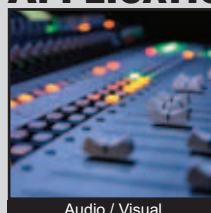


RDT SERIES ROTARY DIP SWITCH

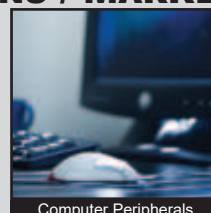
ANTI-VANDAL SWITCHES
DETECTOR SWITCHES
DIP SWITCHES
KEYLOCK SWITCHES
NAVIGATION SWITCHES
PUSHBUTTON SWITCHES
ROCKER SWITCHES
ROTARY SWITCHES
SLIDE SWITCHES
SNAP ACTION SWITCHES
TACTILE SWITCHES
TOGGLE SWITCHES
CAP OPTIONS



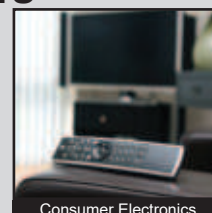
APPLICATIONS / MARKETS



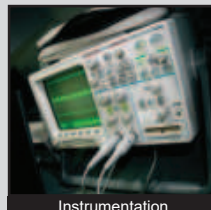
Audio / Visual



Computer Peripherals



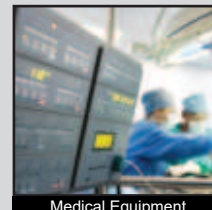
Consumer Electronics



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
RDT	A	R	04	P1	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



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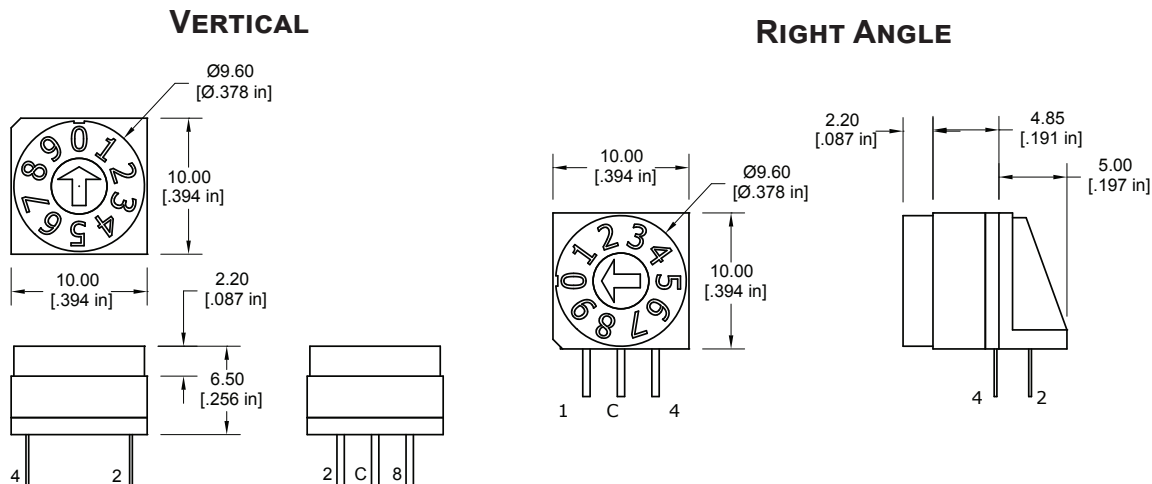
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1

RDT SERIES ROTARY DIP SWITCH

BODY DIMENSIONS



GENERAL CODES

REAL CODE

	C	1	2
0	●		
1	●	●	
2	●		●
3	●	●	●

4 POSITION

COMPLEMENT CODE

	C	1	2
0	●	●	●
1	●		●
2	●	●	
3	●		

4 POSITION

REAL CODE

	C	1	2	4	8
0	●				
1	●	●			
2	●		●		
3	●	●	●		
4	●			●	
5	●	●		●	

6 POSITION

COMPLEMENT CODE

	C	1	2	4	8
0	●	●	●	●	●
1	●		●	●	●
2	●	●		●	●
3	●		●		●
4	●	●	●		●
5	●		●	●	●

6 POSITION

REAL CODE

	C	1	2	4	8
0	●				
1	●	●			
2	●		●		
3	●	●	●		
4	●			●	
5	●	●		●	
6	●		●	●	
7	●	●	●	●	

8 POSITION

COMPLEMENT CODE

	C	1	2	4	8
0	●	●	●	●	●
1	●		●	●	●
2	●	●		●	●
3	●		●		●
4	●	●	●		●
5	●		●	●	●
6	●	●		●	●
7	●		●	●	●

8 POSITION

REAL CODE

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

10 POSITION

COMPLEMENT CODE

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

10 POSITION

REAL CODE

	C	1	2	4	8	
0	●					0
1	●	●				1
2	●		●			2
3	●	●	●			3
4	●			●		4
5	●	●		●		5
6	●		●	●		6
7	●	●	●	●		7
8	●				●	8
9	●	●			●	9
10	●		●		●	A
11	●	●	●		●	B
12	●			●	●	C
13	●	●		●	●	D
14	●		●	●	●	E
15	●	●	●	●	●	F

16 POSITION

COMPLEMENT CODE

	C	1	2	4	8	
0	●	●	●	●	●	0
1	●		●	●	●	1
2	●	●		●	●	2
3	●		●		●	3
4	●	●	●		●	4
5	●		●		●	5
6	●	●		●	●	6
7	●	●	●		●	7
8	●				●	8
9	●	●	●		●	9
10	●	●		●	●	A
11	●		●		●	B
12	●	●	●		●	C
13	●		●		●	D
14	●	●		●	●	E
15	●	●	●	●	●	F

16 POSITION

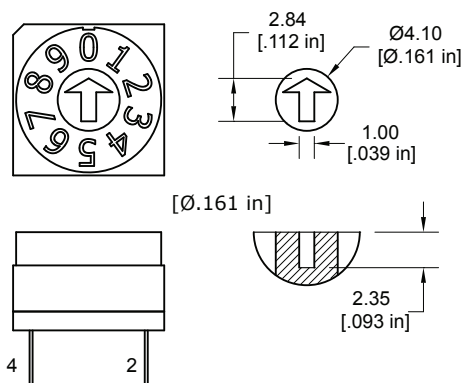


RDT SERIES ROTARY DIP SWITCH

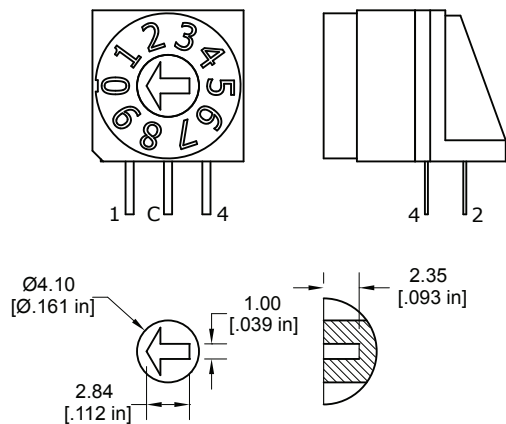
ACTUATOR OPTIONS

"A" ACTUATOR

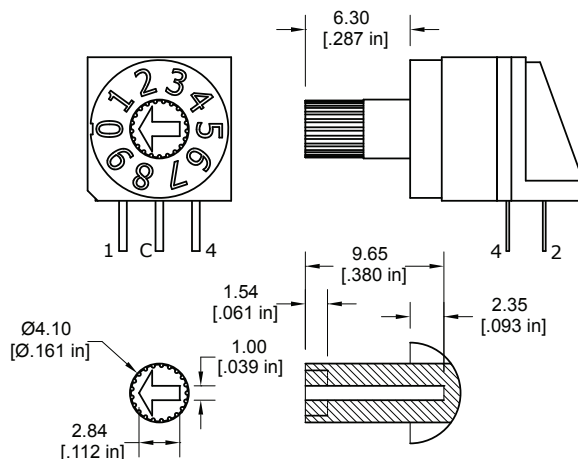
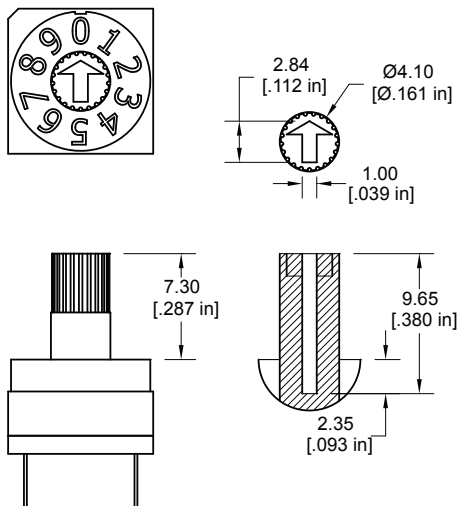
VERTICAL



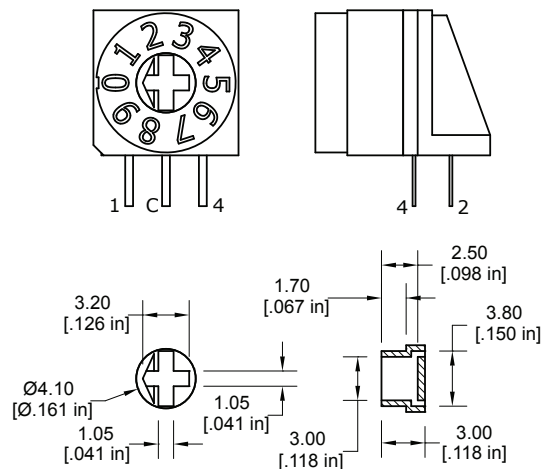
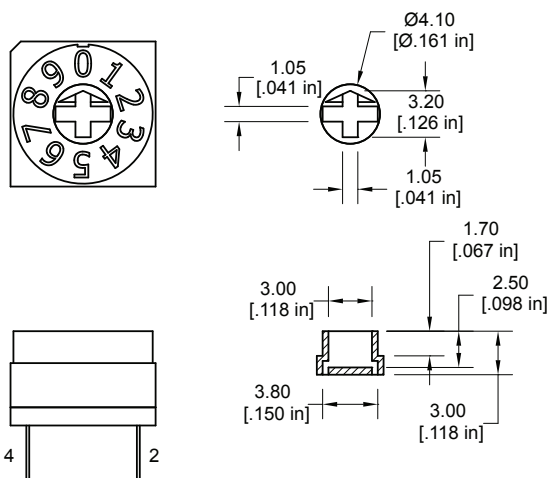
RIGHT ANGLE



"B" ACTUATOR



"C" ACTUATOR



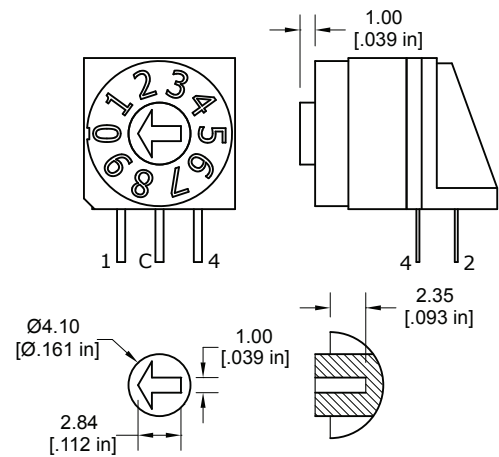
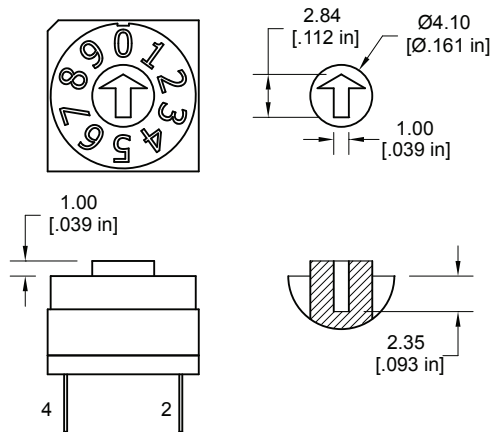
RDT SERIES ROTARY DIP SWITCH

ACTUATOR OPTIONS (CONT.)

VERTICAL

RIGHT ANGLE

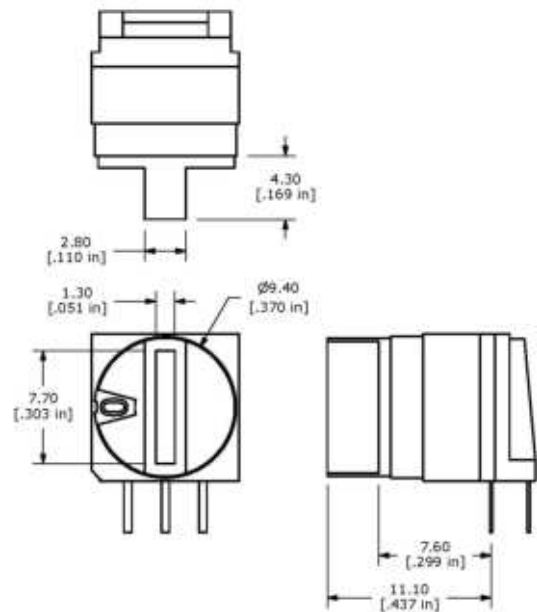
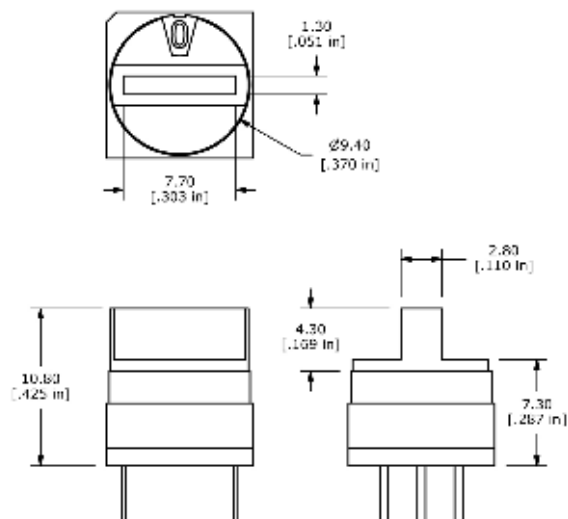
"D" ACTUATOR



VERTICAL

RIGHT ANGLE

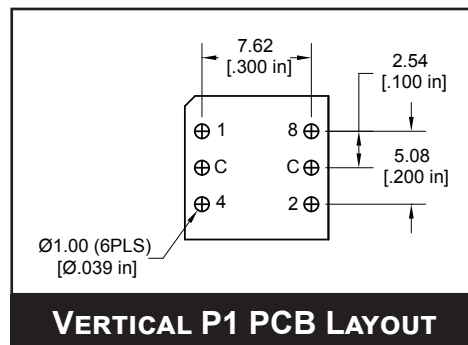
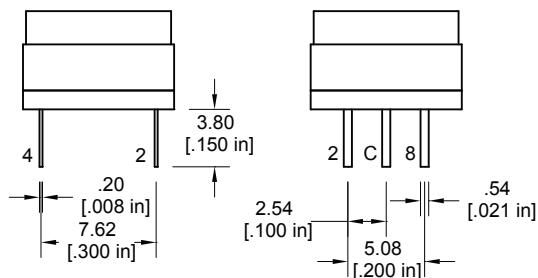
"G" AND "K" ACTUATORS



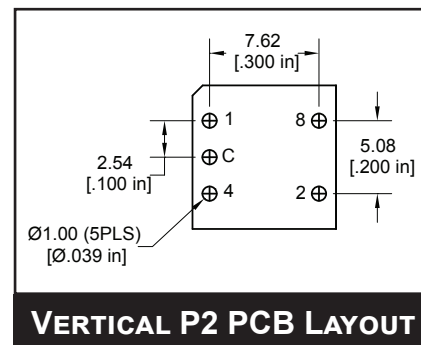
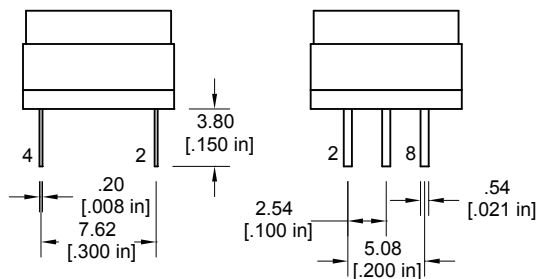
RDT SERIES ROTARY DIP SWITCH

TERMINATION OPTIONS

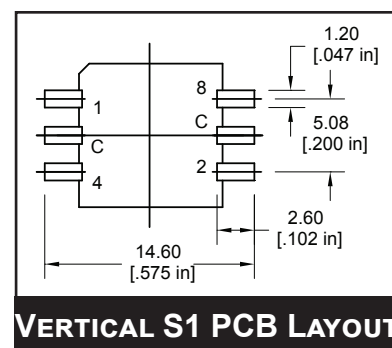
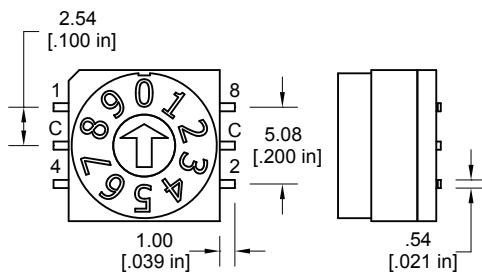
P1 - VERTICAL



P2 - VERTICAL



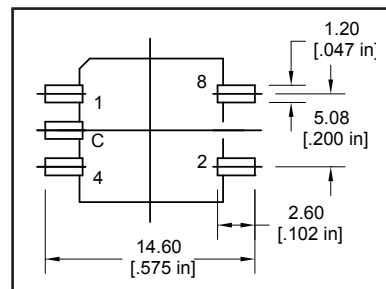
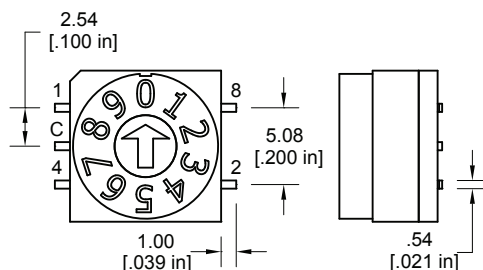
S1 - VERTICAL



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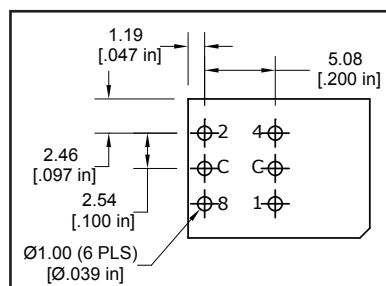
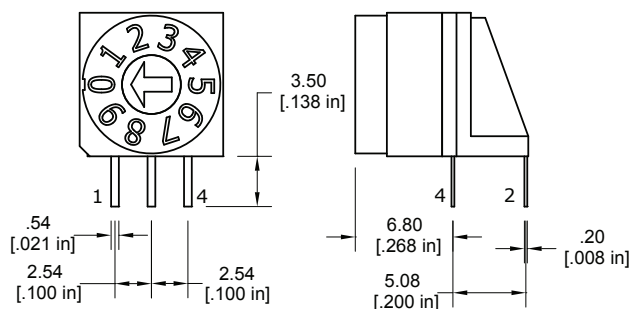
TERMINATION OPTIONS (CONT.)

S2 - VERTICAL



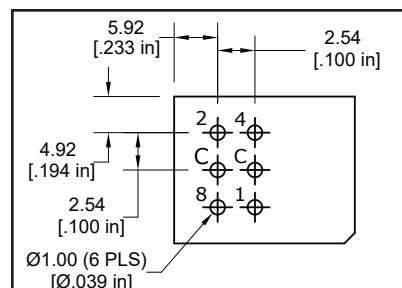
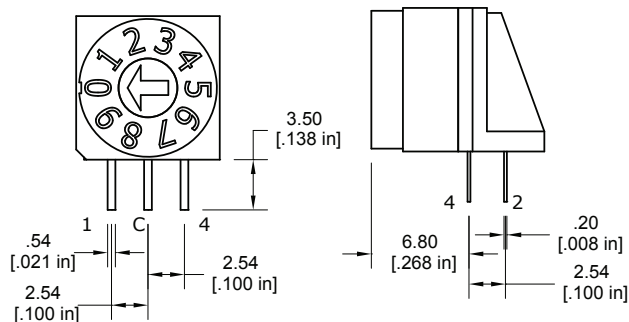
VERTICAL S2 PCB LAYOUT

R1-RIGHTANGLE



RT ANGLE R1 PCB LAYOUT

R2 - RIGHT ANGLE

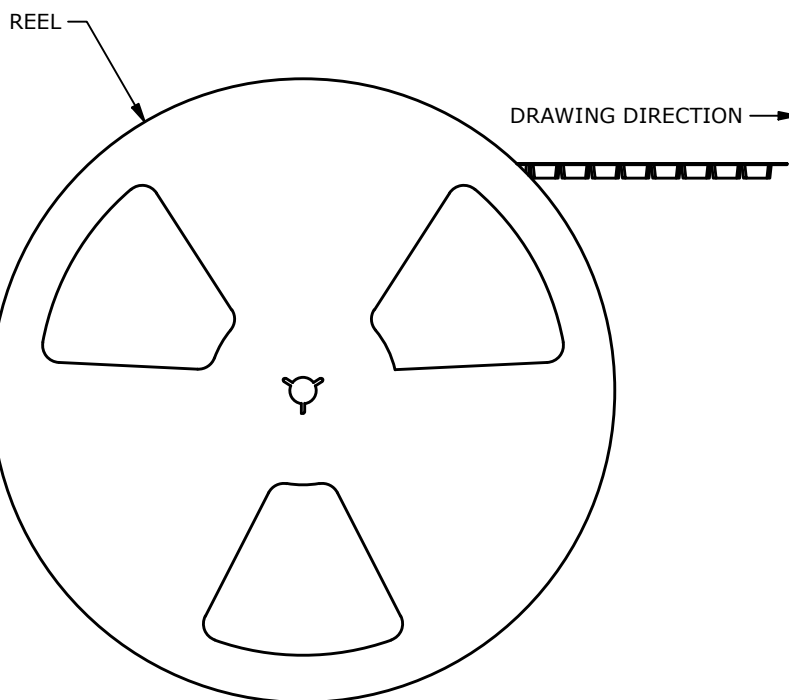
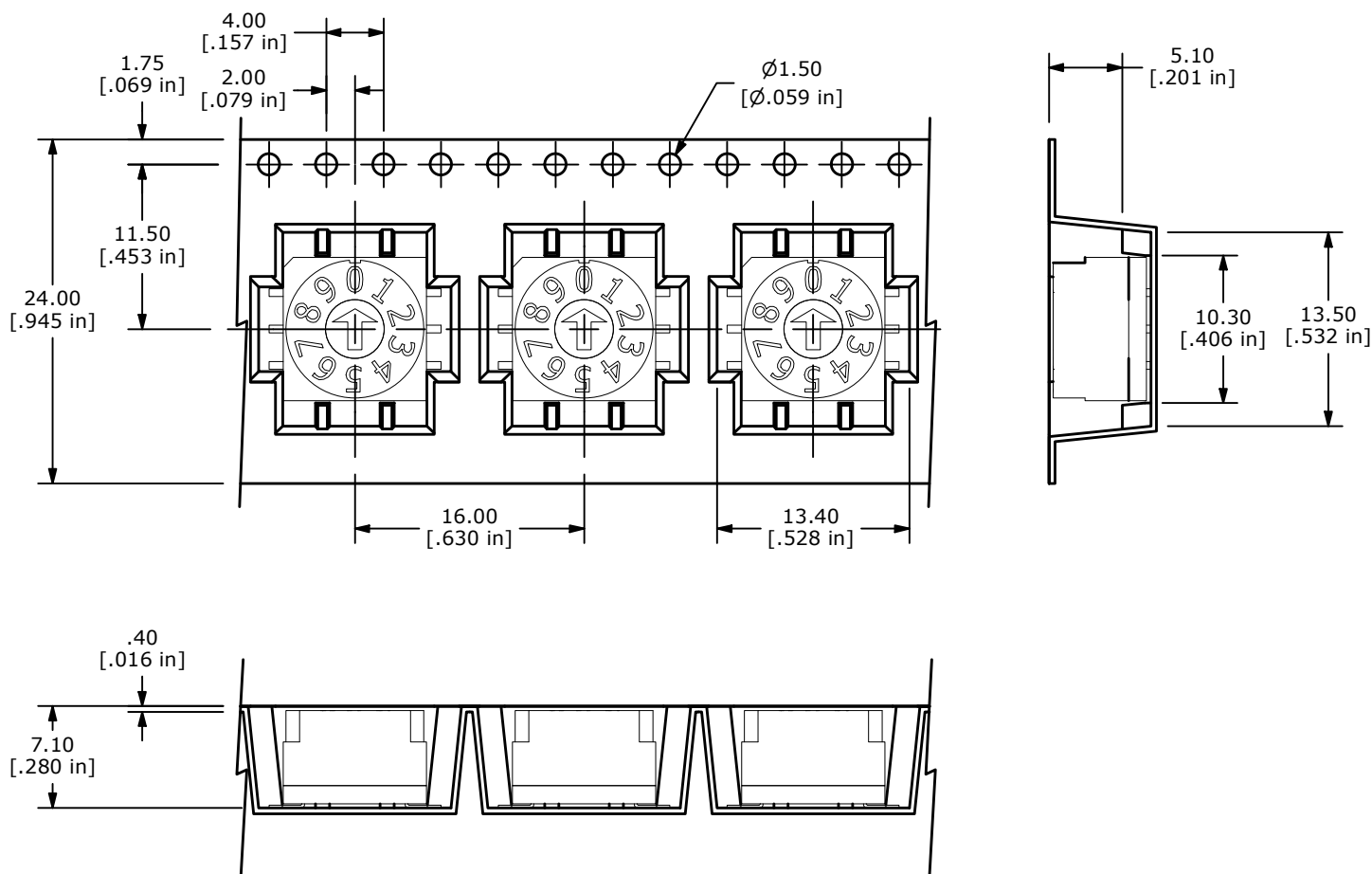


RT ANGLE R2 PCB LAYOUT



RDT SERIES ROTARY DIP SWITCH

BODY DIMENSIONS TAPE AND REEL



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7

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 ($T_{s_{max}}$ to T_p)	3 °C/second max.	3 °C/second max.
Preheat		
-Temperature Min ($T_{s_{min}}$)	100 °C	150 °C
-Temperature Max ($T_{s_{max}}$)	150 °C	200 °C
-Time ($t_{s_{min}}$ to $t_{s_{max}}$)	60-120 seconds	60-180 seconds
Time Maintained above:		
-Temperature (T_L)	183 °C	217 °C
-Time (t_L)	60-150 seconds	60-150 seconds
Time within 5 °C of actual Peak Temperature (t_p)	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.

