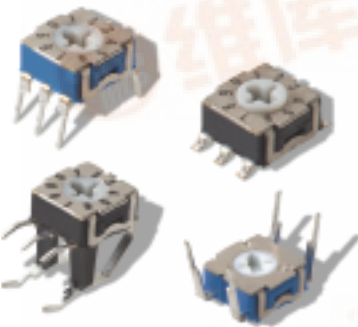


C&K RTE Series

Low Profile Rotary DIP Switches

—

DIP



Features/Benefits

- Thru-hole and surface mount models
- Miniature size with robust stainless steel cover
- Rotary SPDT, SP3T, SP4T functions
- Rotary binary-decimal and hexadecimal coding
- RoHS compliant - options available

Typical Applications

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

Specifications

CONTACT RATING:
Gold: 100 mA max. 10 μ 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 m Ω max. initial; 150 m Ω after life
INSULATION RESISTANCE: RTE02/03: 10¹³ Ω min. initial
RTE04/10/16: 10¹⁰ 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 & BASE: Thermoplastic PPS
ACTUATOR: PA Thermoplastic
KNOB: Thermoplastic
MOVABLE CONTACTS: Brass, gold or silver plated.
STATIONARY CONTACTS: Brass, gold or silver plated.
TERMINALS: See page I-24
O-RING: Silicone

NOTE: For the latest information regarding RoHS compliance, please go to: www.itcannon.com/rohs.

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.

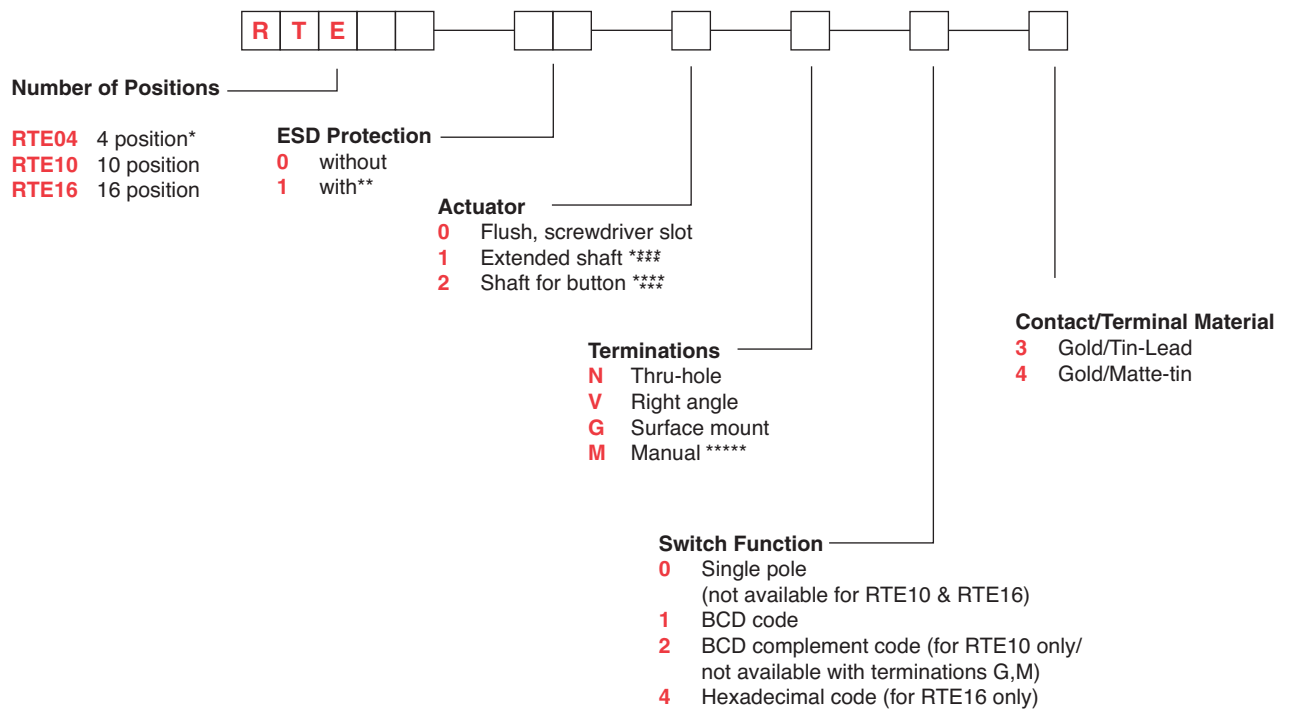
How To Order

Our easy 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.

Number of Positions RTE02 2 positions RTE03 3 positions	ESD Protection 0 without 1 with**	Actuator 0 Flush, screwdriver slot 1 Extended shaft **** 2 Shaft for button ***	Terminations N Thru-hole R Reverse, thru-hole G Surface mount M Manual****(for RTE03 only)	Switch Function 0 Single pole	Contact/Terminal Material 3 Gold/Tin-Lead 1 Silver/Tin lead 4 Gold/Matte-tin 5 Silver/Matte-tin
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** ESD protection only available with N or R terminations
*** Buttons ordered separately
**** Not available in surface mount.
***** Only possible in combination with actuator option "2"

C&K RTE Series Low Profile Rotary DIP Switches



* RTE04 version only available with screw driver slot acuator "0"

** ESD protection only available with N termination

*** Buttons ordered separately

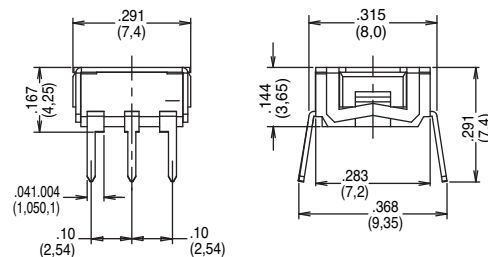
**** Not available in surface mount

***** Available with RTE 10, and RTE 16, with actuator option 2 only

Please note Gray code option available, consult ITT customer service for options and availability.

DIP

PC Mount



Technical drawing of a 1/2-20 UNF-2A x 0.50 inch Hex Flange Nut. The drawing shows two views: a top view (left) and a side view (right). Dimensions are provided in inches and millimeters.

Top View Dimensions:

- Overall width: .291 (7,4)
- Inner width: .100 (2,54)
- Inner width: .100 (2,54)
- Inner width: .033 (0,85)

Side View Dimensions:

- Overall height: .167 (4,25)
- Overall height: .144 (3,65)
- Overall height: .315 (8,0)
- Overall height: .283 (7,2)
- Overall height: .020 (0,50)
- Overall height: .148 (3,75)
- Overall height: .004 (0,10)
- Overall height: .197 (5,0)
- Overall height: .197 (5,0)
- Overall height: .024 (0,6)



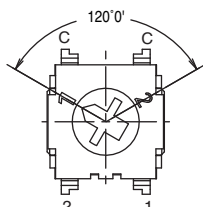
Dimensions are shown: Inch (mm)

C&K RTE Series Low Profile Rotary DIP Switches

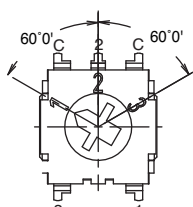
NUMBER OF POSITIONS



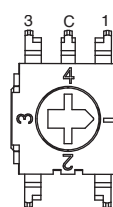
RTE02* 2 POSITION



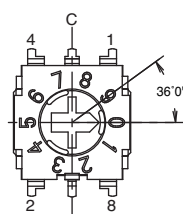
RTE03* 3 POSITION



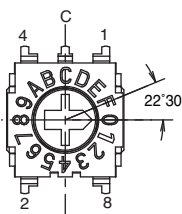
RTE04 4 POSITION



RTE10 10 POSITION



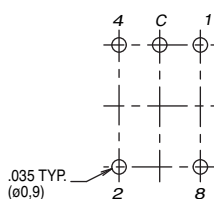
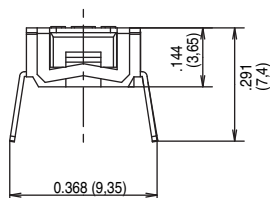
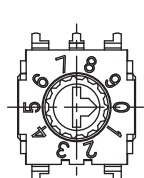
RTE16 16 POSITION



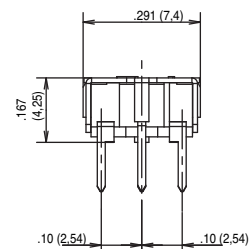
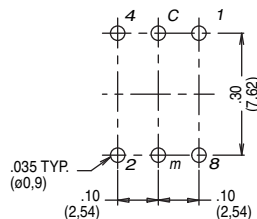
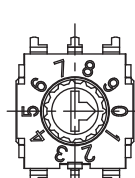
ESD PROTECTION



0 WITHOUT



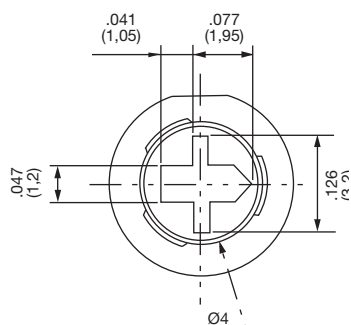
1 WITH



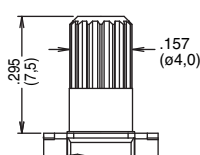
ACTUATOR



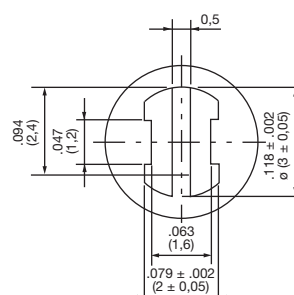
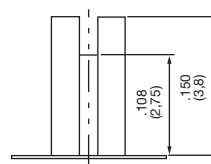
0 FLUSH, SCREWDRIVER SLOT



1 EXTENDED SHAFT
(not available in surface mount)



2 SHAFT FOR BUTTON

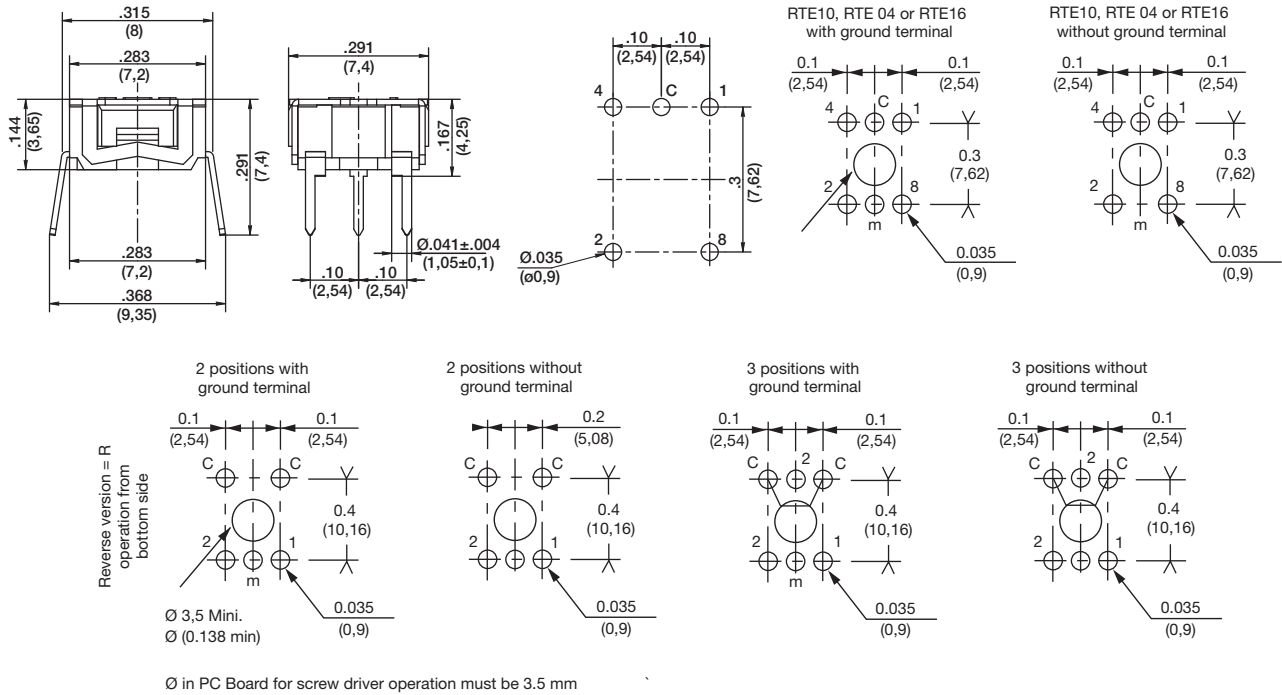


Dimensions are shown: Inch (mm)

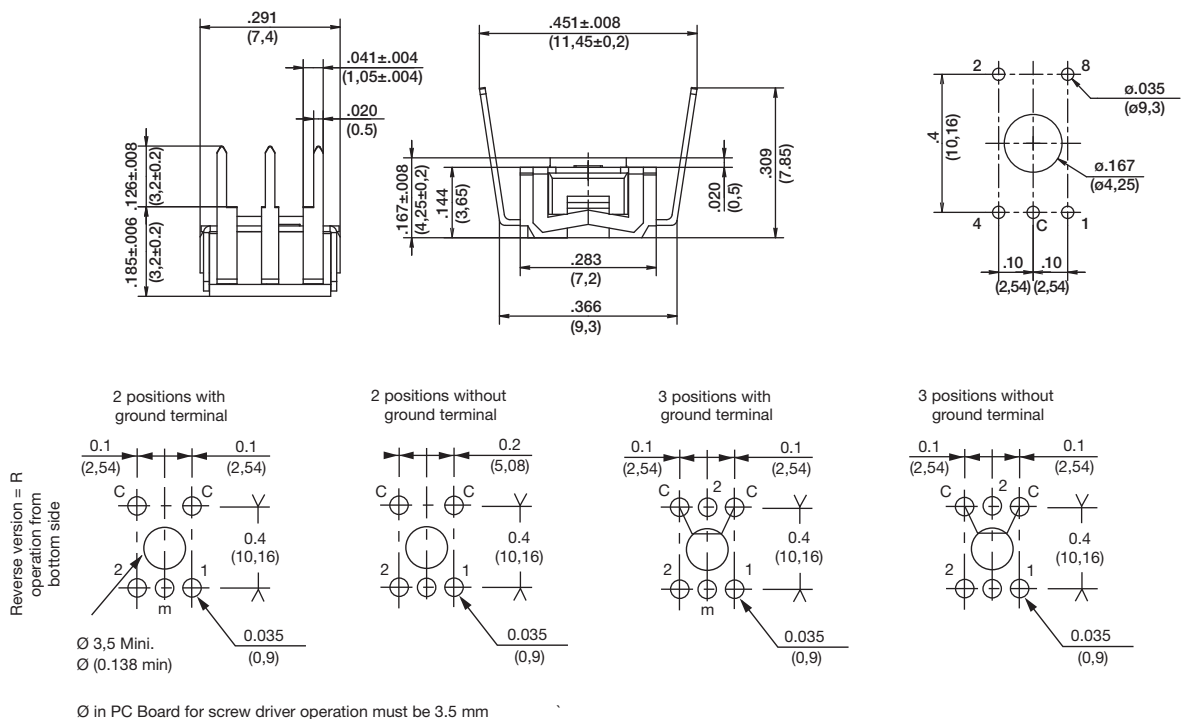
C&K RTE Series Low Profile Rotary DIP Switches

TERMINATIONS

N THRU-HOLE



R REVERSE, THRU-HOLE

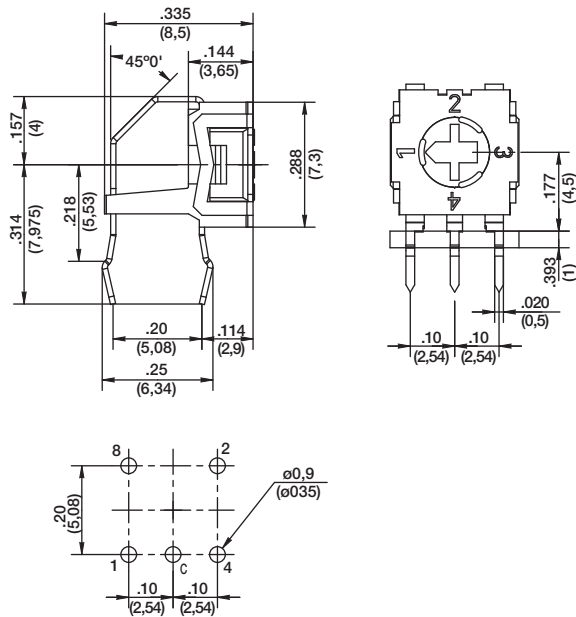


Dimensions are shown: Inch (mm)

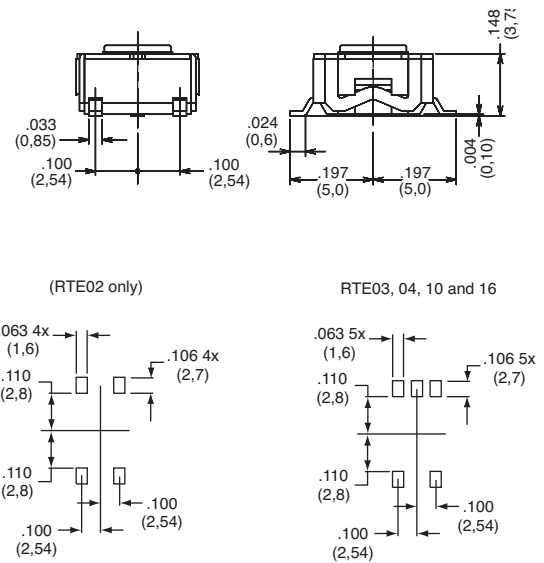
C&K RTE Series Low Profile Rotary DIP Switches

TERMINATIONS

V RIGHT ANGLE, THRU-HOLE

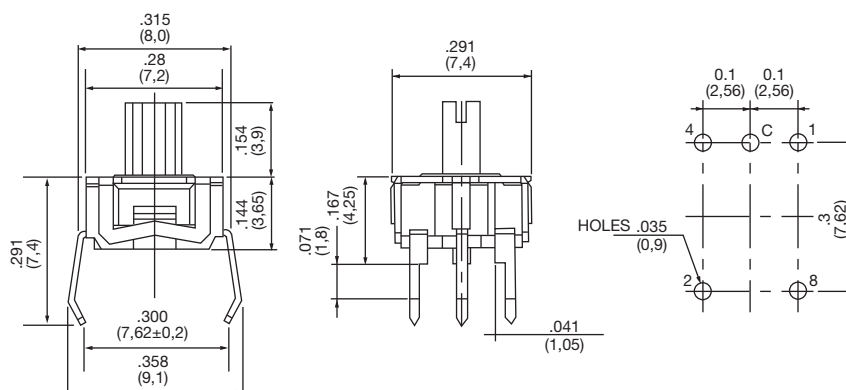


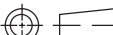
G SURFACE MOUNT



PCB layout seen component side

M OPTION



 Third Angle
Projection

Dimensions are shown: Inch (mm)



DIP

C&K 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.

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									●	●	●	●	●	●	●	

CONTACT MATERIAL



OPTION CODE	RoHS COMPLIANT *	RoHS COMPATIBLE *	CONTACT MATERIAL	TERMINAL PLATING	RATINGS		
3	NO	**	GOLD	TIN LEAD	100 mA max.	10μ A min.	30 V DC max.
1	NO	**	SILVER	TIN LEAD	100 mA max.	1 mA min.	50 V DC max.
*4	YES	**	GOLD	MATTE TIN	100 mA max.	10μ A min.	30 V DC max.
*5	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.

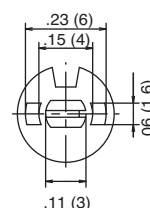
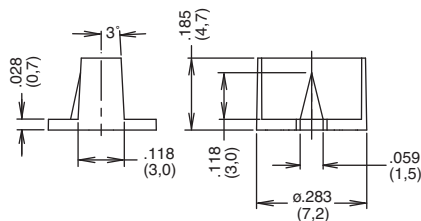
** When selecting contact material option 4 and 5 with RTE02, RTE03 and or "V" terminations, these combinations are RoHS compliant but not compatible (i.e. they do not sustain the high temperatures of the leadfree soldering process). All other options and terminations are RoHS compatible. (Compliant with 4 and 5 contact material only).

BUTTONS AVAILABLE

Buttons are ordered separately, shipped in bulk.

Part Number Color

BTN RTE 40	Red
BTN RTE 50	Green
BTN RTE 90	Black



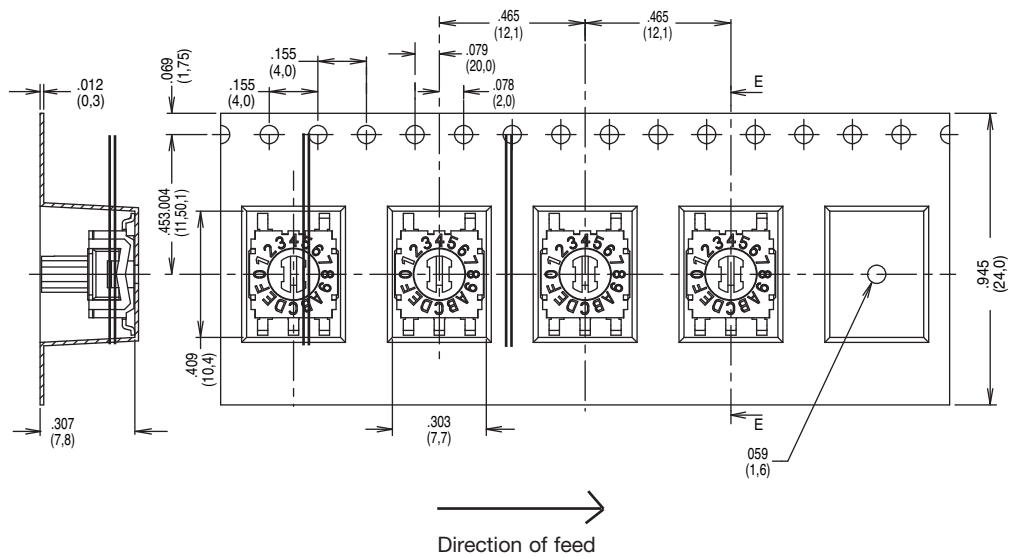
Third Angle
Projection

Dimensions are shown: Inch (mm)

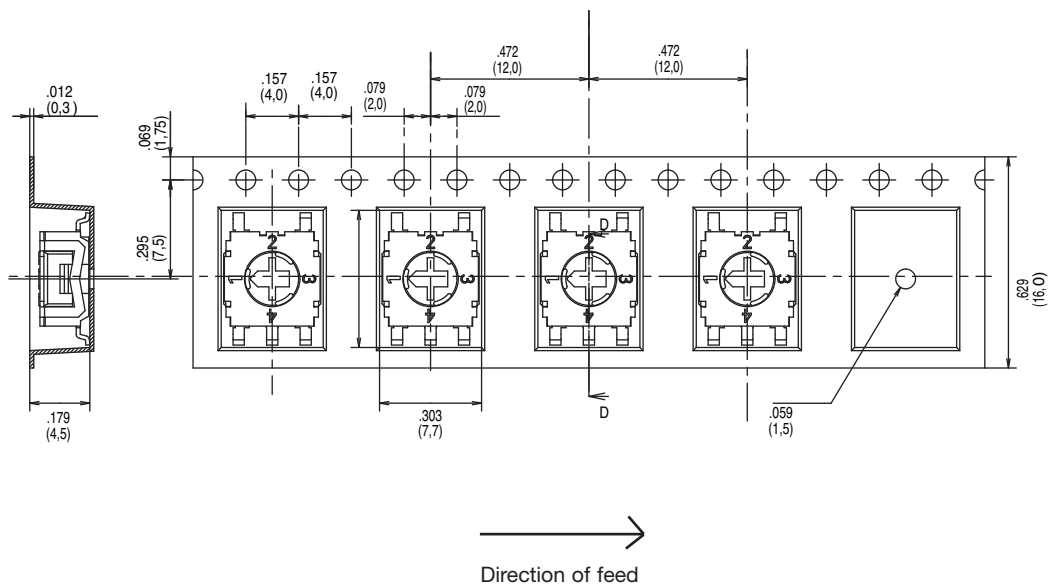
C&K RTE Series Low Profile Rotary DIP Switches

TAPE AND REEL

Tape and reel for RTExx02Gxx
750 pieces per reel.



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



Note: Dimensions in: $\frac{\text{inches}}{\text{(mm)}}$