

# 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 mΩ max.
- Insulation resistance : 1,000 MΩ 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

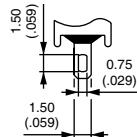


## SOLDERING

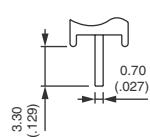
- Hand soldering : 280 °C (536 °F) max. for 5 seconds max.
- Wave soldering : 260 °C (500 °F) max. for 5 seconds max.



## TERMINALS



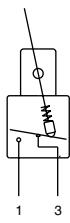
Solder lug S0



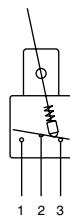
Straight P0



## ELECTRICAL FUNCTIONS



Function 1

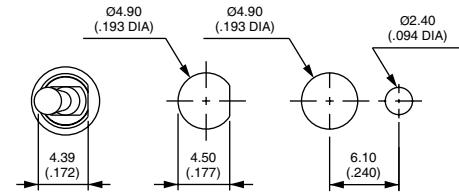


Other function

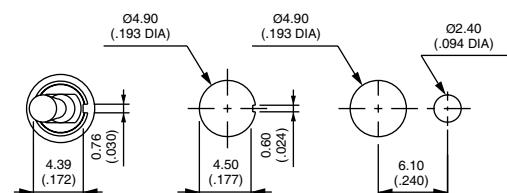


## PANEL CUT-OUT

WITH FLAT



WITH KEYWAY

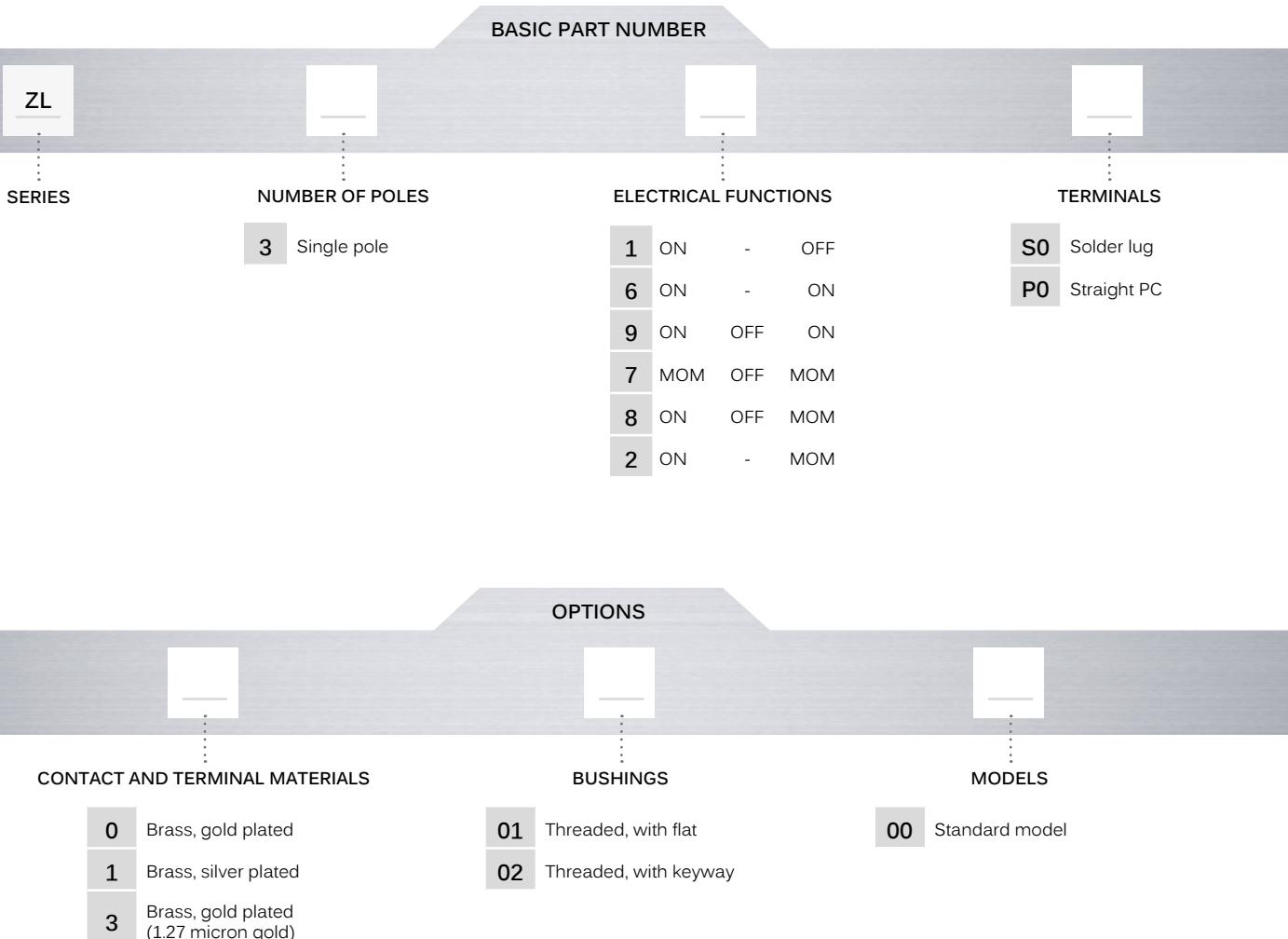


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## BUILD YOUR PART NUMBER



## 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.

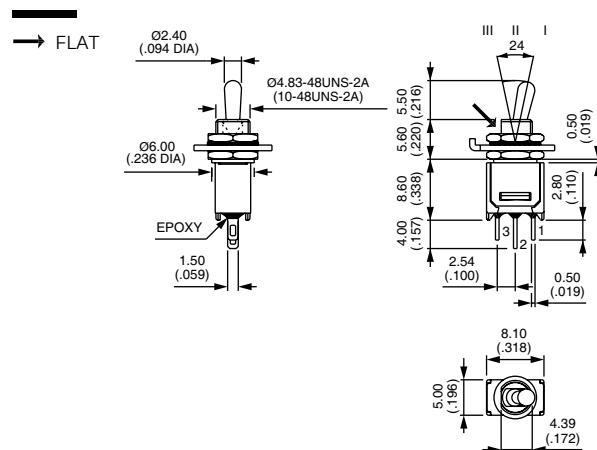
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## SOLDER LUG TERMINALS



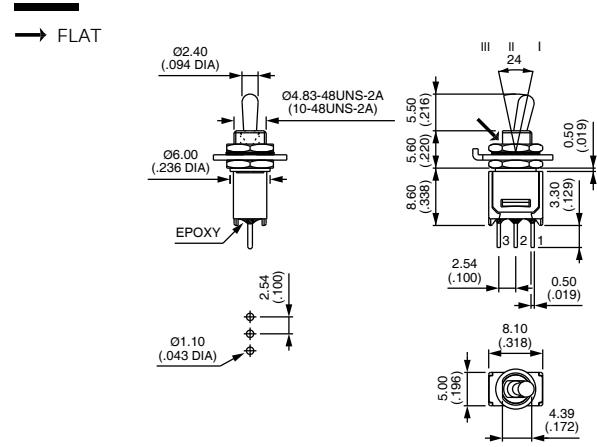
	III	II	I
ZL31S0	ON	-	OFF
ZL36S0	ON	-	ON
ZL39S0	ON	OFF	ON
ZL37S0	MOM	OFF	MOM
ZL38S0	MOM	OFF	ON
ZL32S0	MOM	-	ON



## STRAIGHT PC TERMINALS



	III	II	I
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

- 0 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