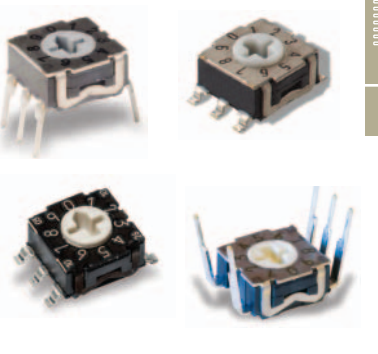
RTE Series
Low Profile Rotary DIP Switches

Features/Benefits

- *Thru-hole and surface mount models*
- *Miniature size with robust metal cover in black or silver nickel finish*
- *2, 3, 4, 10, & 16 positions*
- *Large choice of codings*
- *Vertical or reverse versions*
- *RoHS compliant*

Typical Applications

- *Timers, automation components*
- *Computer and peripherals*
- *Alarms, access control*
- *Instrumentation*



Specifications

CONTACT RATING:
Gold: 100 mA max. 10µ A min. 30 V DC max. 20 mVDC min.
Silver: 100 mA max. 1 mA min. 50 V DC max. 2 VDC min.
MECHANICAL LIFE: RTE02/03: 1,500 actuations; RTE04/10/16: 20,000 actuations
CONTACT RESISTANCE: 100 mΩ max. initial; 150 mΩ after life
INSULATION RESISTANCE: RTE02/03: 10^{13} Ω min.
RTE04/10/16: 10^{10} Ω min. initial
DIELECTRIC STRENGTH: RTE 02/03: 500 Vrms; RTE 10/16; 300 Vrms
OPERATING TEMPERATURE: -25°C to 85°C.
STORAGE TEMPERATURE: -40°C to 85°C.
PACKAGING: N or R terminations in tube.
V termination in box. G termination in reel, 750 pieces per reel. G termination with flush actuator, 1250 pieces per reel.

Materials

COVER: Brass, nickel plated (black or silver)
BASE: Thermoplastic PPS
ACTUATOR: LCP
KNOB: Thermoplastic
MOVABLE CONTACTS: Bronze, gold or silver plated.
STATIONARY CONTACTS: Brass, gold or silver plated.
TERMINALS: See page I-28 to I-29
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.

Solderability: Wave soldering 260°/2s.
SMT are reflow compatible according to CECC 00802-NORM.

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.

R T E

Number of Positions

RTE02 [1]
RTE03 [1]
RTE04 [2]
RTE10 [3]
[2]RTE16 [3]

ESD Protection and top plate

0 Without ESD - standard plate
1 With ESD - standard plate [4]
B Without ESD - black plate

Actuator

0 Flush, screwdriver slot
1 Extended shaft [2, 5]
2 Shaft for button [2, 5, 6]

Terminations

N Thru-hole
V Right angle [7]
G Surface mount
M Manual [8]
R Reverse, thru-hole

Switch Function

0 Single pole [3, 1]
1 BCD code
2 BCD complement code [9]
3 Grey Code [10]
4 Hexadecimal code [11]
7 Grey Code [12]

Contact/Terminal Material

4 Gold/Matte-tin
5 Silver/Matte-tin [13]

1 - RTE02/RTE03 available with single pole function "0" only
2 - RTE04 version only available with screwdriver slot acuator "0"
3 - Single pole function not available for RTE10/RTE16
4 - ESD protection available with "N" thru-hole termination only
5 - Not available in surface mount
6 - Buttons ordered separately
7 - Not available for RTE02/RTE03
8 - Manual - available for RTE03 and RTE10/RTE16 with actuator option "2" only
9 - BCD complement code for RTE10, not available with terminations "G" & "M"
10 - Grey Code - for RTE10 only
11 - Hexidecimal code for RTE16 only
12 - Grey code for RTE04/RTE16 only
13 - Silver contact option only available for RTE02/RTE03

Third Angle Projection

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

RTE Series
Low Profile Rotary DIP Switches

SWITCHES WITH STANDARD OPTIONS

PC Mount-Terminal Option N



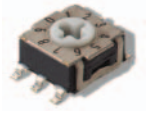
PART NUMBER WITHOUT ESD PIN	WITH ESD PIN	NO. POS.	FUNCTION	QTY PER TUBE
RTE0200N04	RTE0210N04	2	SPDT	65
RTE0300N04	RTE0310N04	3	SP3T	65
RTE0400N04	RTE0410N04	4	SP4T	65
RTE1000N14	RTE1010N14	10	BCD	65
RTE1600N44	RTE1610N44	16	HEXADECIMAL	65

Right Angle Mount-Terminal Option V



PART NUMBER	NO. POS.	FUNCTION	QUANTITY
RTE0400V04	4	SP4T	150 per box
RTE1000V14	10	BCD	150 per box
RTE1600V44	16	HEXADECIMAL	150 per box

Surface Mount-Terminal Option G



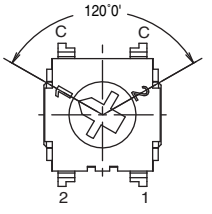
PART NUMBER	NO. POS.	FUNCTION	QUANTITY PER REEL
RTE0200G04	02	SPDT	1250
RTE0300G04	03	SP3T	1250
RTE0400G04	04	SP4T	1250
RTE1000G14	10	BCD	1250
RTE1600G44	16	HEXADECIMAL	1250

Third Angle Projection

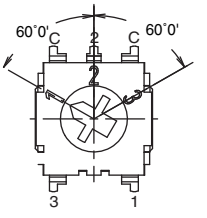
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

NUMBER OF POSITIONS

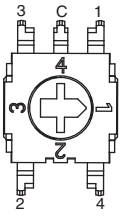
RTE02* 2 POSITION



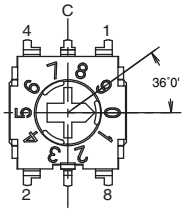
RTE03 3 POSITION



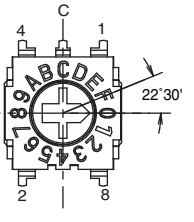
RTE04 4 POSITION



RTE10 10 POSITION

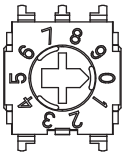


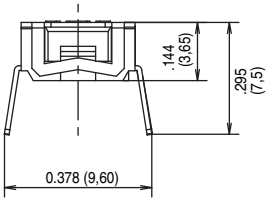
RTE16 16 POSITION

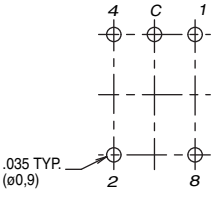


ESD PROTECTION

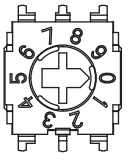
0 WITHOUT

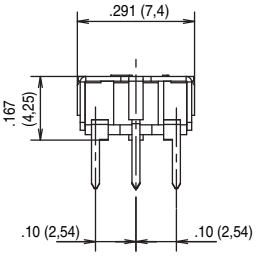


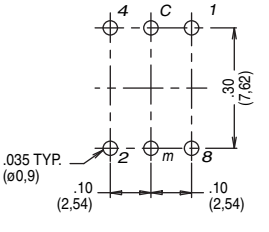




1 WITH

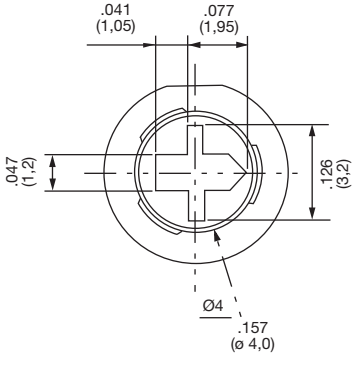




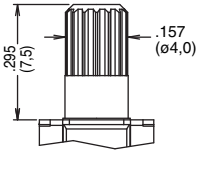


ACTUATOR

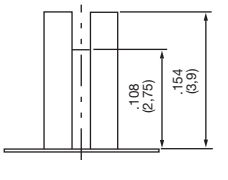
0 FLUSH, SCREWDRIVER SLOT

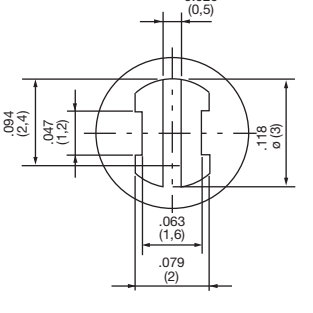


1 EXTENDED SHAFT
(not available in surface mount)



2 SHAFT FOR BUTTON





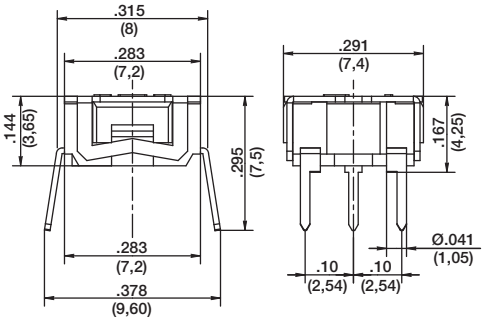
Third Angle Projection

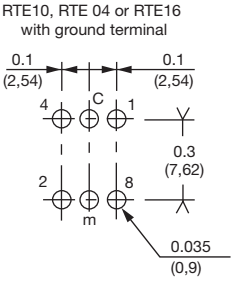
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Specifications and dimensions subject to change

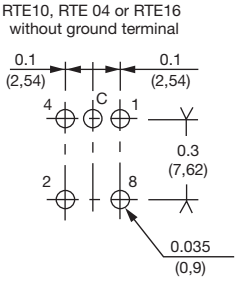
RTE Series
Low Profile Rotary DIP Switches

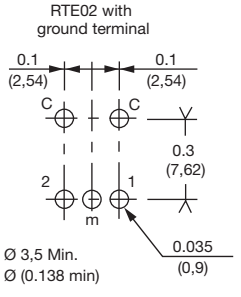
TERMINATIONS

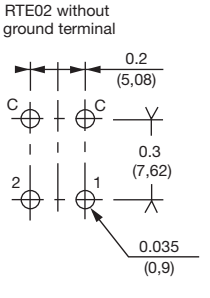
N THRU-HOLE

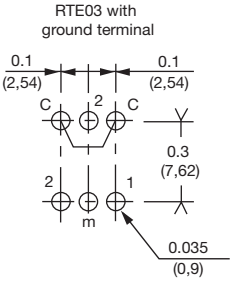


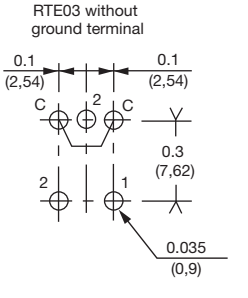






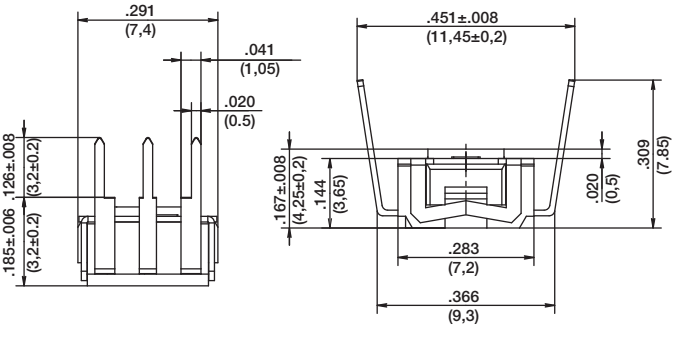


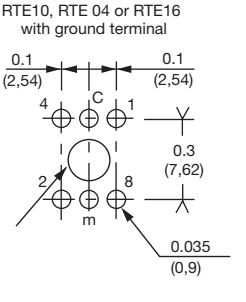


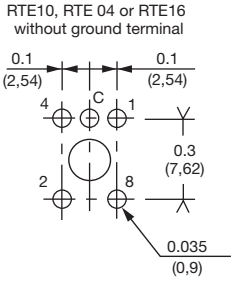


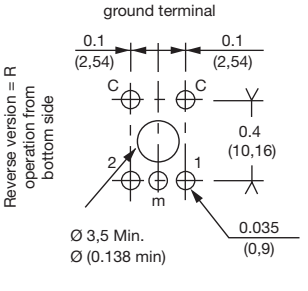
Ø in PC Board for screw driver operation must be 3.5 mm

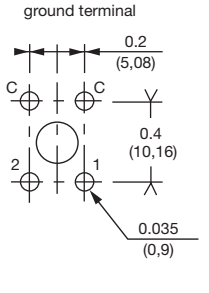
R REVERSE, THRU-HOLE

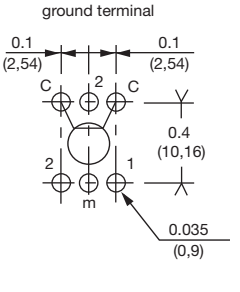


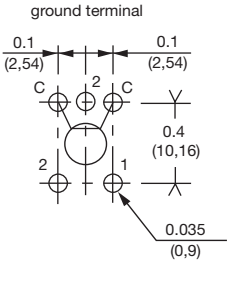




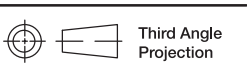








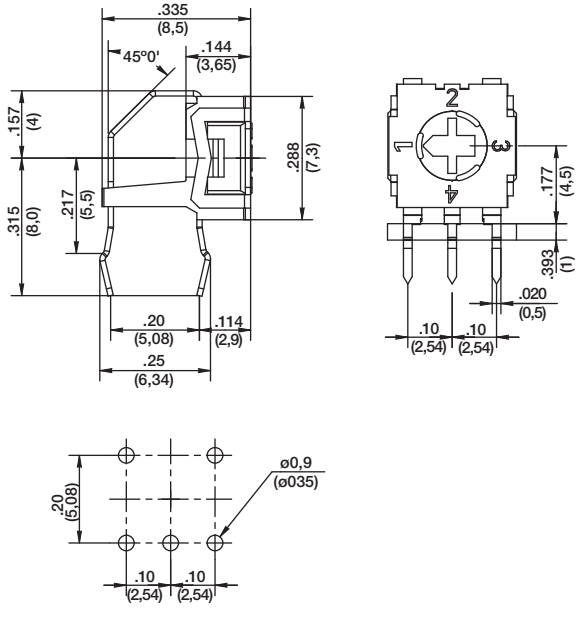
Ø in PC Board for screw driver operation must be 3.5 mm



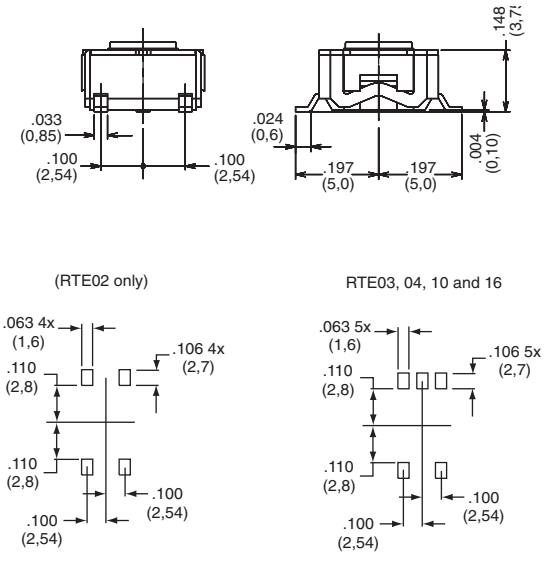
Dimensions are shown: Inch (mm)
Specifications and dimensions subject to change

TERMINATIONS

V RIGHT ANGLE, THRU-HOLE

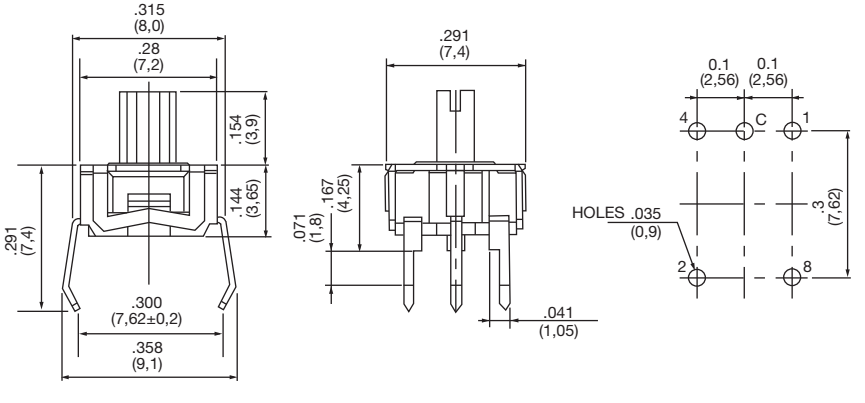


G SURFACE MOUNT



PCB layout seen component side

M OPTION



Third Angle Projection

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

RTE Series
Low Profile Rotary DIP Switches

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									●	●

2 BCD COMPLEMENT CODE

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

Other codes available by request.

3 GREY 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	10	11	12	13	14	15
C	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
1		●		●		●		●		●		●		●		●
2			●	●			●	●			●	●			●	●
4					●	●	●	●					●	●	●	●
8									●	●	●	●	●	●	●	●

7 GREY 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	RoHS COMPLIANT *	RoHS COMPATIBLE *	CONTACT MATERIAL	TERMINAL PLATING	RATINGS		
*4	YES	YES * *	GOLD	MATTE TIN	100 mA max.	10µ A min.	30 V DC max.
*5	YES	YES * *	SILVER	MATTE TIN	100 mA max.	1 mA min.	50 V DC max.

* Note: See Technical Data section of this catalog for RoHS compliant and compatible definitions and specifications.

** When selecting contact material option 4 and 5 with RTE02, RTE03 and or “V” terminations, these combinations are RoHS compliant but not currently compatible (i.e. they do not sustain the high temperatures of the leadfree soldering process). All other options and terminations are RoHS compatible. Please contact customer service for RoHS compatible versions of the RTE02 and RTE03.

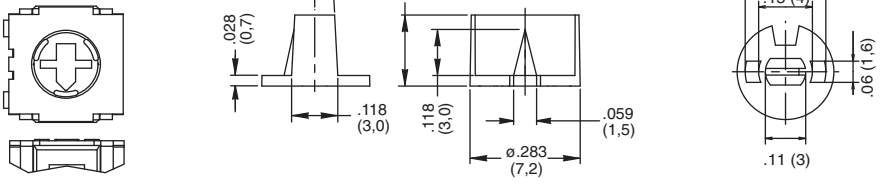
Third Angle Projection

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

BUTTONS AVAILABLE

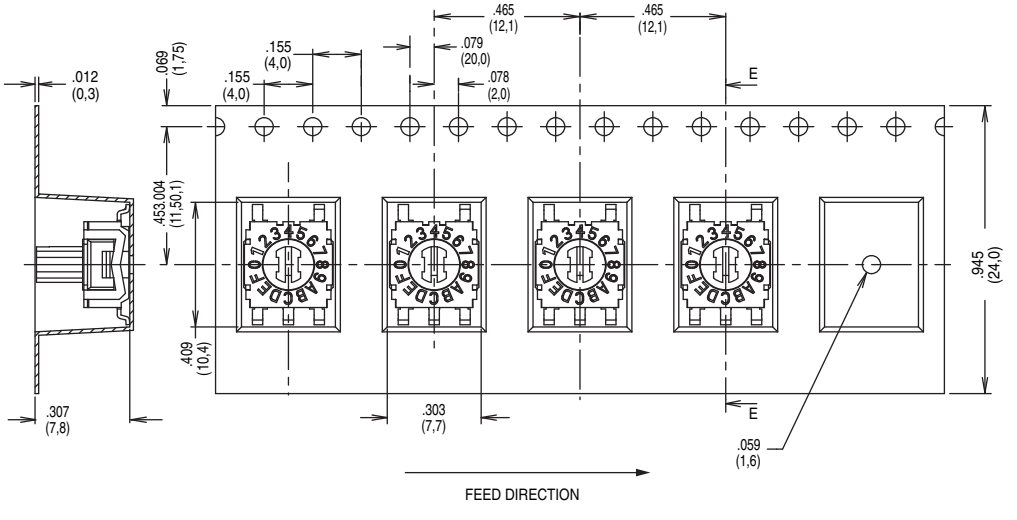
Buttons are ordered separately, shipped in bulk.

Part Number	Color
BTN RTE 40	Red
BTN RTE 50	Green
BTN RTE 90	Black

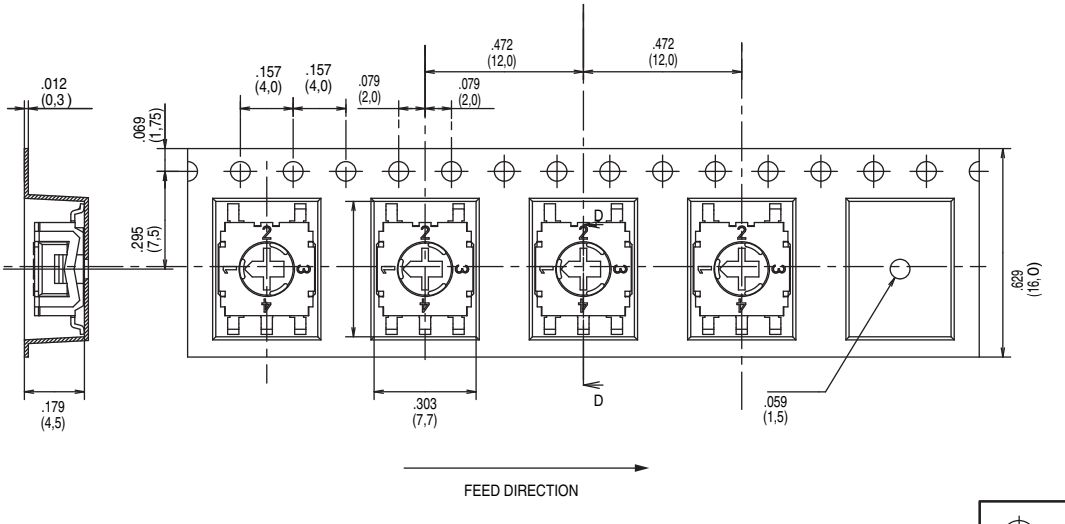


TAPE AND REEL

Tape and reel for RTExx02Gxx
750 pieces per reel.



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



Third Angle Projection

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