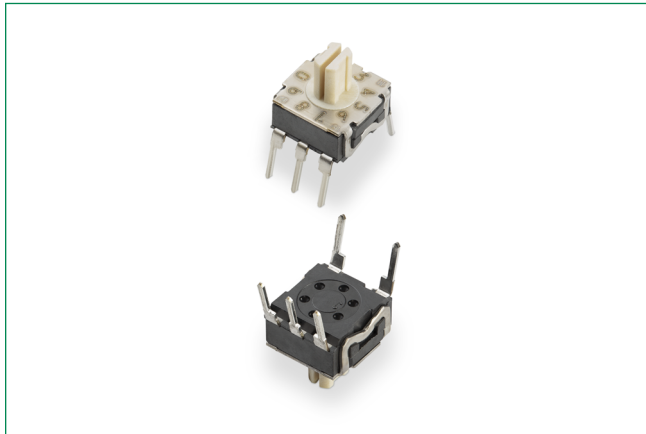


RTE Series

Low Profile Rotary DIP Switches



Specifications

| | |
|-----------------------|---|
| Contact Rating | Gold: 100 mA max. 10 μ A min. 30 V DC max. 20 mVDC min. |
|-----------------------|---|

Environmental Characteristics

| | |
|------------------------------|---------------|
| Storage Temperature | -55°C to 85°C |
| Operating Temperature | -25°C to 85°C |
| Operating Force | 0.75-3 N.cm |

Process

| | |
|----------------------|--|
| Solderability | Surface Mount Terminals: Infrared Reflow Soldering in accordance with IEC 61760-1. Thru-Hole Terminals: Lead free single or double wave soldering process according to C&K Procedure PS-LF-001. |
|----------------------|--|

Mechanical Characteristics

| | |
|------------------------------|--|
| Mechanical Life | 20,000 indexations |
| Contact Resistance | 100 m Ω max. initial; 150 m Ω after life |
| Insulation Resistance | 10 ¹⁰ Ω min. initial |
| Dielectric Strength | 300 Vrms 1 mn |

Description

For designers of timers, automation components, alarms, access controls and smoke detectors, the RTE series low profile rotary DIP switches are the preferred choice. These miniature switches are available with a robust metal cover (in silver nickel finish), a large choice of codings, in either vertical or right angle version.

Features & Benefits

- Thru-hole and surface mount models
- Miniature size with robust metal cover in silver nickel finish
- 4, 10 and 16 positions
- Large choice of codings
- Vertical and right angle versions
- IP54
- RoHS compliant

Applications

- Timers, automation components
- Computer peripherals
- Instrumentation
- Alarms, access control, smoke detectors, lighting, and home protection

Materials

| | |
|----------------------------|-------------------------------|
| Cover | Brass, nickel plated (silver) |
| Base | PPS |
| Actuator | LCP |
| Movable Contacts | Copper alloy, gold plated |
| Stationary Contacts | Brass, gold plated |
| Terminals | Lead free tin or gold |
| O-ring | Silicone |

Note: Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

Packaging

| Terminations | Actuator | Tube | Box (in bulk) | Carrier Tape | Standard Package |
|--------------|-------------------------|------|---------------|--------------|------------------|
| G | Flush, screwdriver slot | - | - | 1250 | 1250 (1 reel) |
| | Shaft for button | - | - | 750 | 750 (1 reel) |
| N | All Versions | 65 | - | - | 1950 (30 tubes) |
| V | | - | 150 | - | 1500 (10 boxes) |

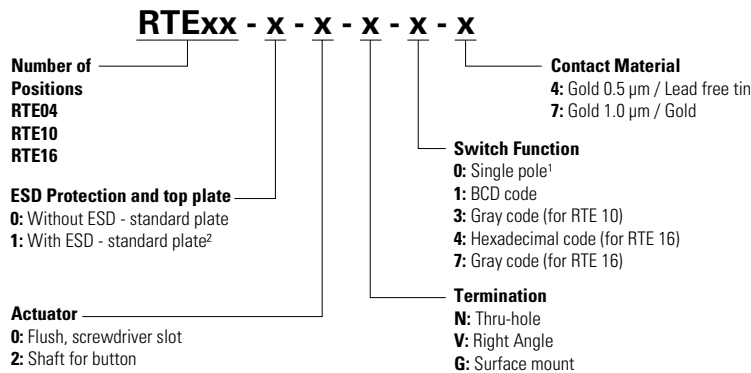
RTE Series

Low Profile Rotary DIP Switches



Ordering Number

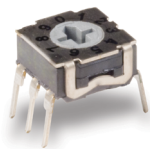
The Build-A Switch concept allows you to mix and match options to create the switch you need. Below is a complete listing of options shown in catalog. To order, simply select desired option from each category and place in the appropriate box. All switches supplied in "OFF" position.



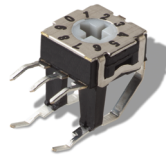
Notes:
 1. Single pole function not available for RTE10/RTE16
 2. ESD protection available with "N" terminations only

Switches and Standard Options

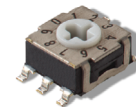
PC Mount-Terminal Option N



Right Angle Mount-Terminal Option V

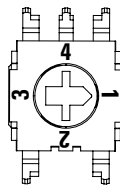


Surface Mount-Terminal Option G

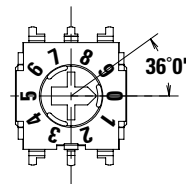


Number of Positions

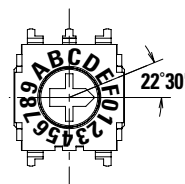
RTE04 - 4 positions



RTE10 - 10 positions



RTE16 - 16 positions



RTE Series

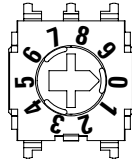
Low Profile Rotary DIP Switches



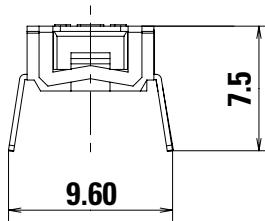
ESD Protection

0 - Without

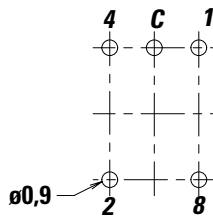
Top View



Side View

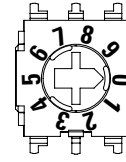


PCB Mounting

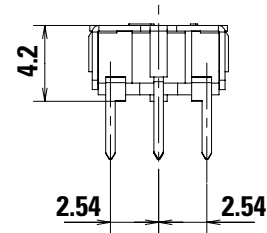


1 - With

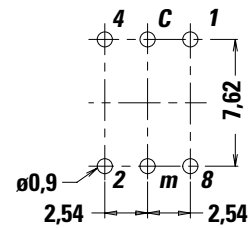
Top View



Side View



PCB Mounting



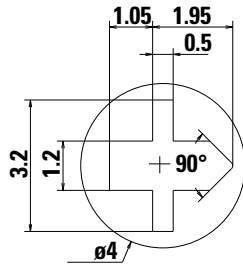
RTE Series

Low Profile Rotary DIP Switches

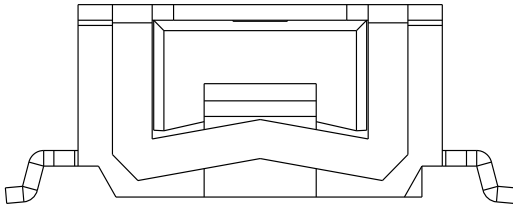


Actuator (mm)

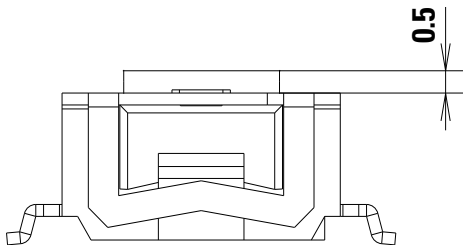
0 - Screwdriver Slot



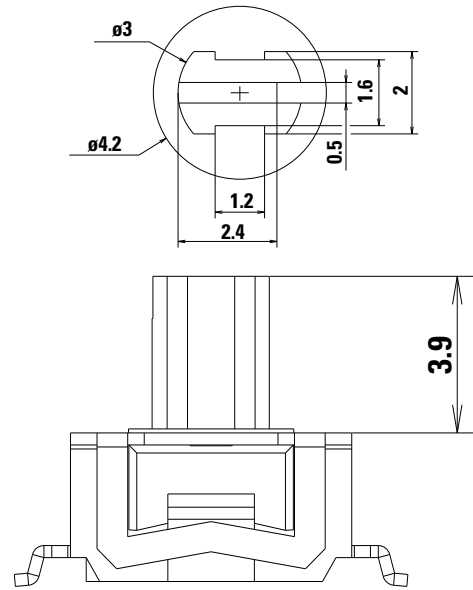
For non-SMT Terminations (N or V option)



For SMT Termination Only (G option)

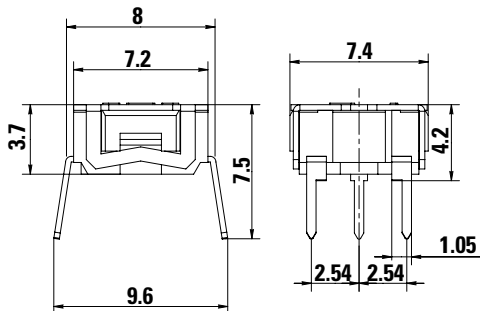


2 - Shaft for Button

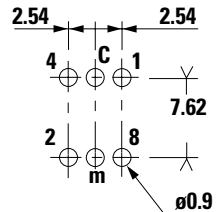


Terminations

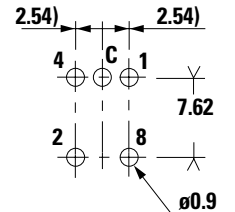
N - Thru-hole (mm)



With ground terminal



Without ground terminal

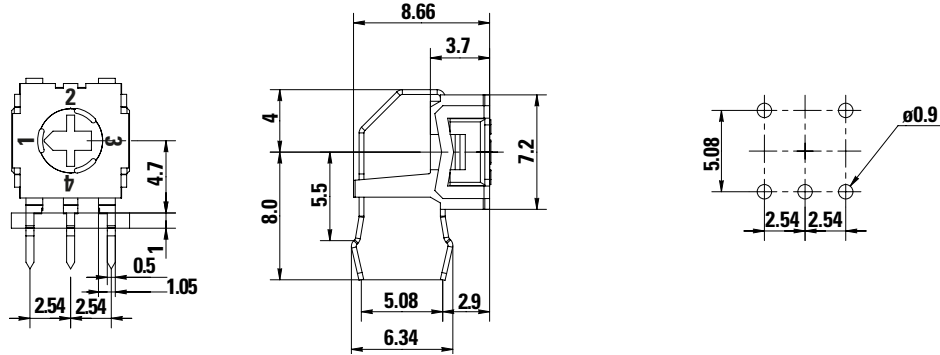


RTE Series

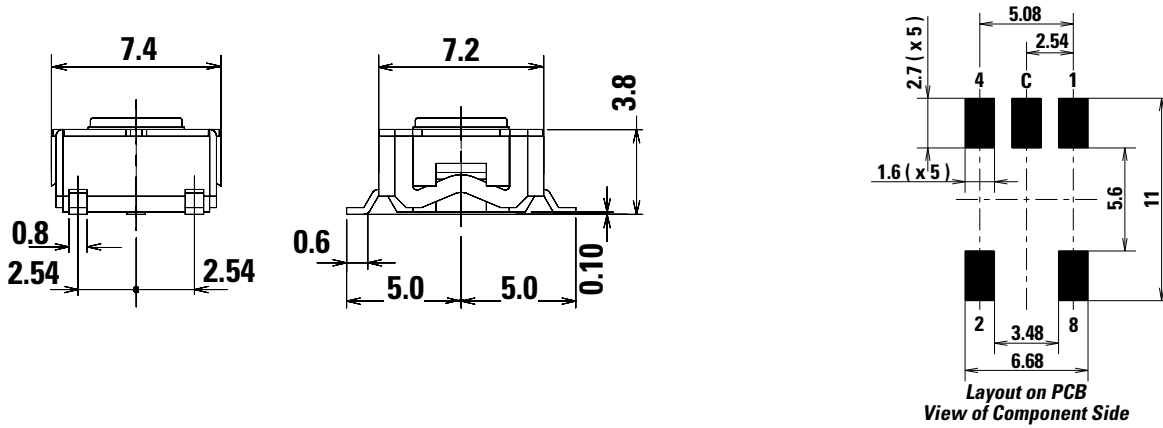
Low Profile Rotary DIP Switches



V - Right Angle, Thru-hole (mm)



G - Surface Mount (mm)



Switch Function

0 - Single Pole (For RTE04 only)

| POS. | 1 | 2 | 3 | 4 |
|------|---|---|---|---|
| C | ● | ● | ● | ● |
| 1 | ● | | | |
| 2 | | ● | | |
| 3 | | | ● | |
| 4 | | | | ● |

1 - BCD code

| POS. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------|---|---|---|---|---|---|---|---|---|---|
| C | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 1 | | ● | | ● | | ● | | ● | | ● |
| 2 | | | ● | ● | | | ● | ● | | |
| 4 | | | | ● | ● | ● | ● | | | |
| 8 | | | | | | | | | ● | ● |

RTE Series

Low Profile Rotary DIP Switches



Switch Function

3 - Gray Code (for RTE10 only)

| POS. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------|---|---|---|---|---|---|---|---|---|---|
| C | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 1 | | ● | ● | | | ● | ● | | | ● |
| 2 | | | ● | ● | ● | ● | | | | |
| 4 | | | | ● | ● | ● | ● | ● | ● | ● |
| 8 | | | | | | | | ● | ● | |

4 - Hexadecimal Code (For RTE16 only)

| POS. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 1 | | ● | | ● | | ● | | ● | | ● | | ● | | ● | | ● |
| 2 | | | ● | ● | | ● | | ● | | ● | | ● | | ● | | ● |
| 4 | | | | ● | ● | ● | ● | ● | | ● | | ● | | ● | | ● |
| 8 | | | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● |

Contact Material

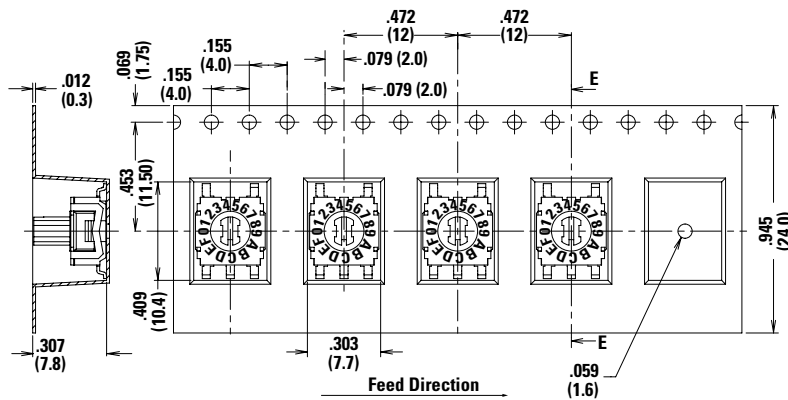
| Option Code | Contact Material | Terminal Plating |
|-------------|------------------|------------------|
| 4 | Gold: 0.5 µm | Lead Free Tin |
| 7 | Gold: 1.0 µm | Gold |

7-Gray code (for RTE16 only)

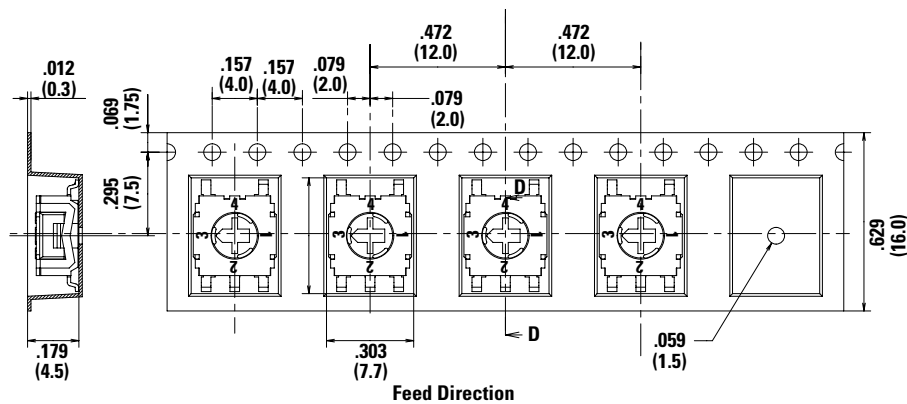
| POS. | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | A | B | C | D | E | F |
|------|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| C | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 1 | | ● | | ● | | ● | | ● | | ● | | ● | | ● | | ● |
| 2 | | | ● | ● | | ● | | ● | | ● | | ● | | ● | | ● |
| 4 | | | | ● | ● | ● | ● | ● | | ● | | ● | | ● | | ● |
| 8 | | | | | | | | | ● | ● | ● | ● | ● | ● | ● | ● |

Tape and Reel

Tape and reel for RTExx02Gxx 750 pieces per reel. (mm)



Tape and reel for RTExx00Gxx, 1,250 pieces per reel. (mm)



Disclaimer Notice - Information furnished is believed to be accurate and reliable. However, users should independently evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice at <http://www.littelfuse.com/disclaimer-electronics>.