        | USA marking on other side |             |             |
|-----------------------------------|-----------------------|---------------------|---------------------------|-------------|-------------|
| Single pole                       | ST1-1L5S5V30BJ3J9322  | UL11L5S5V30QJ3J9322 | ON                        | NONE        | ON          |
|                                   | ST1-2L5S5V30BJ3J9322  | UL12L5S5V30QJ3J9322 | ON                        | OFF         | ON          |
|                                   | ST1-3L5S5V30BJ3J9322  | UL13L5S5V30QJ3J9322 | MOM                       | OFF         | MOM         |
|                                   | ST1-4L5S5V30BJ3J9322  | UL14L5S5V30QJ3J9322 | ON                        | OFF         | MOM         |
|                                   | ST1-5L5S5V30BJ3J9322  | UL15L5S5V30QJ3J9322 | ON                        | NONE        | MOM         |
| Double pole                       | ST2-1L5S5V30BJ3J9322  | UL21L5S5V30QJ3J9322 | ON                        | NONE        | ON          |
|                                   | ST2-2L5S5V30BJ3J9322  | UL22L5S5V30QJ3J9322 | ON                        | OFF         | ON          |
|                                   | ST2-3L5S5V30BJ3J9322  | UL23L5S5V30QJ3J9322 | MOM                       | OFF         | MOM         |
|                                   | ST2-4L5S5V30BJ3J9322  | UL24L5S5V30QJ3J9322 | ON                        | OFF         | MOM         |
|                                   | ST2-5L5S5V30BJ3J9322  | UL25L5S5V30QJ3J9322 | ON                        | NONE        | MOM         |
|                                   | ST2-6L5S5V30BJ3J9322  | UL26L5S5V30QJ3J9322 | ON                        | ON          | ON          |
|                                   | ST2-7L5S5V30BJ3J9322  | UL27L5S5V30QJ3J9322 | ON                        | ON          | MOM         |
|                                   | ST2-8L5S5V30BJ3J9322  | UL28L5S5V30QJ3J9322 | MOM                       | ON          | MOM         |
| Terminals connected (-6, -7 & -8) |                       |                     | 1-2,<br>4-5               | 1-2,<br>5-6 | 2-3,<br>5-6 |

Above models have black bezel & actuator.

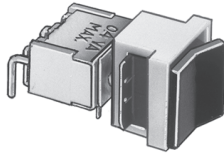


SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

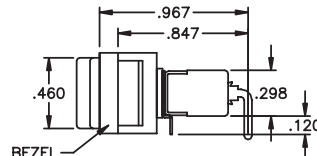
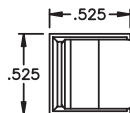
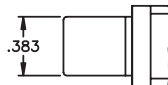
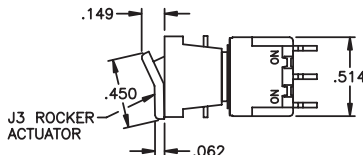
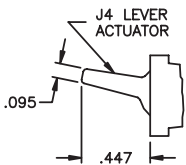
# ST SERIES - MINIATURE ROCKER & LEVER SWITCHES

## Horizontal right angle p.c. terminals - p.c. mtg. bezel

SINGLE  
POLE  
WITH J3  
ROCKER



| Poles | Option | Dim. A | Dim. B    |
|-------|--------|--------|-----------|
| SP    | A      | .148   | .045 max. |
| SP    | A-1    | .164   | .095 max. |
| DP    | A      | .250   | .300 max. |
| DP    | A-1    | .266   | .350 max. |



Terminal numbers  
for reference only

SINGLE POLE

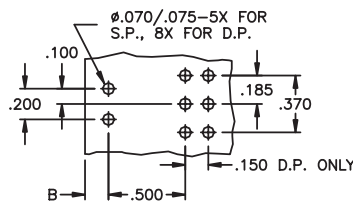
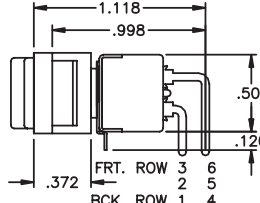
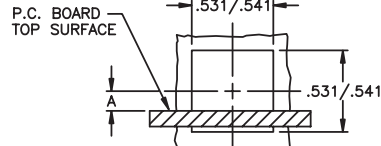
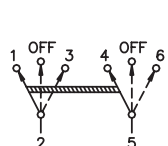
DRY CKT.  
MODEL NO.

UL MODEL NO.

USA marking on other side

|                                   |                      |                     |             |             |             |
|-----------------------------------|----------------------|---------------------|-------------|-------------|-------------|
| Single pole                       | ST1-1L5S5A-1BJ3J9322 | UL11L5S5A-1QJ3J9322 | ON          | NONE        | ON          |
|                                   | ST1-2L5S5A-1BJ3J9322 | UL12L5S5A-1QJ3J9322 | ON          | OFF         | ON          |
|                                   | ST1-3L5S5A-1BJ3J9322 | UL13L5S5A-1QJ3J9322 | MOM         | OFF         | MOM         |
|                                   | ST1-4L5S5A-1BJ3J9322 | UL14L5S5A-1QJ3J9322 | ON          | OFF         | MOM         |
|                                   | ST1-5L5S5A-1BJ3J9322 | UL15L5S5A-1QJ3J9322 | ON          | NONE        | MOM         |
| Double pole                       | ST2-1L5S5A-1BJ3J9322 | UL21L5S5A-1QJ3J9322 | ON          | NONE        | ON          |
|                                   | ST2-2L5S5A-1BJ3J9322 | UL22L5S5A-1QJ3J9322 | ON          | OFF         | ON          |
|                                   | ST2-3L5S5A-1BJ3J9322 | UL23L5S5A-1QJ3J9322 | MOM         | OFF         | MOM         |
|                                   | ST2-4L5S5A-1BJ3J9322 | UL24L5S5A-1QJ3J9322 | ON          | OFF         | MOM         |
|                                   | ST2-5L5S5A-1BJ3J9322 | UL25L5S5A-1QJ3J9322 | ON          | NONE        | MOM         |
|                                   | ST2-6L5S5A-1BJ3J9322 | UL26L5S5A-1QJ3J9322 | ON          | ON          | ON          |
|                                   | ST2-7L5S5A-1BJ3J9322 | UL27L5S5A-1QJ3J9322 | ON          | ON          | MOM         |
|                                   | ST2-8L5S5A-1BJ3J9322 | UL28L5S5A-1QJ3J9322 | MOM         | ON          | MOM         |
| Terminals connected (-6, -7 & -8) |                      |                     | 1-2,<br>4-5 | 1-2,<br>5-6 | 2-3,<br>5-6 |

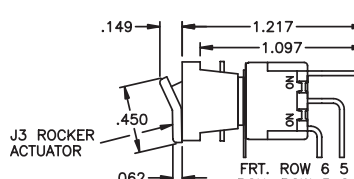
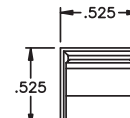
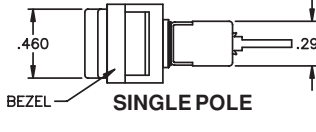
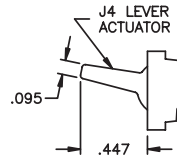
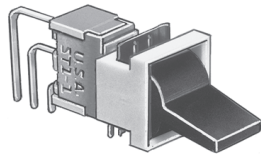
Above models have black bezel & actuator.



DOUBLE POLE

## Vertical right angle p.c. terminals - p.c. mtg. bezel

SINGLE  
POLE  
WITH J4  
LEVER



J3 ROCKER  
ACTUATOR

Terminal numbers  
for reference only

SINGLE POLE

DOUBLE POLE

Above models have black bezel & actuator.

DRY CKT.  
MODEL NO.

UL MODEL NO.

USA marking on other side

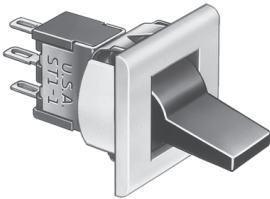
|                                   |                      |                     |             |             |             |
|-----------------------------------|----------------------|---------------------|-------------|-------------|-------------|
| Single pole                       | ST1-1L5S5V-1BJ3J9322 | UL11L5S5V-1QJ3J9322 | ON          | NONE        | ON          |
|                                   | ST1-2L5S5V-1BJ3J9322 | UL12L5S5V-1QJ3J9322 | ON          | OFF         | ON          |
|                                   | ST1-3L5S5V-1BJ3J9322 | UL13L5S5V-1QJ3J9322 | MOM         | OFF         | MOM         |
|                                   | ST1-4L5S5V-1BJ3J9322 | UL14L5S5V-1QJ3J9322 | ON          | OFF         | MOM         |
|                                   | ST1-5L5S5V-1BJ3J9322 | UL15L5S5V-1QJ3J9322 | ON          | NONE        | MOM         |
| Double pole                       | ST2-1L5S5V-1BJ3J9322 | UL21L5S5V-1QJ3J9322 | ON          | NONE        | ON          |
|                                   | ST2-2L5S5V-1BJ3J9322 | UL22L5S5V-1QJ3J9322 | ON          | OFF         | ON          |
|                                   | ST2-3L5S5V-1BJ3J9322 | UL23L5S5V-1QJ3J9322 | MOM         | OFF         | MOM         |
|                                   | ST2-4L5S5V-1BJ3J9322 | UL24L5S5V-1QJ3J9322 | ON          | OFF         | MOM         |
|                                   | ST2-5L5S5V-1BJ3J9322 | UL25L5S5V-1QJ3J9322 | ON          | NONE        | MOM         |
|                                   | ST2-6L5S5V-1BJ3J9322 | UL26L5S5V-1QJ3J9322 | ON          | ON          | ON          |
|                                   | ST2-7L5S5V-1BJ3J9322 | UL27L5S5V-1QJ3J9322 | ON          | ON          | MOM         |
|                                   | ST2-8L5S5V-1BJ3J9322 | UL28L5S5V-1QJ3J9322 | MOM         | ON          | MOM         |
| Terminals connected (-6, -7 & -8) |                      |                     | 1-2,<br>4-5 | 1-2,<br>5-6 | 2-3,<br>5-6 |

ST SERIES - MINIATURE ROCKER & LEVER SWITCHES

Snap-in bezel for round hole mounting  
Self-keying against rotation

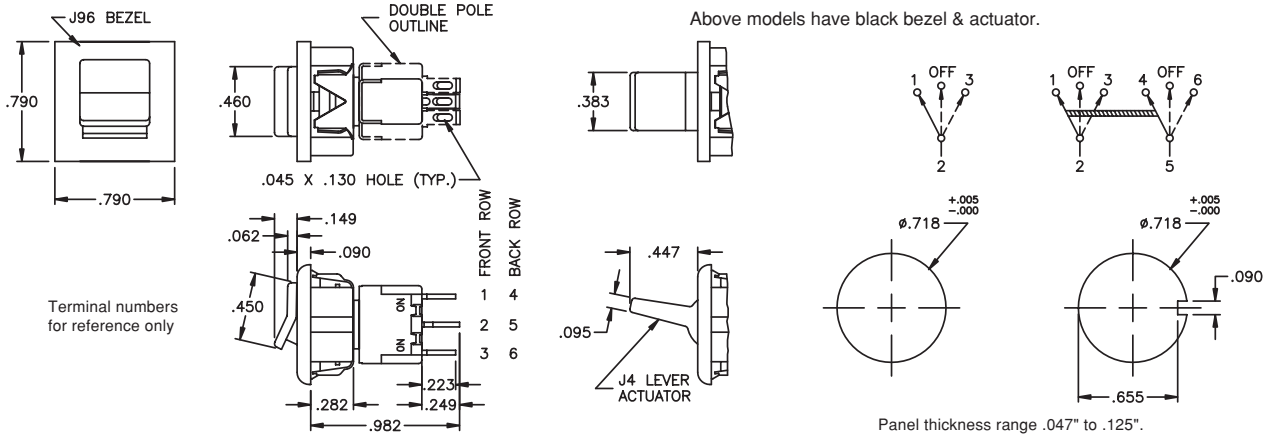
B

ST1-1L5S5ZQJ4J9682



|                                   | POWER CKT. MODEL NO. | UL MODEL NO.      | USA marking on other side |          |          |
|-----------------------------------|----------------------|-------------------|---------------------------|----------|----------|
| Single pole                       | ST1-1L5S5ZQJ4J9622   | UL11L5S5ZQJ4J9622 | ON                        | NONE     | ON       |
|                                   | ST1-2L5S5ZQJ4J9622   | UL12L5S5ZQJ4J9622 | ON                        | OFF      | ON       |
|                                   | ST1-3L5S5ZQJ4J9622   | UL13L5S5ZQJ4J9622 | MOM                       | OFF      | MOM      |
|                                   | ST1-4L5S5ZQJ4J9622   | UL14L5S5ZQJ4J9622 | ON                        | OFF      | MOM      |
|                                   | ST1-5L5S5ZQJ4J9622   | UL15L5S5ZQJ4J9622 | ON                        | NONE     | MOM      |
| Double pole                       | ST2-1L5S5ZQJ4J9622   | UL21L5S5ZQJ4J9622 | ON                        | NONE     | ON       |
|                                   | ST2-2L5S5ZQJ4J9622   | UL22L5S5ZQJ4J9622 | ON                        | OFF      | ON       |
|                                   | ST2-3L5S5ZQJ4J9622   | UL23L5S5ZQJ4J9622 | MOM                       | OFF      | MOM      |
|                                   | ST2-4L5S5ZQJ4J9622   | UL24L5S5ZQJ4J9622 | ON                        | OFF      | MOM      |
|                                   | ST2-5L5S5ZQJ4J9622   | UL25L5S5ZQJ4J9622 | ON                        | NONE     | MOM      |
|                                   | ST2-6L5S5ZQJ4J9622   | UL26L5S5ZQJ4J9622 | ON                        | ON       | ON       |
|                                   | ST2-7L5S5ZQJ4J9622   | UL27L5S5ZQJ4J9622 | ON                        | ON       | MOM      |
|                                   | ST2-8L5S5ZQJ4J9622   | UL28L5S5ZQJ4J9622 | MOM                       | ON       | MOM      |
| Terminals connected (-6, -7 & -8) |                      |                   | 1-2, 4-5                  | 1-2, 5-6 | 2-3, 5-6 |

Above models have black bezel & actuator.

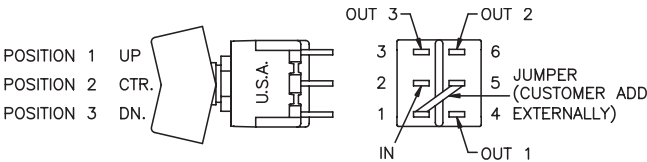


MISCELLANEOUS

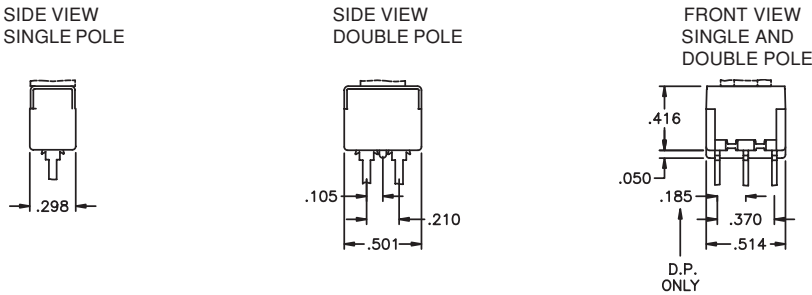
ST2-6, -7 & -8 SWITCHES

May be wired as a single pole 3 position switch; add external jumper between terminals 1 & 5, then:

Common terminal is 2  
Output 1 - terminal 4  
Output 2 - terminal 6  
Output 3 - terminal 3

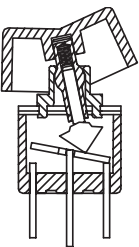


SWITCH BODY  
SIZES WITH  
TERMINAL  
LOCATION  
DIMENSIONS

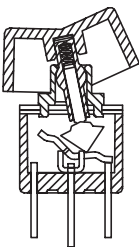


TYPICAL SWITCH CROSS SECTIONS

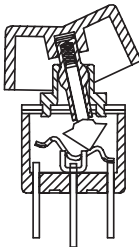
Note:  
Contacts make opposite actuator direction.



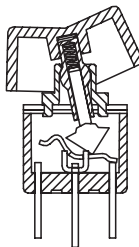
ON NONE ON



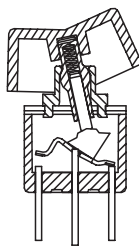
ON OFF ON



MOM OFF MOM



ON OFF MOM



ON NONE MOM

# ST SERIES - MINIATURE ROCKER & LEVER SWITCHES

**Additional ordering information:** Commonly ordered models are shown on prior pages with complete model numbers and specifications. Below is an order format that enables you to 'build your own switch' and specify the correct switch model number by simply selecting from all available options shown and filling in the boxes.

## 'BUILD YOUR OWN SWITCH' ORDER FORMAT

Fill in boxes with selections shown for **Model Structure**, then add **Options** selections for complete model number. Allowable options are shown below each respective box with brief description - see option dwgs. & info. following. Note: 'NONE' indicates box may be left empty.

### Model Structure:

| Series                                                                                                                               | Electrical functions                                                                                                                                                                                     | Sub-actuators                                                     | Sub-Bushings                                                      | Terminations                                                                                                                                                                                                                                                                                                                                                                                                                      | Contact materials                                                                                                           |
|--------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|-------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <input type="text"/>                                                                                                                 | <input type="text"/>                                                                                                                                                                                     | <input type="text"/>                                              | <input type="text"/>                                              | <input type="text"/>                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="text"/>                                                                                                        |
| Single pole:<br><b>S T 1 -</b><br>S.P. UL model:<br><b>U L 1</b><br>Double pole:<br><b>S T 2 -</b><br>D.P. UL model:<br><b>U L 2</b> | <b>1</b> ON NONE ON<br><b>2</b> ON OFF ON<br><b>3</b> MOM OFF MOM<br><b>4</b> ON OFF MOM<br><b>5</b> ON - MOM<br>Following for DP only<br><b>6</b> ON ON ON<br><b>7</b> ON ON MOM<br><b>8</b> MOM ON MOM | <b>L 4</b> Specify without bezel<br><b>L 5</b> Specify with bezel | <b>S 4</b> Specify without bezel<br><b>S 5</b> Specify with bezel | <b>Z</b> Solder lug<br><b>C</b> Printed circuit<br><b>W</b> Wirewrap<br><b>W 1</b> Lg. wirewrap<br><b>W 3</b> Sht. wirewrap<br><b>X</b> Extra lg. wirewrap<br>Horiz. right angle p.c.:<br><b>A</b><br><b>A - 1</b><br>Vertical right angle p.c.:<br><b>V</b><br><b>V - 1</b><br><b>V - 2</b><br>Straight p.c. terms. w/brkt.:<br><b>V 3 0 or V 3 1</b><br><b>V 4 0 or V 4 1</b><br><b>V 7 0 or V 7 1</b><br><b>V 8 0 or V 8 1</b> | <b>B</b> Gold<br><b>Q</b> Coin silver<br><b>G</b> Gold over coin silver<br><b>N</b> Economy gold<br><b>T</b> Economy silver |

Although most combinations of options are available, some may result in incompatibilities. Consult factory if there is any question.

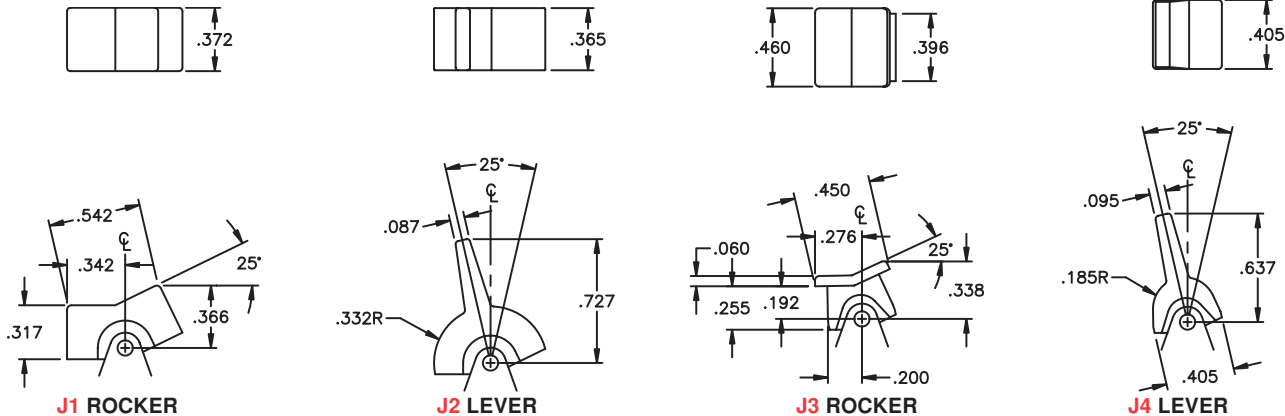
Example of completely specified model number:  
**ST2-3L5S5ZQEJ4J9622**

### Options:

| Sealing              | Actuator                                                                                   | Bezel                                                                                                                                                                                                              | Bezel color                                                | Actuator color                                                                                       | Recognition                             |
|----------------------|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|------------------------------------------------------------------------------------------------------|-----------------------------------------|
| <input type="text"/> | <input type="text"/>                                                                       | <input type="text"/>                                                                                                                                                                                               | <input type="text"/>                                       | <input type="text"/>                                                                                 | <input type="text"/>                    |
| (NONE)<br>E Epoxy    | <b>J 1</b> Rocker<br><b>J 2</b> Lever<br><b>J 3</b> Small rocker<br><b>J 4</b> Small lever | (NONE)<br><b>J 6 1</b> Snap-in w/LED<br><b>J 9 0</b> Snap-in no LED<br><b>J 9 3</b> P.C. style<br>Self-keying round hole mt.:<br><b>J 9 6</b> Snap-in no LED<br>Note: specify J3 or J4 actuators only with bezels. | (NONE)<br><b>2</b> Black<br><b>6</b> Red<br><b>8</b> White | <b>2</b> Black<br><b>6</b> Red<br><b>8</b> White<br>Note: J3 & J4 actuators available in black only. | (NONE)<br>/ <b>C S A</b><br>CSA listing |

## ACTUATOR OPTIONS

Colors available: J1 & J2: Black, red or white. J3 & J4: Black.

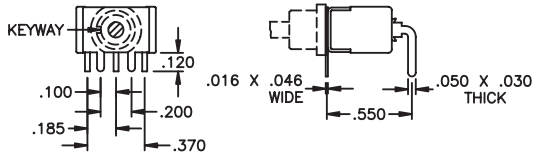


# ST SERIES - MINIATURE ROCKER & LEVER SWITCHES

## TERMINATION OPTIONS

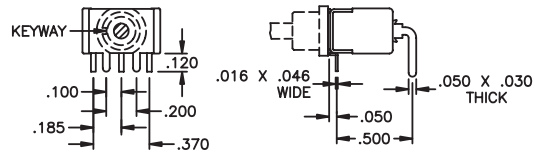
B

A



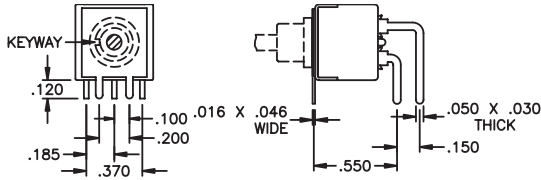
SINGLE POLE HORIZONTAL P.C. MOUNTING

A-1



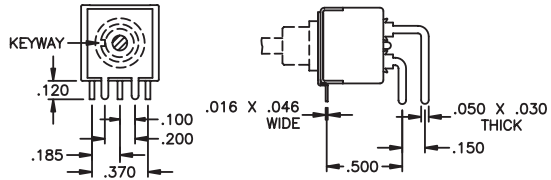
SINGLE POLE HORIZONTAL P.C. MOUNTING

A



DOUBLE POLE HORIZONTAL P.C. MOUNTING

A-1

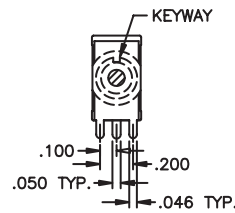


DOUBLE POLE HORIZONTAL P.C. MOUNTING

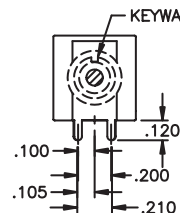
V, V-1 & V-2

| Option | Dim. A | Dim. B |
|--------|--------|--------|
| V      | .550   | .150   |
| V-1    | .500   | .150   |
| V-2    | .500   | .100   |

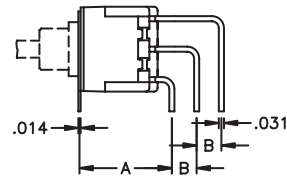
FRONT VIEW  
SINGLE POLE



FRONT VIEW  
DOUBLE POLE



SIDE VIEW - SINGLE & DOUBLE POLE

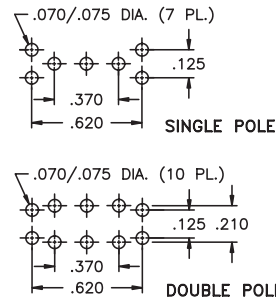


VERTICAL P.C. MOUNTING

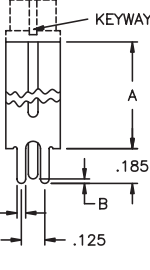
V30, V40, V70, V80, V31, V41, V71 & V81

PANEL LAYOUT  
V30, V31, V40 & V41

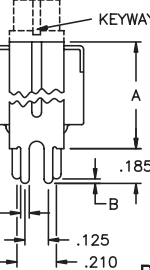
| Option  | Dim. A | Dim. B |
|---------|--------|--------|
| V30-V31 | .527   | .024   |
| V40-V41 | .647   | .048   |



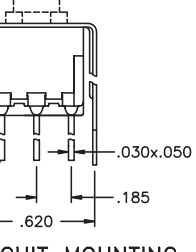
FRONT VIEW  
SINGLE POLE



FRONT VIEW  
DOUBLE POLE



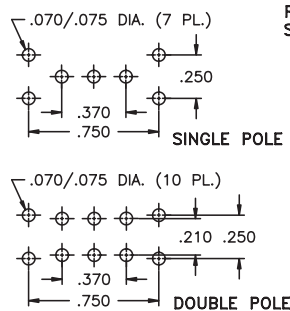
SIDE VIEW -  
SINGLE AND  
DOUBLE POLE



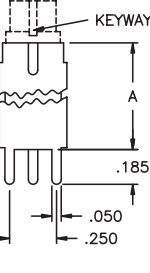
PRINTED CIRCUIT MOUNTING

PANEL LAYOUT  
V70, V71,  
V80 & V81

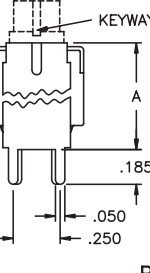
| Option  | Dim. A |
|---------|--------|
| V70-V71 | .630   |
| V80-V81 | .953   |



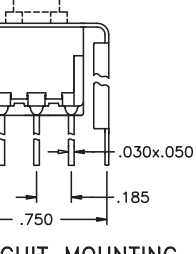
FRONT VIEW  
SINGLE POLE



FRONT VIEW  
DOUBLE POLE

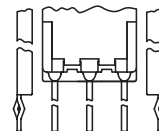
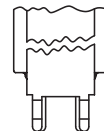
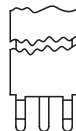


SIDE VIEW -  
SINGLE AND  
DOUBLE POLE



PRINTED CIRCUIT MOUNTING

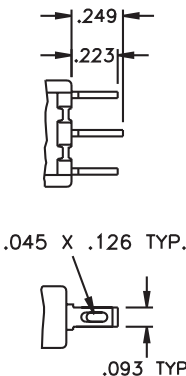
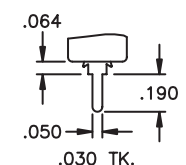
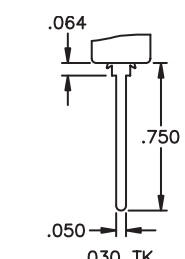
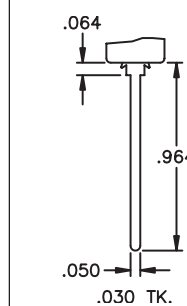
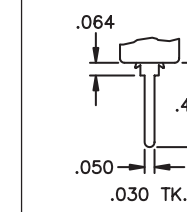
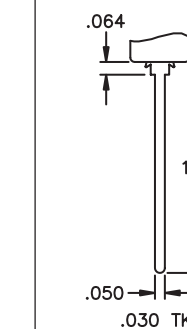
V31, V41, V71 & V81 ARE THE SAME AS V30, V40, V70 & V80 RESPECTIVELY, EXCEPT WITH CRIMPED LEG DESIGN FOR P.C. BOARD RETENTION, AS SHOWN TO RIGHT.



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

# ST SERIES - MINIATURE ROCKER & LEVER SWITCHES

## TERMINATION OPTIONS (CONT'D.)

| Z                                                                                                   | C                                                                                                        | W                                                                                                 | W1                                                                                                      | W3                                                                                                        | X                                                                                                             |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
|  <p>SOLDER LUG</p> |  <p>PRINTED CIRCUIT</p> |  <p>WIREWRAP</p> |  <p>LONG WIREWRAP</p> |  <p>SHORT WIREWRAP</p> |  <p>EXTRA LG. WIREWRAP</p> |

## CONTACT MATERIAL OPTIONS

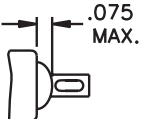
|          |                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>B</b> | Dry circuit - gold over nickel over brass.<br>RATING: 0.4 Volt-Amps (VA) max. at 20 V max.<br>ELECTRIC LIFE: 100,000 cycles min. (ST1-1 & ST2-1 only - other models 40,000 cycles min.)                                                                                                                                                                                                                       |
| <b>Q</b> | Power circuit - coin silver.<br>RATING: 6 Amps at 125 VAC, 3 Amps at 250 VAC or 7 Amps at 30 VDC (resistive loads).<br>ELECTRIC LIFE: 100,000 cycles min. (ST1-1 & ST2-1 only - other models 40,000 cycles min.)                                                                                                                                                                                              |
| <b>G</b> | Dry circuit or power circuit - gold over nickel over coin silver.<br>RATINGS & ELECTRIC LIFE: Same as B & Q above - i.e. - can be used in either dry circuit or power circuit, however once used in power circuit, switch cannot be re-used in dry circuit. This option satisfies those customers who have both dry circuit and power circuit requirements, but prefer to inventory only one switch for both. |
| <b>N</b> | Dry circuit - gold over nickel over brass. Note- less gold than B option.<br>RATING: 0.4 Volt-Amps (VA) max. at 20 V max.<br>ELECTRIC LIFE: 10,000 cycles min. at 13 cycles per minute.                                                                                                                                                                                                                       |
| <b>T</b> | Power circuit - Silver plate over brass.<br>RATING: 3 Amps at 125 VAC or 1.5 Amps at 250 VAC (resistive loads).<br>ELECTRIC LIFE: 10,000 cycles min. at 13 cycles per minute.                                                                                                                                                                                                                                 |

Solder dipped terminals and custom contact plating available - contact factory.

## UL & CSA OPTIONS

|            |                                                                                                                                                                                                                                                                                                                                                                                   |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>UL</b>  | For power circuits - coin silver<br>RATING: 6 Amps at 125 VAC or 3 Amps at 250 VAC (75% power factor).<br>Underwriter Laboratories file no. E66367. To specify, order UL model no. Note - applicable only to terminations with coin silver contacts (Q or G options).                                                                                                             |
| <b>CSA</b> | For power circuits - coin silver<br>RATING: 6 Amps at 125 VAC or 3 Amps at 250 VAC (75% power factor). Canadian Standards Association file no. LR54592-1. To specify, order UL model number, then add '/CSA' to complete switch number. Note - applicable only to terminations with coin silver contacts (Q or G options) as CSA recognizes switches for power applications only. |

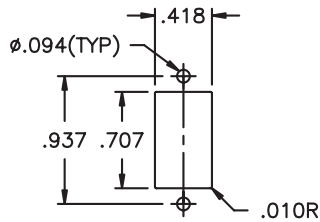
## SEALING & MISCELLANEOUS OPTIONS

|                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>E</b></p> <p>Epoxy terminal sealing: Available with all terminal configurations.</p> <p>The space between terminal &amp; case hole is sealed with epoxy all around terminal.</p> <p>Provides maximum protection from entry of flux or contaminants into the switch case.</p>  | <p><b>/R</b></p> <p>To specify reverse switch action on non-symmetrical models with bushing keyway, add '/R' to switch model no.</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|

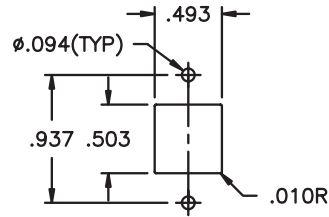
# ST SERIES - MINIATURE ROCKER & LEVER SWITCHES

## MOUNTING INFORMATION & PANEL CUT-OUTS

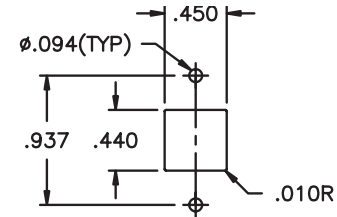
B



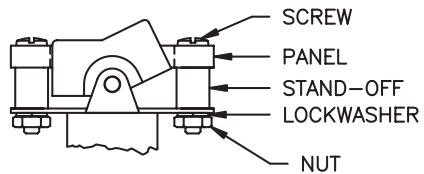
| J1 OR J2       |                 |                  |
|----------------|-----------------|------------------|
| Panel tk'ness. | Hardware number | Stand-off length |
| 1/16"          | <b>A322-3</b>   | .295             |
| 3/32"          | <b>A322-2</b>   | .264             |
| 1/8"           | <b>A322-1</b>   | .233             |



| J3             |                 |                  |
|----------------|-----------------|------------------|
| Panel tk'ness. | Hardware number | Stand-off length |
| 1/16"          | <b>A322-2</b>   | .264             |
| 3/32"          | <b>A322-1</b>   | .233             |
| 1/8"           | <b>A322-4</b>   | .202             |



| J4             |                 |                  |
|----------------|-----------------|------------------|
| Panel tk'ness. | Hardware number | Stand-off length |
| 1/16"          | <b>A322-1</b>   | .233             |
| 3/32"          | <b>A322-4</b>   | .202             |
| 1/8"           | <b>A322-5</b>   | .171             |



Mounting hardware consists of 2 each:  
 Hex Nut, stainless steel  
 Screw, stainless steel  
 Lockwasher, stainless steel  
 Stand-off, aluminum

**1/8" panel hardware supplied if not specified separately by hardware number shown in tables.**

**TYPICAL ASSEMBLY**

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