

# RDT SERIES ROTARY DIP SWITCH

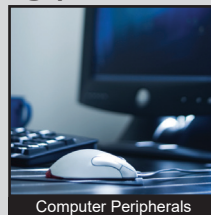
ANTI-VANDAL SWITCHES  
DETECTOR SWITCHES  
DIP SWITCHES  
KEYLOCK SWITCHES  
NAVIGATION SWITCHES  
PUSHBUTTON SWITCHES  
ROCKER SWITCHES  
ROTARY SWITCHES  
SLIDE SWITCHES  
SNAP ACTION SWITCHES  
TACTILE SWITCHES  
TOGGLE SWITCHES  
CAP OPTIONS



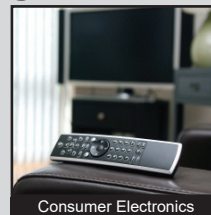
## APPLICATIONS / MARKETS



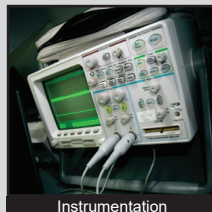
Audio / Visual



Computer Peripherals



Consumer Electronics



Instrumentation



Telecommunication



Medical Equipment

**RoHS**

## SPECIFICATIONS

### Electrical Rating:

Switching: 42VDC, 150mA

Non-Switching: 42VDC, 200mA

**Life Expectancy:** 10,000 steps

**Contact Resistance:** 80mΩ Max.

**Insulation Resistance:** 100 MΩ Min. at 250VDC

**Dielectric Strength:** 250VAC

### Operating Temperature:

-40°C to 85°C (Thru Hole)

-60°C to 125°C (SMT)

**Actuation Force:** 700 gf-cm Max

**Travel:** dependent upon individual switch positions

## FEATURES & BENEFITS

- Offers IP67 ratings for A, B, and D actuators
- Available in 4, 6, 8, 10 and 16 positions
- Right angle or vertical options
- SMT or thru hole options
- Gold contacts
- Tape & Reel packaging for S1 and S2 termination

## PART NUMBER CONFIGURATOR

| Series                           | Actuator                       | Code                           | Positions                       | Terminals                       | Packaging                      |
|----------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|--------------------------------|
| <input type="text" value="RDT"/> | <input type="text" value="A"/> | <input type="text" value="R"/> | <input type="text" value="04"/> | <input type="text" value="P1"/> | <input type="text" value="T"/> |
|                                  | A - Arrow Flush                | R - Real                       | 04                              | P1 - TH 3x3 terminals           | T - Tube                       |
|                                  | B - Arrow Shaft                | C - Complementary              | 06                              | P2 - TH 3x2 terminals           | R - Tape & Reel*               |
|                                  | C - Cross                      |                                | 08                              | S1 - SM 3x3 terminals           |                                |
|                                  | D - Arrow .1 High              |                                | 10                              | S2 - SM 3x2 terminals           |                                |
|                                  | G - Gray Segment Wheel**       |                                | 16                              | R1 - Angled 5.08 spacing        |                                |
|                                  | K - Black Segment Wheel**      |                                |                                 | R2 - Angled 2.54 spacing        |                                |

\*Tape & Reel Packaging available for S1 and S2 termination only

\*\*The segment wheel actuator is shipped separately from the switch and must be assembled after soldering. The segment wheel actuator cannot withstand the high temperatures of automated soldering.

Specifications subject to change without notice 8.2.2021



**E-SWITCH®**

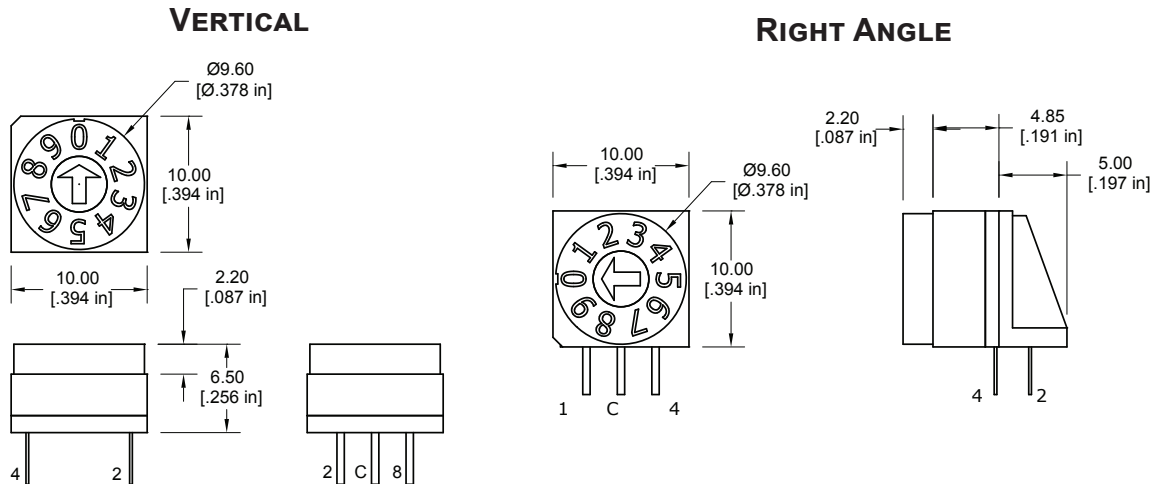
www.e-switch.com

800.867.2717

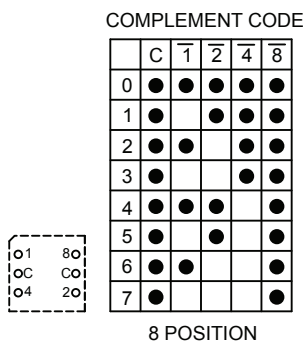
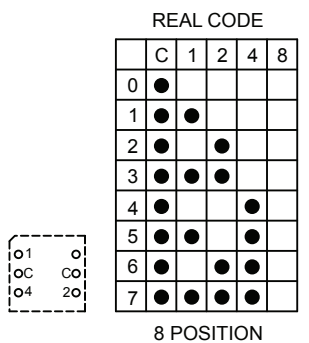
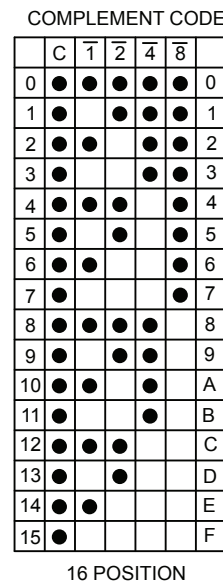
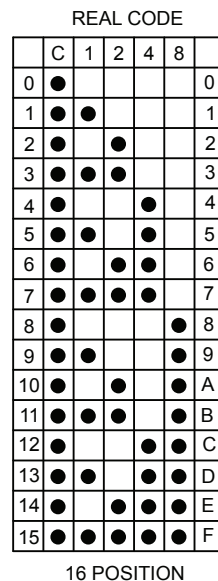
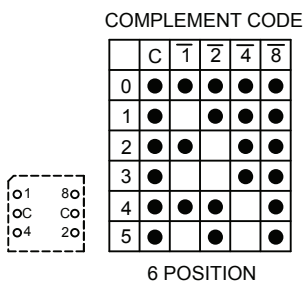
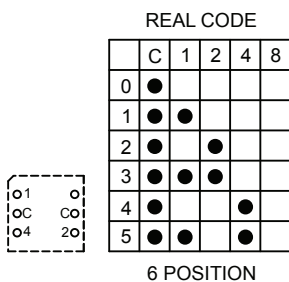
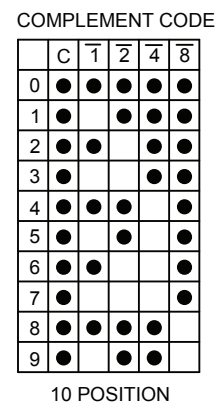
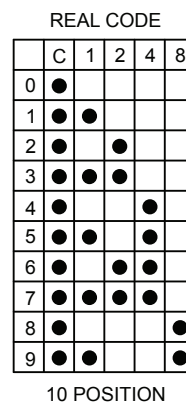
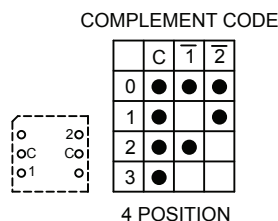
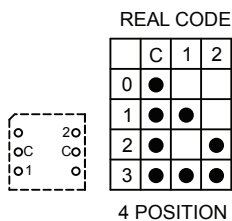
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# RDT SERIES ROTARY DIP SWITCH

## BODY DIMENSIONS



## GENERAL CODES

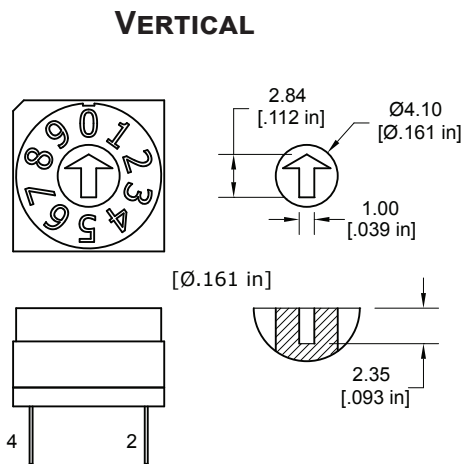


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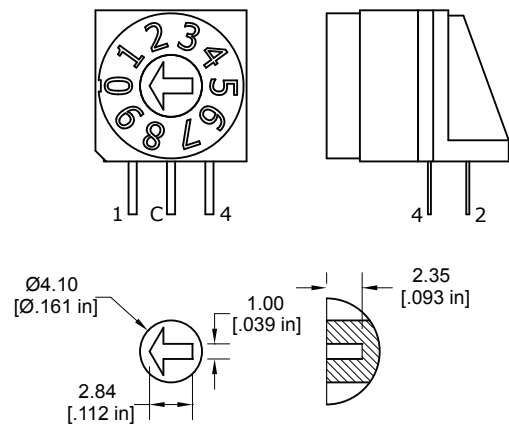
## ACTUATOR OPTIONS

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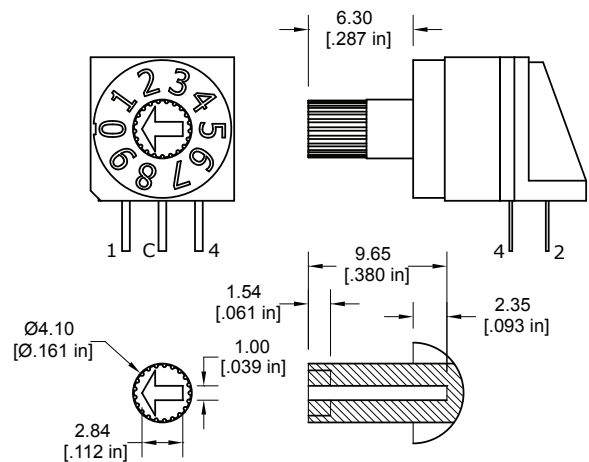
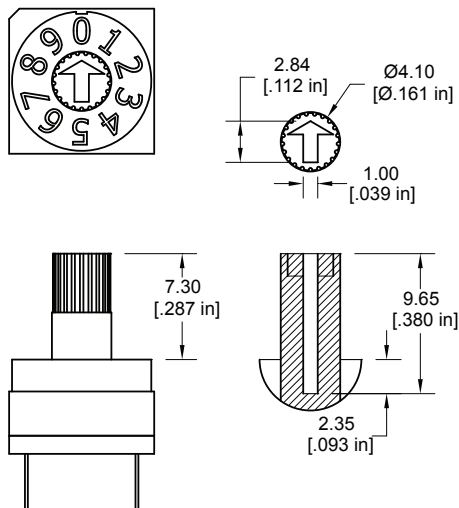
**"A" ACTUATOR**



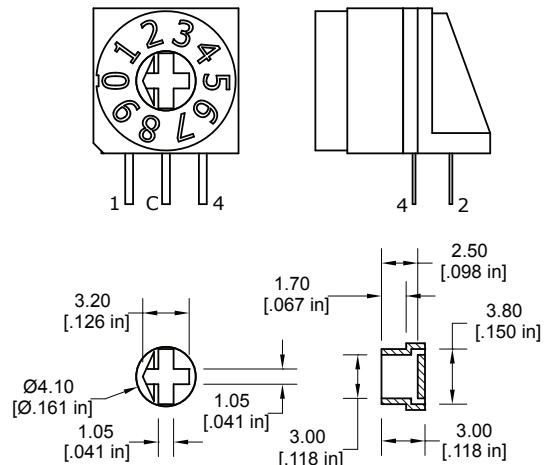
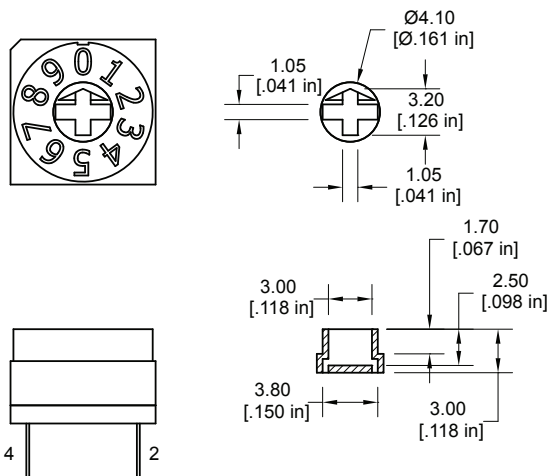
**RIGHT ANGLE**



**"B" ACTUATOR**



**"C" ACTUATOR**



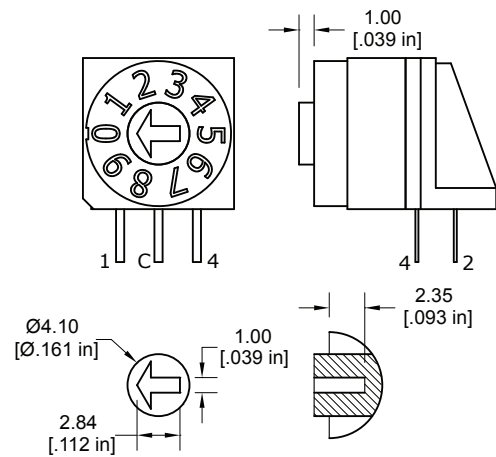
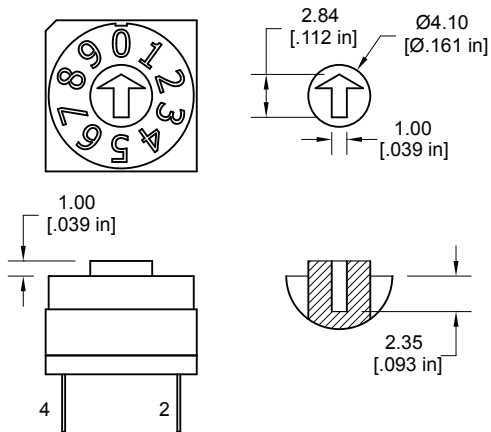
# RDT SERIES ROTARY DIP SWITCH

## ACTUATOR OPTIONS (CONT.)

### VERTICAL

### RIGHT ANGLE

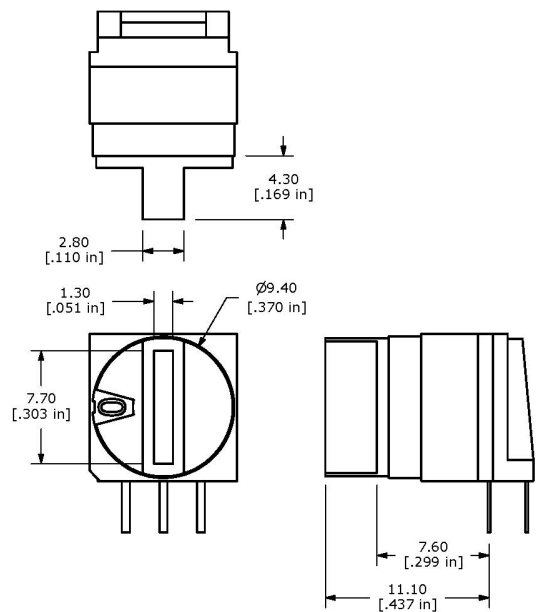
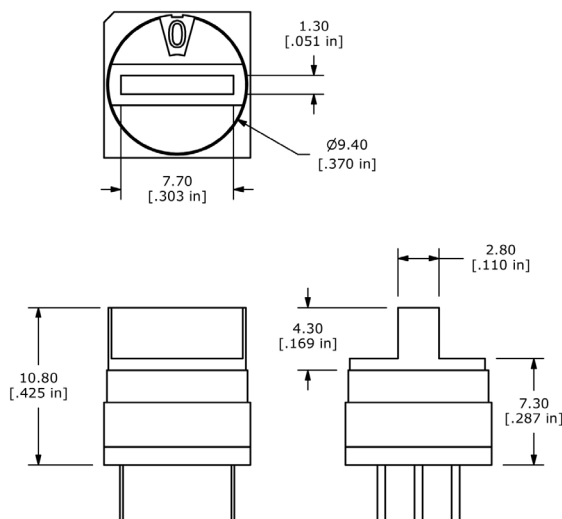
#### "D" ACTUATOR



### VERTICAL

### RIGHT ANGLE

#### "G" AND "K" ACTUATORS

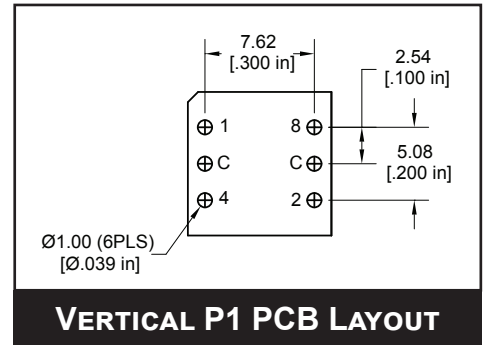
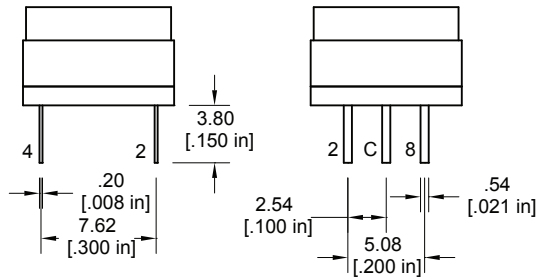


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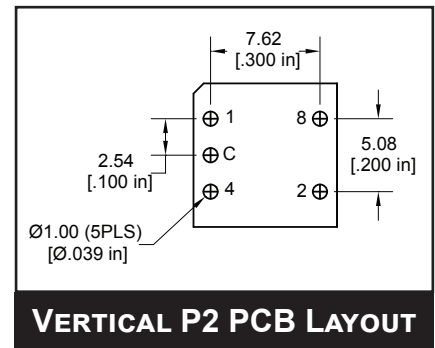
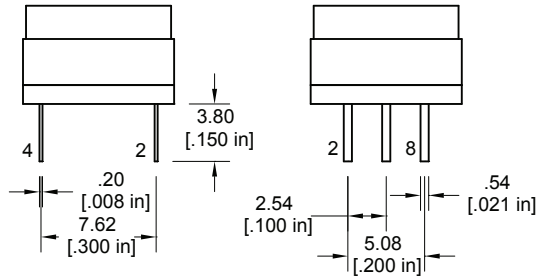
## TERMINATION OPTIONS

### P1 - VERTICAL



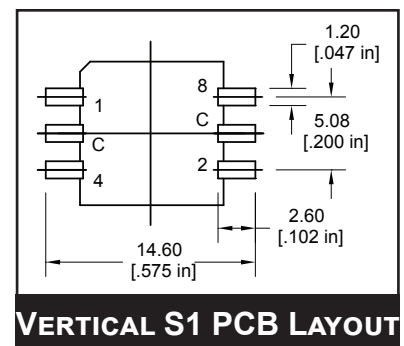
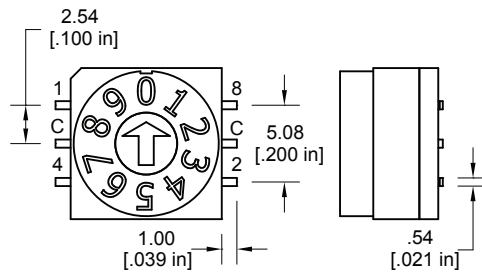
**VERTICAL P1 PCB LAYOUT**

### P2 - VERTICAL



**VERTICAL P2 PCB LAYOUT**

### S1 - VERTICAL



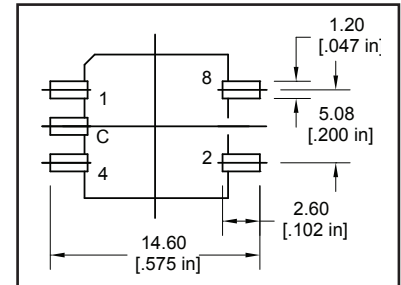
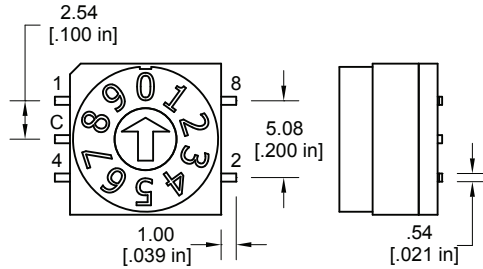
**VERTICAL S1 PCB LAYOUT**



# RDT SERIES ROTARY DIP SWITCH

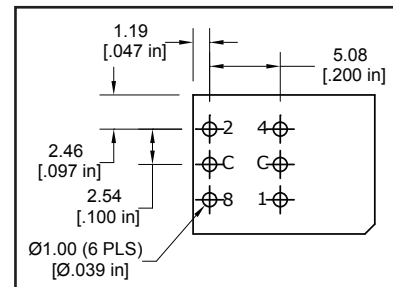
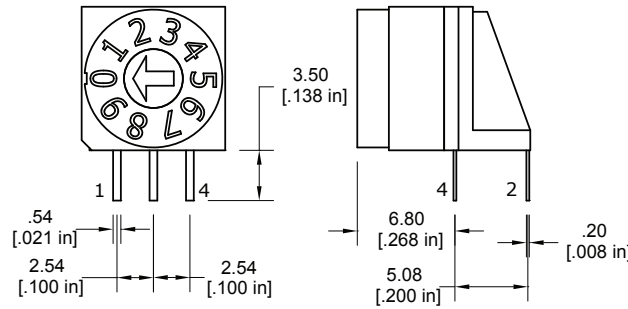
## TERMINATION OPTIONS (CONT.)

### S2 - VERTICAL



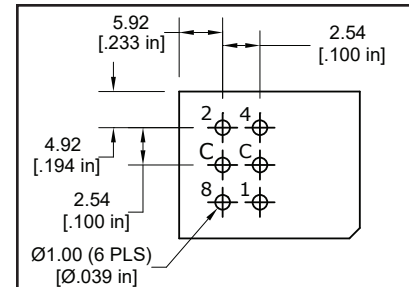
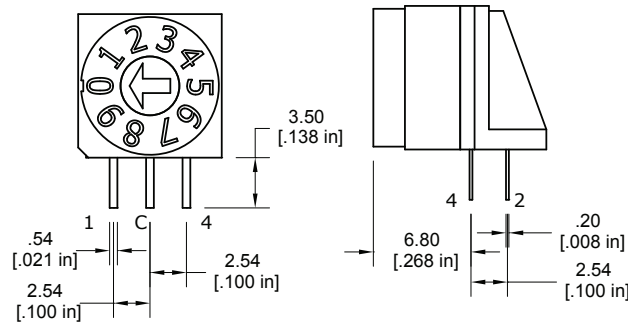
**VERTICAL S2 PCB LAYOUT**

### R1-RIGHTANGLE



**RT ANGLE R1 PCB LAYOUT**

### R2 - RIGHT ANGLE

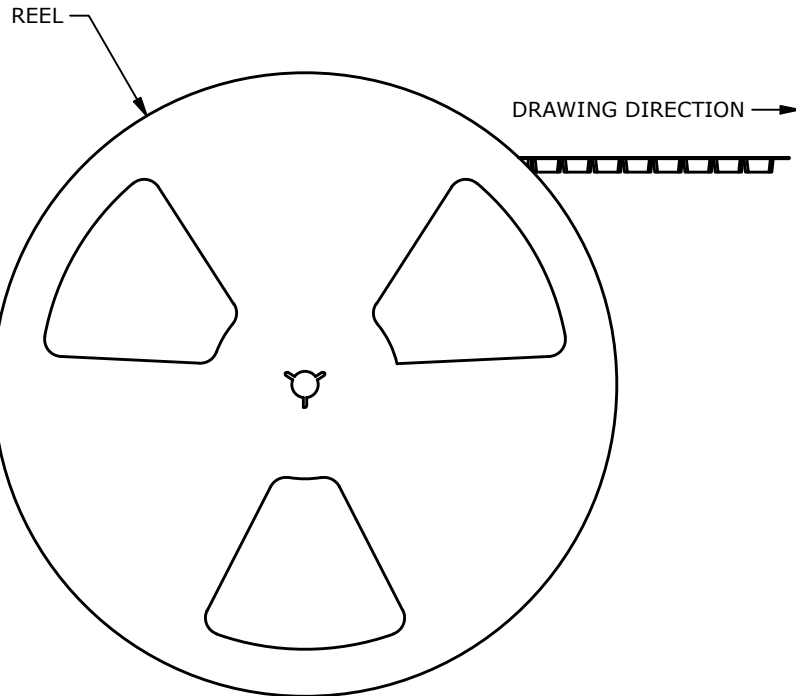
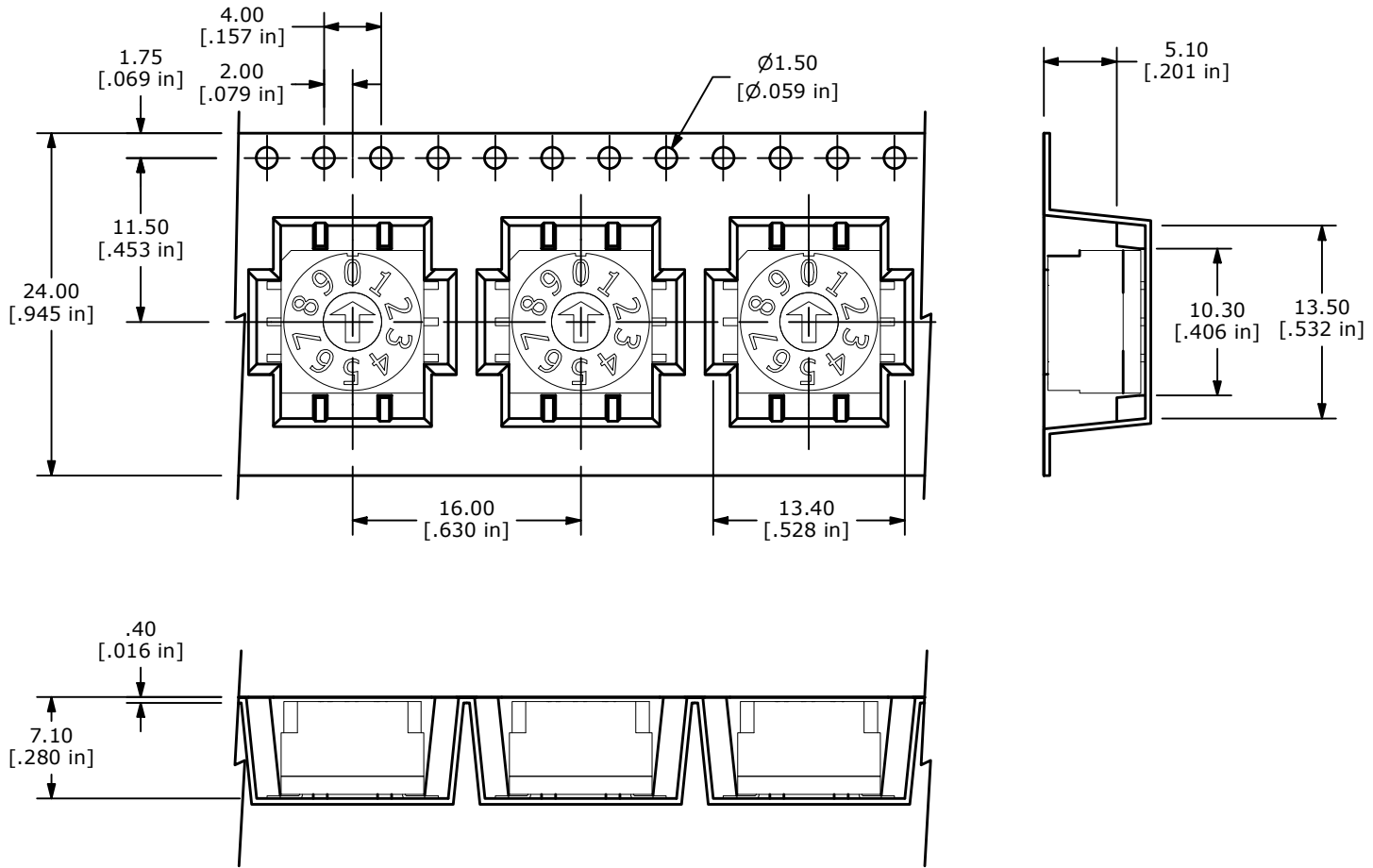


**RT ANGLE R2 PCB LAYOUT**



# RDT SERIES ROTARY DIP SWITCH

## BODY DIMENSIONS TAPE AND REEL



# RDT SERIES ROTARY DIP SWITCH

## RECOMMENDED SOLDER PROCESS

Most contamination problems can be prevented by exercising care during the cleaning and soldering process. Care should be taken not to immerse or spray unsealed switches during flux removal. Contact E-Switch for specific soldering recommendations and specifications not shown. Generalized soldering procedures are outlined below.

### “TYPICAL” SMT REFLOW (Pb and Pb-Free)

| Profile Feature   | Sn-Pb Eutectic Assembly | Pb-Free Assembly |
|---|-------------------------|------------------|
| Average Ramp-Up Rate (T <sub>smax</sub> to T <sub>p</sub> )   | 3 °C/second max.        | 3 °C/second max. |
| <b>Preheat</b>  |                         |                  |
| -Temperature Min (T <sub>smin</sub> )                         | 100 °C                  | 150 °C           |
| -Temperature Max (T <sub>smax</sub> )                         | 150 °C                  | 200 °C           |
| -Time (t <sub>smin</sub> to t <sub>smax</sub> )               | 60-120 seconds          | 60-180 seconds   |
| Time Maintained above:  |                         |                  |
| -Temperature (T <sub>L</sub> )                                | 183 °C                  | 217 °C           |
| -Time (t <sub>L</sub> )                                       | 60-150 seconds          | 60-150 seconds   |
| Time within 5 °C of actual Peak Temperature (t <sub>p</sub> ) | 10-30 seconds           | 20-40 seconds    |
| Ramp-Down Rate  | 6 °C/second max.        | 6 °C/second max. |
| Time 25 °C to Peak Temperature                                | 6 minutes max.          | 8 minutes max.   |

*Note 1: All temperatures refer to topside of the package, measured on the package surface.*

