

“Sealed Dip Rotary” Switch DRD “E” Thru-Hole and Surface Mount

The August/Alcoswitch “E” version of the DR series rotary Dip switch is a process sealed switch. With an actuator “O” ring seal, this switch withstands the stringent 60°C, one minute immersion

“Bubble” Test. Compliance with the “Bubble” test assures you of the compatibility of DRD “E” Series with the harshest of soldering and cleaning processes.

A

MATERIAL SPECIFICATIONS:

ContactsGold flashed copper alloy
TerminalsTin lead plated brass
Base, Rotor, CaseGlass filled PBT resin
Movable Contact.....Gold flashed copper alloy
Ball Support Plate.....Copper alloy
Detent SpringStainless steel (spring)

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 ResistanceWill withstand 50G acceleration in 3 different planes for a period of 11 milliseconds
Salt Spray TestWithstands an atmosphere of 5% salt water at temperature of 50°C
Hydrogen Sulfide TestWithstands an atmosphere of 15-20 PPM hydrogen sulfide gas at temperature of 40°C for 240 hours
Atmospheric TestWithstands an atmosphere of 30-50 PPM sulfite 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
Bubble Test.....Withstands submersion in 60°C Flouriert for 1 min. without leakage

TYPICAL PERFORMANCE CHARACTERISTICS:

Contact Rating0.4 VA @ 20 VDC max.
Initial Contact Resistance.....50 Milliohms max. @ 2 VDC
Insulation Resistance1,000 Megohms min. @100 VDC
Dielectric Strength300 VAC RMS @ sea level
Actuation Strength (DRM).....5.0 Lbs. max. lateral force
Operating Force6 Oz.-in. nom.
SMT Operating Force.....3 Oz.-in. nom.
Life Expectancy10 Pos: 2,000



DRD10E

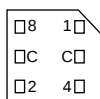


DRD16CE

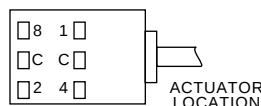
Note: Common terminals are connected internally, except on hybrid versions.

TRUTH TABLES

Terminal Identification
(view from bottom of the switch)



VIEW FROM BOTTOM
OF THE SWITCH



FOR HYBRID VERSIONS, COMMON BETWEEN TERMINALS 1 AND 4 IS RESISTOR OR DIODE COMMON.
NOTE: COMMON TERMINALS ARE CONNECTED INTERNALLY, EXCEPT ON HYBRID VERSIONS.

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
C	X	X	X	X	X	X	X	X	X	X
1	X		X		X		X		X	
2	X	X			X	X			X	X
4	X	X	X	X					X	X
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
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								

Need more technical information?

Consult your Thomas & Betts
sales office listed on the back cover

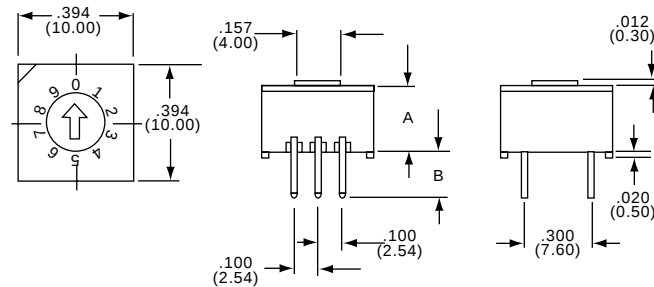
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DRD "E" "Sealed Dip Rotary" Switch Thru-Hole and Surface Mount

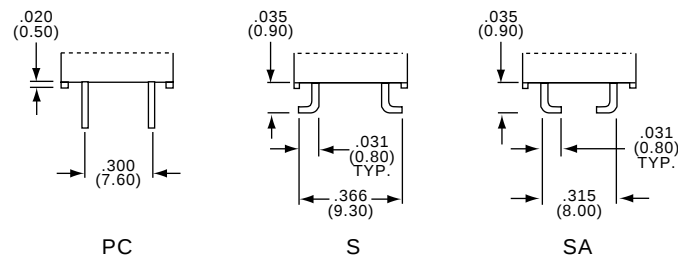
A

"D" FLUSH ACTUATOR

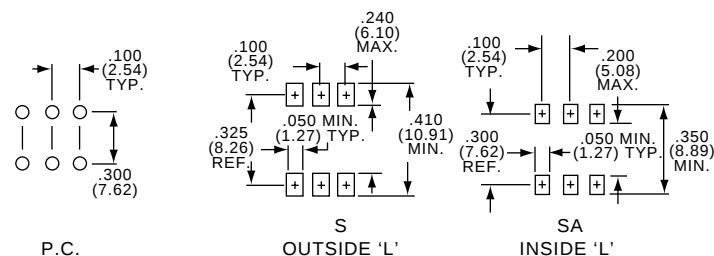


Dim.	DR
A	.236 (6.00)
B	.146 (3.70)

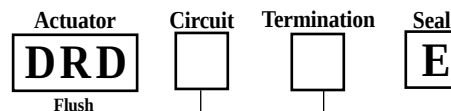
SURFACE MOUNT TERMINATIONS - PC



PAD LAYOUTS



HOW TO ORDER



10 = BCD
10C = BCD Complement
16 = Hexadecimal
16C = Hexadecimal Complement

Blank = PC
S = Outside
SA = Inside

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