# SWILITI

# **ZL** series

Subminiature toggle switches • metal bushing





#### **DISTINCTIVE FEATURES**

Ø 4.83 mm threaded bushing Solder lug and straight PC terminals



## **ENVIRONMENTAL SPECIFICATIONS**

- Operating temperature: -30 °C to +85 °C (-22 °F to +185 °F)
- Moisture: 21 days 95 % (NFC 20-603 IEC 8-2-3)



## **ELECTRICAL SPECIFICATIONS**

- Max. current/voltage rating with resistive load :
  - gold plated contacts: 0.4 VA 20 V max. AC or DC
  - silver plated contacts : 0.5 A 48 V max. AC or DC
- Minimum load : 10 mA 50 mV 10 μA 5 VDC
- Contact resistance : 20 m $\Omega$  max.
- Insulation resistance : 1,000 M $\Omega$  min. at 500 VDC
- Dielectric strength: 1,000 Vrms 50 Hz min. between terminals and frame, 500 Vrms 50 Hz min. between terminals
- Electrical life at full load :

Contacts	Number of cycles			
	2 positions	3 positions		
Gold plated	60,000	30,000		
Silver plated	20,000	10,000		



#### **GENERAL SPECIFICATIONS**

- Strength of terminals : pull-out force 10 N max.
- Torque: 1 Nm max. applied between the 2 nuts
- Max. panel thickness: 1.5 mm (.059) with 2 nuts

The company reserves the right to change specifications without notice.



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#### **MATERIALS**

- Case: thermoplastic UL94-V0
- Actuator : brass, nickel plated
- Bushing: zamac, tin plated
- Contacts and terminals:
- 0: brass, gold plated (standard)
- 1: brass, silver plated
- 3: brass, gold plated (1.27 micron gold)
- Terminal seal : epoxy



#### **SOLDERING**

- Hand soldering: 280 °C (536 °F) max. for 5 seconds max.
- Wave soldering: 260 °C (500 °F) max. for 5 seconds max.



## **TERMINALS**



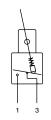


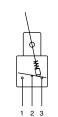
Solder lug S0

Straight P0



## **ELECTRICAL FUNCTIONS**





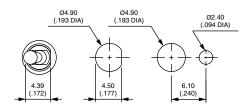
Function  ${\bf 1}$ 

Other function

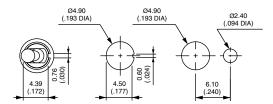


#### PANEL CUT-OUT

WITH FLAT



WITH KEYWAY

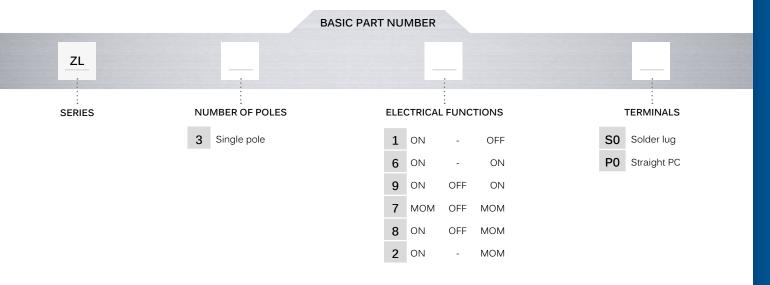


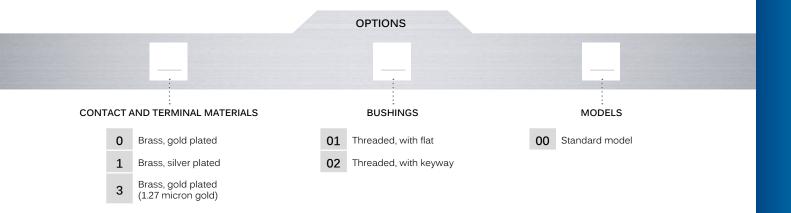
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#### **BUILD YOUR PART NUMBER**







#### **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.

Mounting accessories: Standard hardware supplied with all models: 2 hex nuts 7 mm (.275) across flats P/N U5731, 1 locking ring P/N U5821 (with keyway) or U5831 (with flat) and 1 lockwasher P/N U5841.

# APEN

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#### **SOLDER LUG TERMINALS**



ZL31S0	ON	-	OFF
ZL36S0	ON	-	ON
ZL39S0	ON	OFF	ON
ZL37S0	MOM	OFF	MOM
ZL38S0	MOM	OFF	ON
ZL32S0	MOM	-	ON

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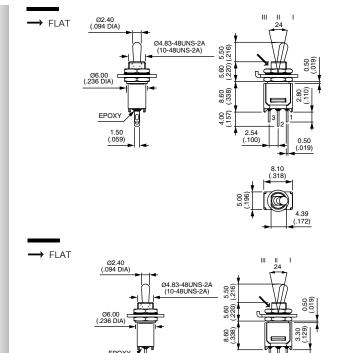
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#### STRAIGHT PC TERMINALS



	III	II	1
ZL31P0	ON	-	OFF
ZL36P0	ON	-	ON
ZL39P0	ON	OFF	ON
ZL37P0	MOM	OFF	MOM
ZL38P0	MOM	OFF	ON
ZL32P0	MOM	-	ON

Shown with threaded bushing code 01



#### CONTACT & TERMINAL MATERIALS

BASIC P/N

- .....00
- O Brass, gold plated (standard)
- 1 Brass, silver plated
- 3 Brass, gold plated (1.27 micron gold)

#### BUSHINGS

BASIC P/N

.....00

- **01** Threaded, with flat
- 02 Threaded, with keyway