

# SMT TL series

## Surface mount tiny washable toggle switches

*Distinctive features and specifications*

Entirely designed for surface mount

UG1006-A

Tape and reel packaging

Reflow solderable

- High temperature plastic materials
- Tin plated ground plate
- Terminal coating : tin alloy over nickel plating
- Terminals turned to the outside, preventing the shadow effect in infrared soldering and permitting visual inspection of solder joints
- Distance between case and circuit : 0,55 mm (.021)
- End stackable with 10,16 mm (.40) pitch
- Available with positioning pins to ensure switch orientation during the reflow process and increasing switch mechanical resistance



Protected against electrostatic discharges (ESD) up to 10 KV

Washable

Construction withstands cleaning processes, including hot water under pressure

### ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load : 0,4VA 20V max. AC or DC
- Minimum load : 10mA 50mV or 10 $\mu$ A 5VDC
- Initial contact resistance : 20 m $\Omega$  max
- Insulation resistance : 1.000 M $\Omega$  min. at 500VDC
- Dielectric strength : 1.000 Vrms. 50 Hz min. between terminals and frame 500 Vrms. 50 Hz min. between terminals
- Electrical life at full load :
  - 2 position switches : 60.000 cycles
  - 3 position switches : 30.000 cycles
- Static resistance : 10 KV (Schaffner equipment)

### GENERAL SPECIFICATIONS

- Operating temperature : -40°C to +85°C
- Moisture resistance : 21 days per IEC 512-6 test 11c
- Vibration resistance : 10-500 Hz / 10 g per IEC 512-4 test 6d
- Shock resistance : 50 g per IEC 512-4 test 6c

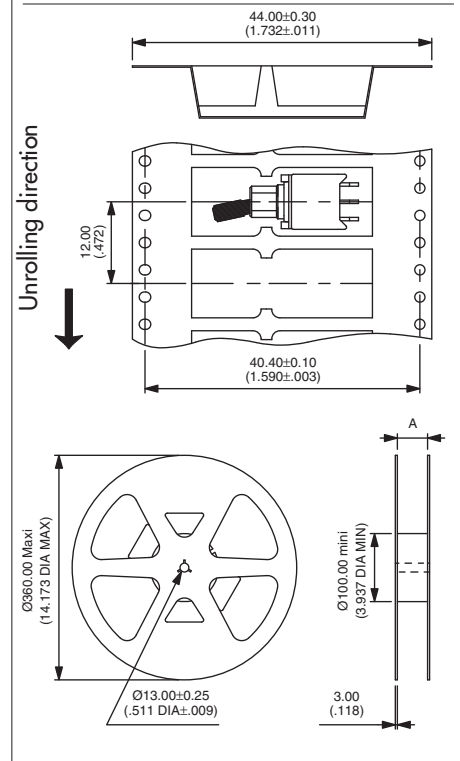
### MATERIALS

- Case : high temperature plastic material UL94-V0
- Actuator : brass, nickel plated, with high temperature UL94-V0 plastic cap
- Ground plate and positioning pins : steel, tin plated
- Contacts : brass, gold plated
- Terminals : brass, with pure tin plating over nickel barrier

### SOLDERING AND CLEANING

- Reflow soldering : infrared, vapor phase or infrared convection
- Washable per IEA-RS448-2 :
  - water + detergent - preferred
  - solvents
- Further information on reflow soldering : see end of catalogue.

### PACKAGING



Tape width	24.00 (.944)	44.00 (1.732)
Reel (dimension A)	24.40+2.00/0.00 (.960+.078/.000)	44.40+2.00/0.00 (1.748+.078/.000)

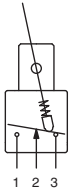
**Standard packaging unit** : 700 pieces  
Tape meeting international standard IEC - Publication 286-3 (EIA481A)  
Start leader : 400 mm min.

**Dimensions** : First dimensions are in mm while inches are shown as bracketted numbers.

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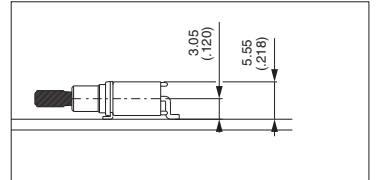
Surface mount tiny washable toggle switches

A



- With or without positioning pins
- Single pole

Also available for vertical mounting. On request.

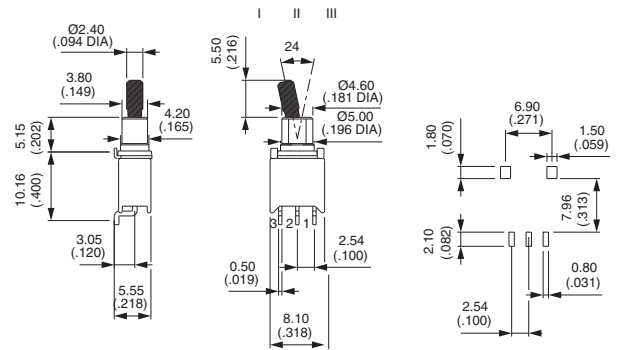


## Without positioning pins



TL36WS84000  
TL39WS84000  
TL37WS84000  
TL38WS84000  
TL32WS84000

	III	II	I
TL36WS84000	ON	-	ON
TL39WS84000	ON	OFF	ON
TL37WS84000	MOM	OFF	MOM
TL38WS84000	ON	OFF	MOM
TL32WS84000	ON	-	MOM



## With positioning pins



TL36WS84065  
TL39WS84065  
TL37WS84065  
TL38WS84065  
TL32WS84065

	III	II	I
TL36WS84065	ON	-	ON
TL39WS84065	ON	OFF	ON
TL37WS84065	MOM	OFF	MOM
TL38WS84065	ON	OFF	MOM
TL32WS84065	ON	-	MOM

