S series

Washable miniature toggle switches • plain bushing



DISTINCTIVE FEATURES

Process sealed
Front and rear sealing
Process compatible
Wave solderable
Washable



ENVIRONMENTAL SPECIFICATIONS

- Operating temperature : -20 °C to +85 °C (-4 °F to +185 °F)
- Storage temperature : -40 °C to +85 °C (-40 °F to +185 °F)
- Moisture : The insulating materials employed and the complete seal permit the switches to withstand a 56 days moisture test (IEC 68-2-3).
- Solderability : The switches are tested at 235 °C (455 °F) according to IEC 68-2-20 after accelerated aging.

ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load :
  - silver contacts (A) : 4 A 30 VDC
  - gold plated brass contacts (CD) : 0.4 VA 20 VAC or DC
  - gold plated silver contacts (AD) : 4 A 30 VDC (300 mA 30 VDC for gold plating)
- Initial contact resistance : 10 mΩ max.
- Insulation resistance : 1,000 MΩ min.
- Dielectric strength : 1,000 Vrms 50 Hz min.
- Electrical life at full load :

Contacts	Number of cycles	
	2 positions	3 positions
A	40,000	40,000
CD	100,000	50,000
AD	40,000	40,000

The company reserves the right to change specifications without notice.

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GENERAL SPECIFICATIONS

- Mechanical strength : Terminals are strengthened by a bracket or a ground plate ensuring the rigidity of the switch on the board. Actuator strength is 10 N max.
- Soldering - thermal shock : The switches are especially designed for flow soldering at 260 °C (500 °F) during 5 seconds owing to high temperature polymer parts.

MATERIALS

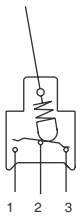
- Case and cover : UL94-VO, polyamide, glass filled or PES
- Actuator : brass, nickel plated
- Contacts
  CD : brass, gold plated
  A : silver
  AD : silver, gold plated
- Terminal seal : epoxy

AGENCY APPROVALS

2 A 250 VAC
4 A 125 VAC

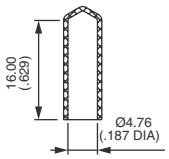
CECC 96201-006

ELECTRICAL FUNCTIONS



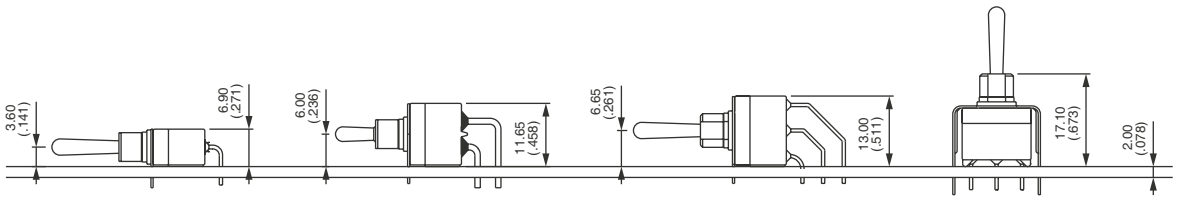
CAP FOR PCB PROCESSING

- Provide additional protection during PCB processing.
- Supplied mounted on the switch or separately.
- Material : vinyl



U3012

PCB MOUNTING



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BUILD YOUR PART NUMBER

BASIC PART NUMBER

S				
SERIES	TERMINALS	TERMINAL SPACING	NUMBER OF POLES	ELECTRICAL FUNCTIONS

TERMINALS

W	Right angle, horizontal mounting
WW	Right angle, vertical mounting
Y	Bracket mounting

TERMINAL SPACING

2	Terminal spacing 4.7 (.185) or 3.81 (.150)
0	Terminal spacing 5.08 (.200) (SW switches)

NUMBER OF POLES

3	Single pole
4	Double pole

ELECTRICAL FUNCTIONS

6	ON	-	ON
9	ON	OFF	ON
7	MOM	OFF	MOM
8	ON	OFF	MOM
2	ON	-	MOM
4TH	ON	ON	ON

OPTIONS

CONTACT MATERIALS	LEVERS	APPROVALS	SPECIAL OPTIONS	INSULATING CAPS

CONTACT MATERIALS

A	Silver
AD	Silver, gold plated
CD	Brass, gold plated

LEVERS

-7	Short Standard
-13	Long

Insulated levers

-11	Long
-8	Short

APPROVALS

UL CECC	Availability : Consult factory for details of approved models.

SPECIAL OPTIONS

X601	Silver plated brass contacts
X696	Higher bushing (for insulated levers)

INSULATING CAPS

U270	For lever 13
U1710	For lever 7

ABOUT THIS SERIES

On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.

Notice : please note that not all combinations of above numbers are available. Refer to the following pages for further information.

S series

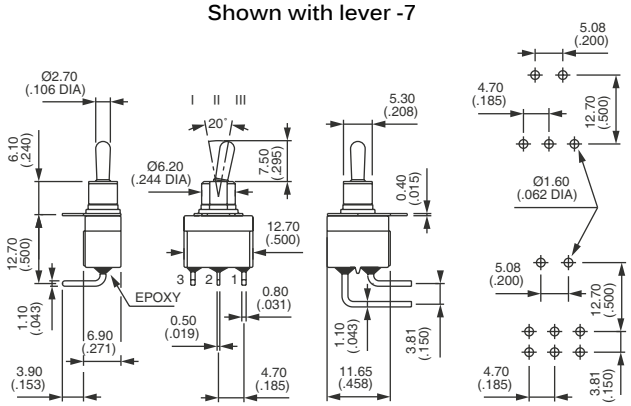
Washable miniature toggle switches • plain bushing

RIGHT ANGLE TERMINALS - HORIZONTAL SPACING 4.7 (.185)



Single pole	Double pole	III 2-3 5-6	II	I 2-1 4-5
SW236	SW246	ON	-	ON
SW239	SW249	ON	OFF	ON
SW237	SW247	MOM	OFF	MOM
SW238	SW248	ON	OFF	MOM
SW232	SW242	ON	-	MOM
	SW244TH*	ON	ON	ON

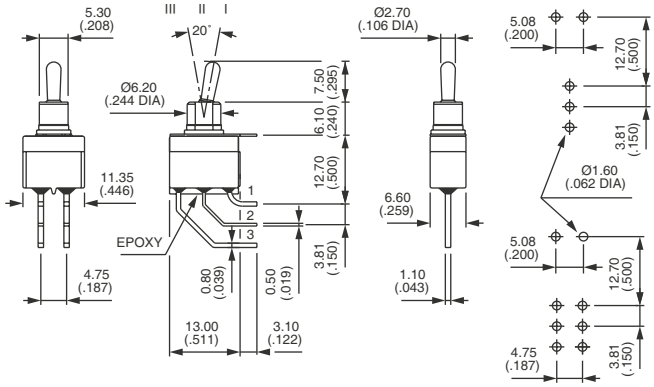
Shown with lever -7



RIGHT ANGLE TERMINALS - VERTICAL



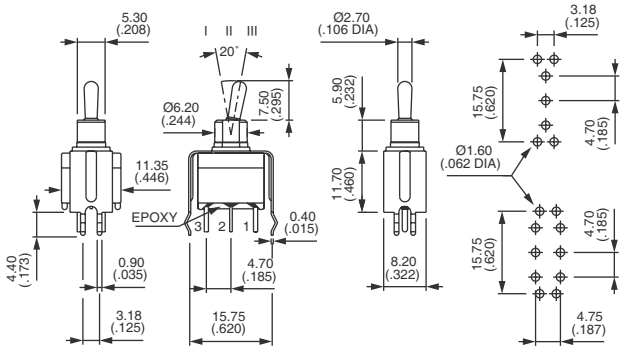
Single pole	Double pole	I 2-3 5-6	II	III 2-1 4-5
SWW236	SWW246	ON	-	ON
SWW239	SWW249	ON	OFF	ON
SWW237	SWW247	MOM	OFF	MOM
SWW238	SWW248**	ON	OFF	MOM
SWW232	SWW242**	ON	-	MOM
	SWW244TH*	ON	ON	ON



BRACKET MOUNTING



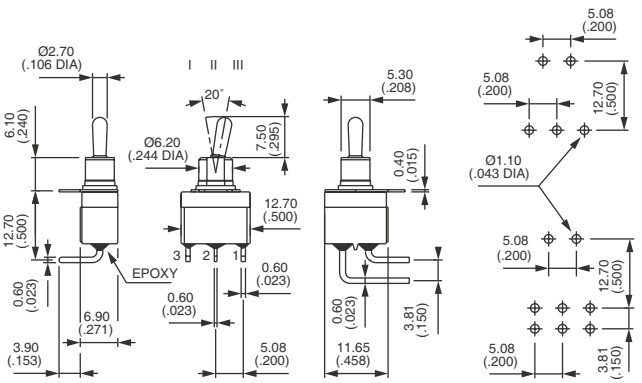
Single pole	Double pole	I 2-3 5-6	II	III 2-1 4-5
SY236	SY246	ON	-	ON
SY239	SY249	ON	OFF	ON
SY237	SY247	MOM	OFF	MOM
SY238	SY248	ON	OFF	MOM
SY232	SY242	ON	-	MOM
	SY244TH*	ON	ON	ON



RIGHT ANGLE TERMINALS - HORIZONTAL - SPACING 5.08 (.200)



Single pole	Double pole	I 2-3 5-6	II	III 2-1 4-5
SW036	SW046	ON	-	ON
SW039	SW049	ON	OFF	ON
SW037	SW047	MOM	OFF	MOM
SW038	SW048	ON	OFF	MOM
SW032	SW042	ON	-	MOM
	SW044TH*	ON	ON	ON



* Function 4 : SP in DP case - TH connection, see "Technical information" on website.
** Functions 2 and 8 : reversed connection available. On request.

S series

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CONTACT MATERIALS

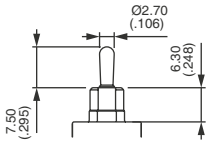
BASIC P/N

A Silver
AD Silver, gold plated
AC Brass, gold plated

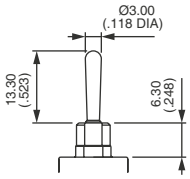
LEVERS

BASIC P/N

METAL LEVERS



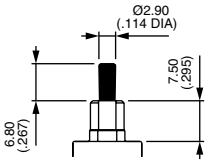
-7
Standard



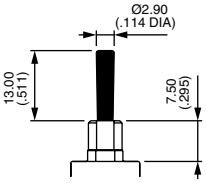
-13
Long

If actuator not specified, we supply former default option -13.

INSULATED LEVERS



-8
Short



-11
Long

Protected against electrostatic discharges (ESD) up to 12 KV. Black color.
ⓘ To combine with option X696.

SPECIAL OPTIONS

BASIC P/N

X601 Silver plated brass contacts
Lower rating - Minimum quantity : 5,000 pieces per model and shipment.
X696 Higher bushing 7.50 (.295). Compulsory for insulated levers 11 and 8.

AGENCY APPROVALS

BASIC P/N

UL
CECC
Blank No agency approval required.

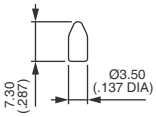
Availability : consult factory for details of approved models.
Marking : to order switches marked UL or CECC, please complete above box with desired approvals.

S series

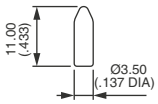
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INSULATING CAPS

BASIC P/N + U...



U1710
For lever 7



U270
For lever 13

For cap colors, replace "**0**" with number :

1	Blue
1/4	Dark blue
2	Black
3	Green
4	Grey
5	Yellow
6	Red
7/1	White
9	Orange