

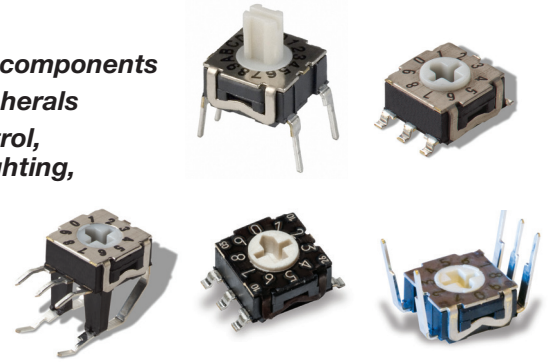
RTE Series Low Profile Rotary DIP Switches

Features/Benefits

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

Typical Applications

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



H

DIP

Specifications

CONTACT RATING:

Gold: 100 mA max. 10μ A min. 30 V DC max. 20 mVDC min.

MECHANICAL LIFE: 20,000 indexations

CONTACT RESISTANCE: 100 mΩ max. initial;
150 mΩ after life

INSULATION RESISTANCE: 10¹⁰ Ω min. initial

DIELECTRIC STRENGTH: 300 Vrms 1 mn

OPERATING TEMPERATURE: -25°C to 85°C.

STORAGE TEMPERATURE: -55°C to 85°C.

PACKAGING:

Quantities

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	All versions		150		1500 (10 boxes)
R	Flush, screwdriver slot	65			1950 (30 tubes)
	Shaft for button		150		1500 (10 boxes)

Materials

COVER: Brass, nickel plated (black or silver)

BASE: PPS

ACTUATOR: LCP

MOVABLE CONTACTS: Copper alloy, gold plated.

STATIONARY CONTACTS: Brass, gold plated.

TERMINALS: See page I-28 to I-29

O-RING: Silicone

SOLDERING PROCESS:

- Surface Mount Terminals: Infrared Reflow Soldering in accordance with IEC 61760-1.

- Non Reverse Thru-Hole Terminals: Lead free single or double wave soldering process according to C&K Procedure PS-LF-001

- Reverse Thru-Hole Terminals: Manual soldering: 3 sec / 350°C. Lead free single wave soldering process can be used but validation of the process must be done by customer

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

How To Order

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.

NOTE: Some of the configurations may not be available or could require some development.



Number of Positions

RTE04

RTE10

RTE16

ESD Protection and top plate

0 Without ESD - standard plate

1 With ESD - standard plate ²

B Without ESD - black plate

Actuator

0 Flush, screwdriver slot

2 Shaft for button

Terminations

N Thru-hole

V Right angle

G Surface mount

R Reverse, thru-hole

Contact/Terminal Material

4 Gold 0.5 μm/ lead free tin

7 Gold 1.0 μm

Switch Function

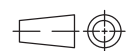
0 Single pole ¹

1 BCD code

3 Gray Code (for RTE 10)

4 Hexadecimal code (for RTE 16)

7 Gray Code (for RTE 16)



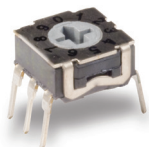
First Angle
Projection

- 1 - Single pole function not available for RTE10/RTE16
2 - ESD protection available with "N" and "R" terminations only

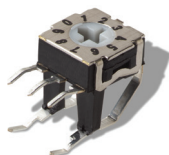
RTE Series Low Profile Rotary DIP Switches

SWITCHES WITH STANDARD OPTIONS

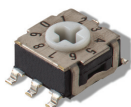
PC Mount-Terminal Option N



Right Angle Mount-Terminal Option V

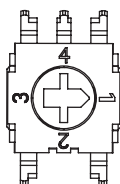


Surface Mount-Terminal Option G

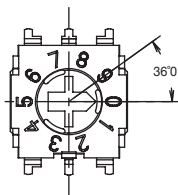


NUMBER OF POSITIONS

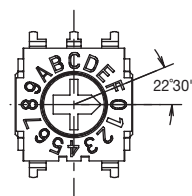
RTE04 4 POSITIONS



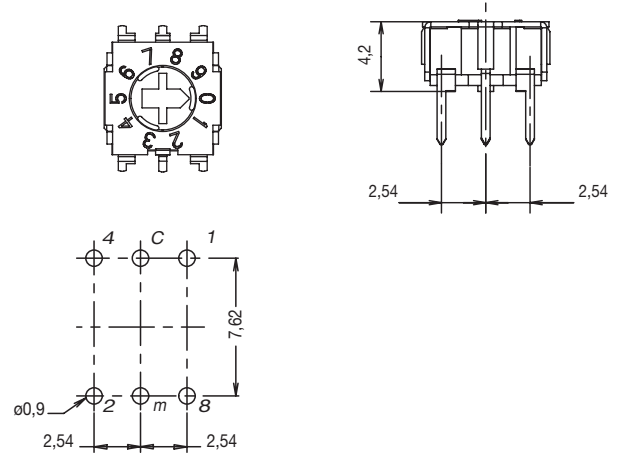
RTE10 10 POSITIONS



RTE16 16 POSITIONS



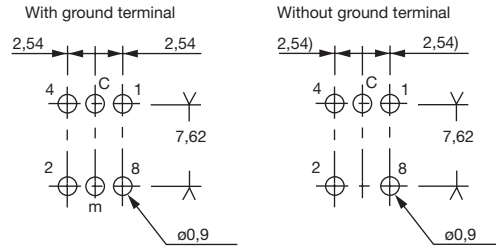
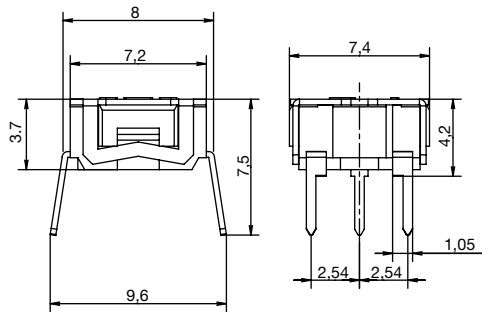
DIP



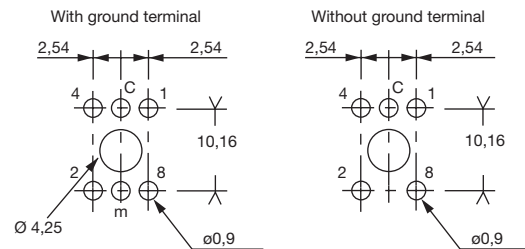
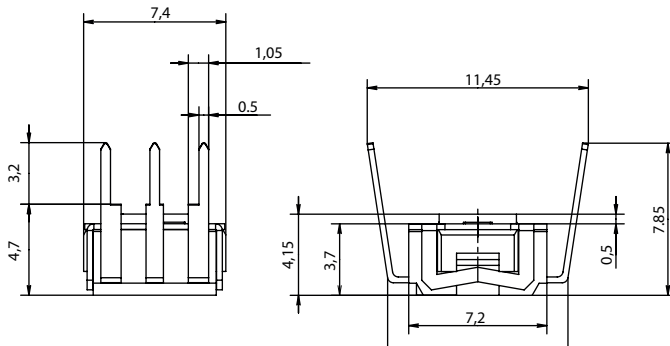
RTE Series Low Profile Rotary DIP Switches

TERMINATIONS

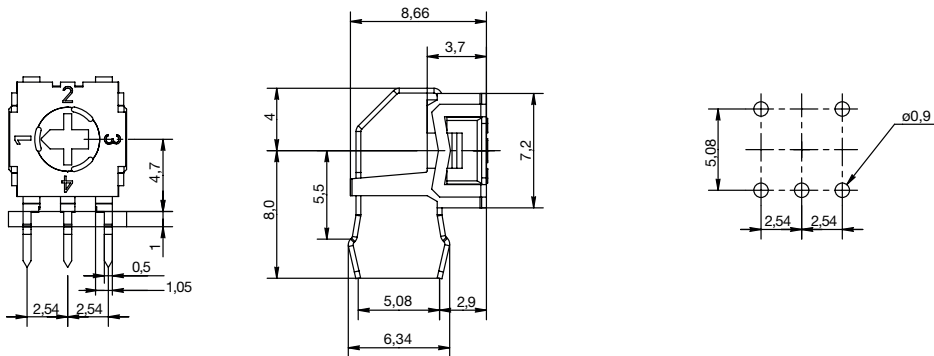
N THRU-HOLE



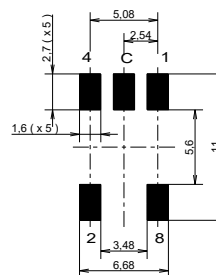
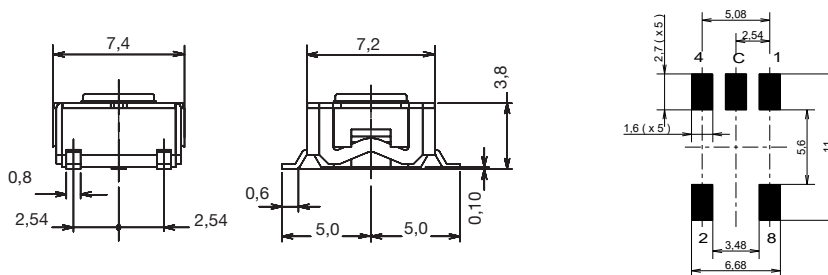
R REVERSE, THRU-HOLE



V RIGHT ANGLE, THRU-HOLE



G SURFACE MOUNT



PCB layout seen component side



First Angle
Projection



H

DIP

SWITCH FUNCTION

0 SINGLE POLE

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									●	●

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

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

7 GRAY CODE (for RTE04 only)

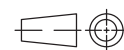
POS.	1	2	3	4
C	●	●	●	●
1	●			
2		●		
4			●	
8				●

(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 μ m / lead free tin
7	Gold	1.0 μ m



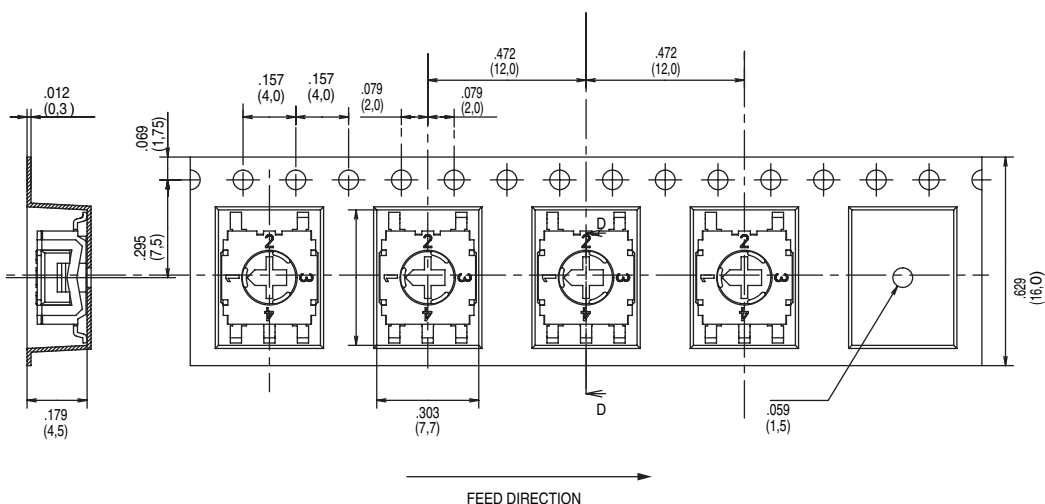
First Angle
Projection

Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

H

DIP

Tape and reel for RTExx00Gxx
1,250 pieces per reel.



H-38

www.ckswitches.com