



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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**Rotary DIP Switches, Unsealed, Through Hole, Straight and Right-Angle**

**FEATURES:**

- High pressure contacts (140K PSI) provide 20,000 Steps.
- Unique design utilizes high pressure pin-point sliding contacts to penetrate contaminants on contact surface.
- Terminals insert molded into base.

- Screwdriver, knob and shaft (plastic and steel) type actuators available in both upright and right angle versions.

- 10 And 16 position versions with both real and complement codes.

Note: Common terminals connected internally.

**MATERIAL SPECIFICATIONS:**

Contacts .....Gold flashed copper alloy

Terminals .....Tin Lead Plated

Base, Rotor, Case .....Polyester

**TYPICAL PERFORMANCE CHARACTERISTICS:**

Contact Rating .....0.4 VA @ 20 VDC

Initial Contact Resistance .....50 Milliohms max. @ 2 VDC

Insulation Resistance .....1,000 Megohms min. @ 100 VDC

Dielectric Strength .....300 VAC RMS @ sea level

**ENVIRONMENTAL SPECIFICATIONS:**

Operating Temperature.....-22°F to +185°F (-30°C to +85°C)

Storage Temperature.....-49°F to +212°F (-45°C to +100°C)

Vibration Resistance.....Subjected to vibration of 10-55hz per second with a total amplitude of .06 in. in 3 mutually perpendicular directions for 2 hours each

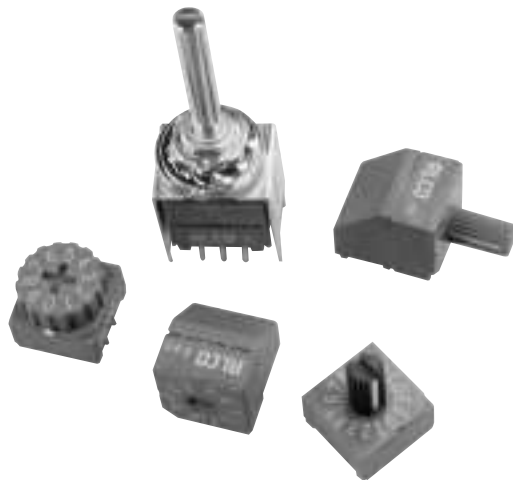
Shock Resistance .....Will withstand 50G acceleration in 3 different planes for a period of 11 milliseconds

Salt Spray Test .....Withstands an atmosphere of 5% salt water at temperature of 50°C

Hydrogen Sulfide Test .....Withstands an atmosphere of 15-20 PPM hydrogen sulfide gas at temperature of 40°C for 240 hours

Atmosphere Test.....Withstands an atmosphere of 30-50 PPM sulfide gas at a temperature of 40°C for 240 hours

Solder Heat Resistance .....Withstands 5 sec. flow solder bath of 260°C when mounted on a .06" thick PC board per MIL-STD 202, Method 210



**Example: DRW 10RA** = Rotary Dip with Wheel actuator BDC -10 position Right angle PC terminations

**Series**  
Rotary Dips (blue case)

**Actuator Style**

- \*D = Flush
- M = Mini plastic shaft
- W = Wheel
- S = Metal shaft

**Circuit Type**

- 10 = BCD
- 10C = BCD complement
- 16 = Hexadecimal
- 16C = Hexadecimal complement

**HOW TO ORDER**

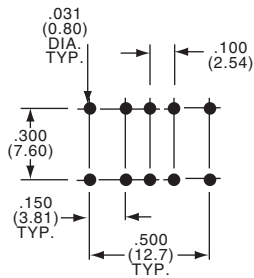
**Terminations**

- Blank = PC
- RA = Right angle for DRM, DRW, DRS only
- RAE = Right angle, Auto Assembly Compatible for DRD type only

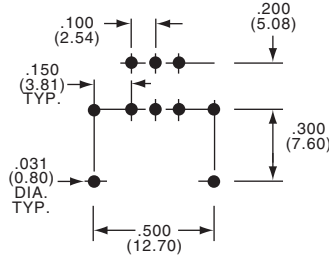
\*DRD Available in RAE version only. For PC or SMT versions, see Pg. A24 DRD "E" Process Sealed Product.

**Rotary DIP Switches, Unsealed, Through Hole, Straight and Right-Angle**

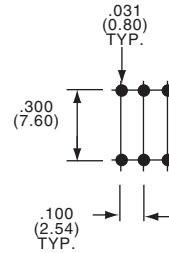
**FOOTPRINTS**



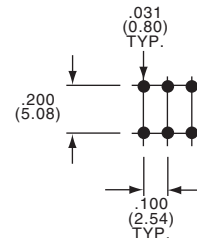
**S STYLE VERTICAL  
(METAL SHAFT)**



**S STYLE RA  
(METAL SHAFT)**



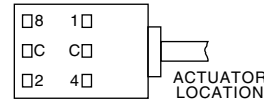
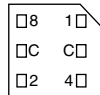
**PC**



**PC  
RIGHT ANGLE**

**TRUTH TABLES**

**Terminal Identification**  
(view from bottom of the switch)



10-Position, BCD (red actuator)										
Pos.	0	1	2	3	4	5	6	7	8	9
C	X	X	X	X	X	X	X	X	X	X
1		X		X		X		X		X
2			X	X			X	X		
4					X	X	X	X		
8									X	X

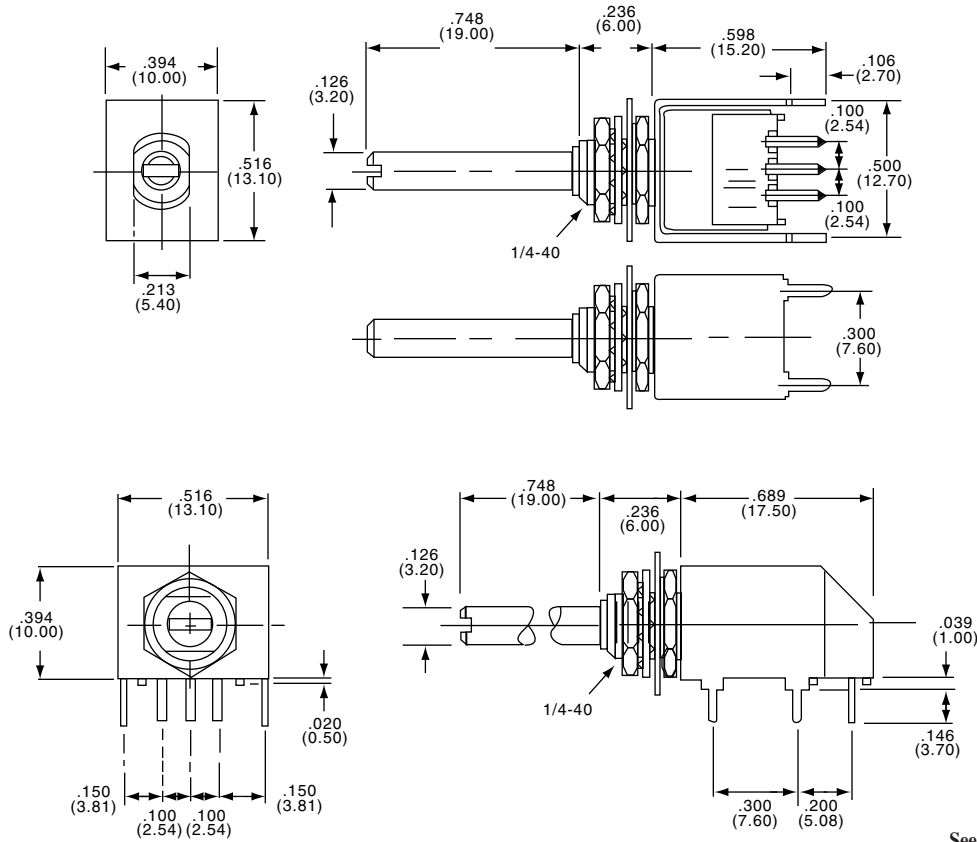
16-Position, Hexadecimal (black actuator)																
Pos.	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
C	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1		X		X		X		X		X		X		X		X
2			X	X			X	X			X	X			X	X
4					X	X	X	X					X	X	X	X
8									X	X	X	X	X	X	X	X

10-Position, BCD Complement (orange actuator)										
Pos.	0	1	2	3	4	5	6	7	8	9
$\bar{C}$	X	X	X	X	X	X	X	X	X	X
$\bar{1}$	X		X		X		X		X	
$\bar{2}$	X	X			X	X			X	X
$\bar{4}$	X	X	X	X					X	X
$\bar{8}$	X	X	X	X	X	X	X	X		

16-Position Hexadecimal Complement (white actuator)																
Pos.	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
$\bar{C}$	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
$\bar{1}$	X		X		X		X		X		X		X		X	
$\bar{2}$	X	X			X	X			X	X			X	X		
$\bar{4}$	X	X	X	X					X	X	X	X				
$\bar{8}$	X	X	X	X	X	X	X	X								

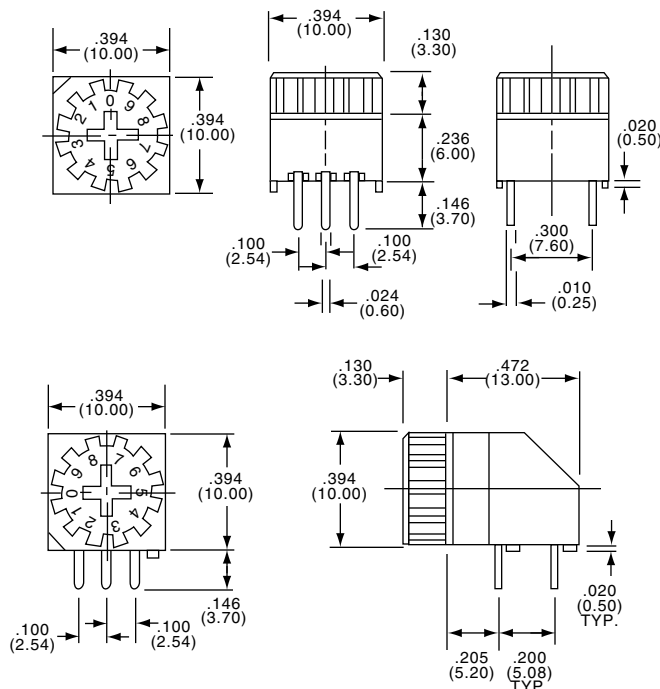
**Rotary DIP Switches, Unsealed, Through Hole, Metal Shaft or Wheel Actuator**

“S” METAL SHAFT ACTUATOR



See Section K for knob selection

“W” WHEEL ACTUATOR

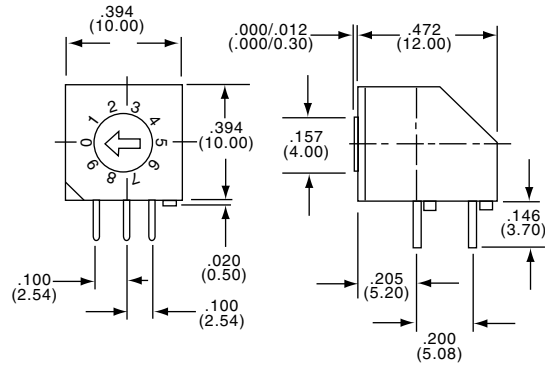


A

DR Series

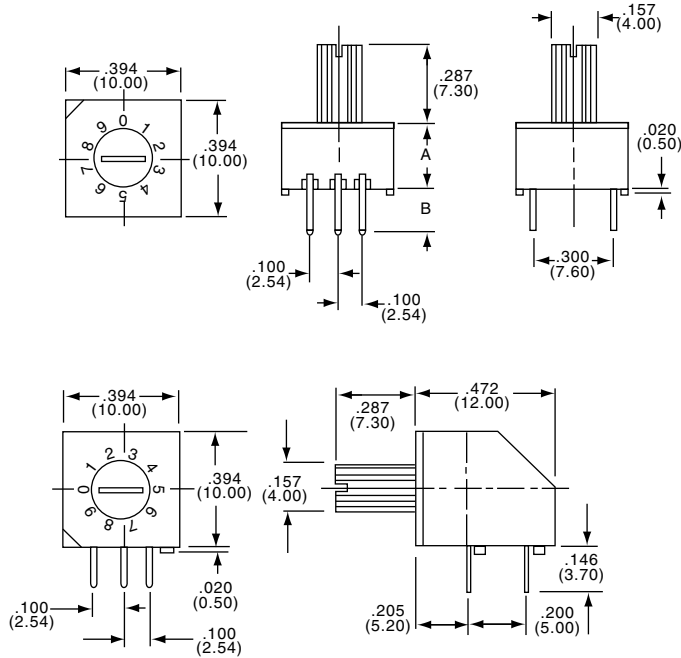
**Rotary DIP Switches, Unsealed, Through-Hole, Flush and Mini Shaft Actuator**

“D” FLUSH ACTUATOR



DIM.	DR	RC, *RA, RR
A	.236 (6.00)	.256 (6.50)
B	.146 (3.70)	.126 (3.20)

“M” MINI-SHAFT ACTUATOR



DIM.	DR	RR
A	.236 (6.00)	.256 (6.50)
B	.146 (3.70)	.126 (3.20)