

# SMT TR series

## Surface mount tiny washable rocker switches

*Distinctive features and specifications*

UG1410A



- ☐ Entirely designed for surface mount
- ☐ Tape and reel packaging
- ☐ Reflow solderable
  - High temperature plastic materials
  - Tin plated ground plate
  - Terminal coating : pure tin plating over nickel barrier
  - 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

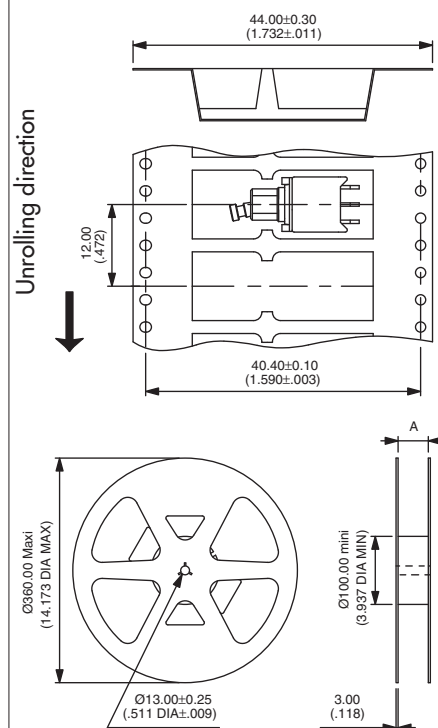
### MATERIALS

- Case : high temperature plastic material UL94-V0
- Actuator : high temperature plastic rocker
- 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 $\pm$ 2.00/0.00 (.960 $\pm$ .078/.000) | 44.40 $\pm$ 2.00/0.00 (1.748 $\pm$ .078/.000) |

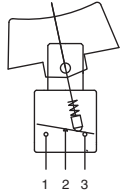
**Standard packaging unit : 700 pieces**  
Tape meeting international standard IEC - Publication 286-3 (EIA481A)  
Start leader : 400 mm min.

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

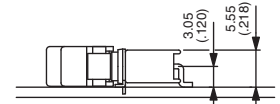
The company reserves the right to change specifications without notice.

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- With or without positioning pins
- Single pole

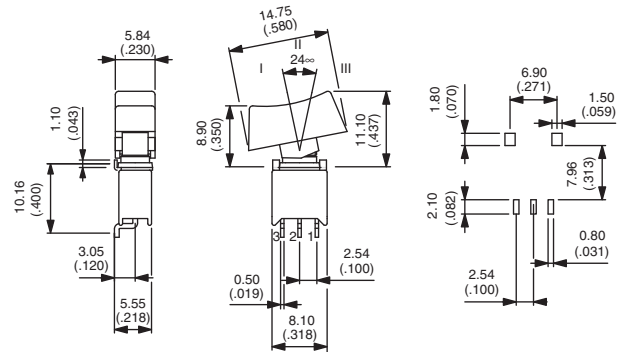


## Without positioning pins



TR36WS80000  
TR39WS80000  
TR37WS80000  
TR38WS80000  
TR32WS80000

| III | II  | I   |
|-----|-----|-----|
| ON  | -   | ON  |
| ON  | OFF | ON  |
| MOM | OFF | MOM |
| ON  | OFF | MOM |
| ON  | -   | MOM |



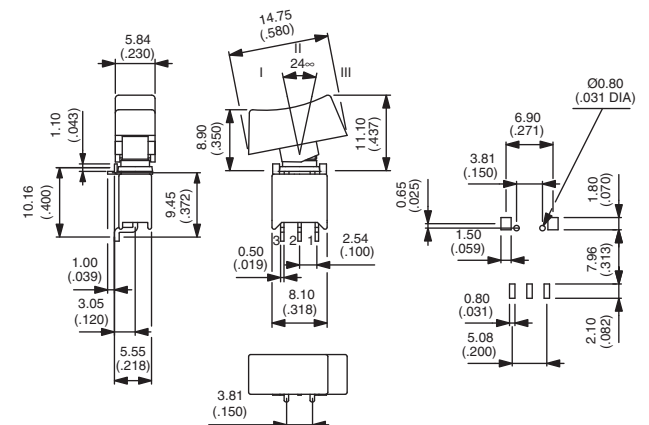
Supplied without rocker.

## With positioning pins



TR36WS80065  
TR39WS80065  
TR37WS80065  
TR38WS80065  
TR32WS80065

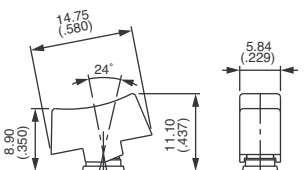
| III | II  | I   |
|-----|-----|-----|
| ON  | -   | ON  |
| ON  | OFF | ON  |
| MOM | OFF | MOM |
| ON  | OFF | MOM |
| ON  | -   | MOM |



Supplied without rocker.

## ROCKERS

Order separately.



U4700

### Rocker colours

Replace last "0" by number

|     |           |     |        |
|-----|-----------|-----|--------|
| 1   | blue      | 5   | yellow |
| 1/4 | dark blue | 6   | red    |
| 2   | black     | 7   | ivory  |
| 3   | green     | 7/1 | white  |
| 4   | grey      | 9   | orange |