

## Surface Mount Multi-Functional DIP Switch IR Solderable

### Features

#### Optimized Mechanical Features

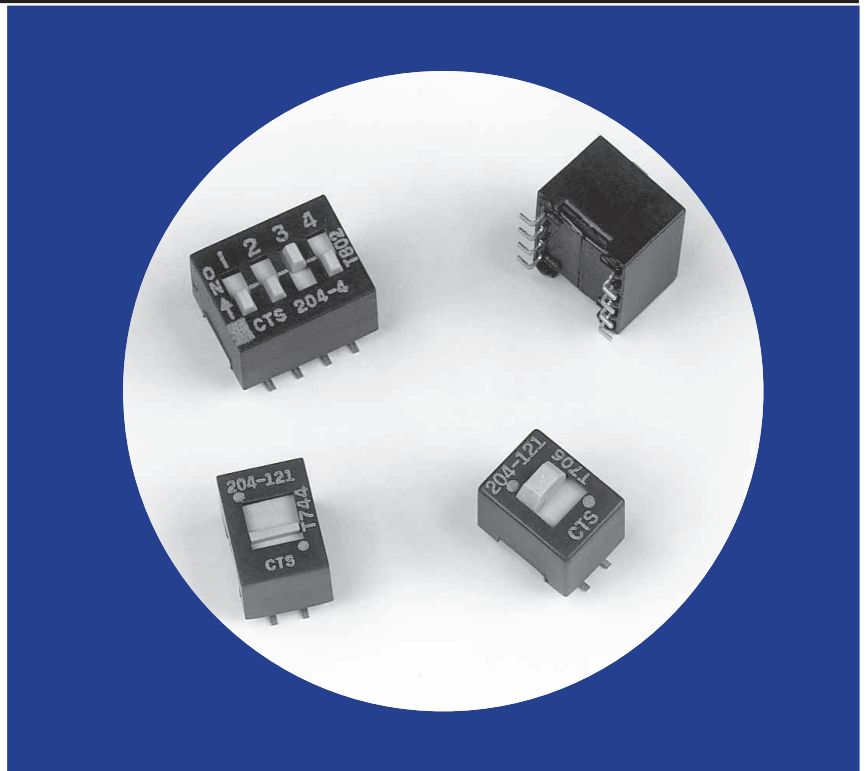
- Coplanarity: 0.1mm / .004" max.
- Compatible with SMT assembly including IR and Vapor-Phase (up to 260°C)
- Enclosed actuators shield contacts from foreign particles throughout life of switch
- Gull-wing terminal configuration
- Multiple circuit configurations available
- PCB washable with removeable tape seal and bottom epoxy seal
- Tube or tape and reel packaging available

#### Optimized Contact System

- Contact wiping action on make and break
- Integral terminal and contact locked into thermoset base
- Available with low profile standard, or extended actuators
- Electrostatic discharge shield rated to 22 KV

#### Materials

- Gold plated, copper alloy contacts
- High temperature body and actuator materials (UL94V-0)
- RoHS compliant switch available



## Electrical and Mechanical Specifications

### Switch Function

- SPST—1 through 10 and 12 positions
- SPDT&DPST—1,2,3,4,5 and 6 positions
- DPDT&4PST—1,2 and 3 positions
- 3PST—1,2,3 and 4 positions

### Contact Resistance

- 50 milliohm maximum initial
- 100 milliohm maximum at end of life

### Insulation Resistance

- 1,000 Meg ohms minimum across open switches
- 1,000 Meg ohms minimum between adjacent closed switches

### Dielectric Strength

- 500 VAC minimum for 1 minute between adjacent switches

### Nonswitching Rating

- 100 mA or 50 VDC maximum

### Switch Capacitance

- 5 pF maximum between adjacent closed switches

### Operating Temperature

- 40°C to +85°C

### Actuation Life

- 10,000 cycles switching
- 50 mA @ 24 VDC

### Coplanarity

- 0.1mm/.004" max.

### Allowable Solder Time

- IR and Vapor Phase - up to 60 seconds at 260°C
- Wave - up to 5 seconds at 260°C

### Vibration

- Per MIL-STD-202F, method 204D, condition B (.06" or 15 G's between 10 Hz to 2K Hz) with no contact inconsistencies greater than 1 microsecond

### Shock

- Per MIL-STD-202F, method 213B, condition A (25 G's) with no contact inconsistencies greater than 1 microsecond

### Sealing

- Optional bottom epoxy seal
- Optional removable tape seal

### Marking

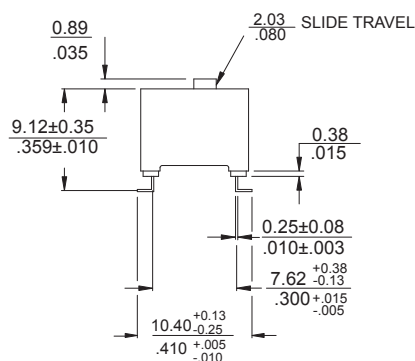
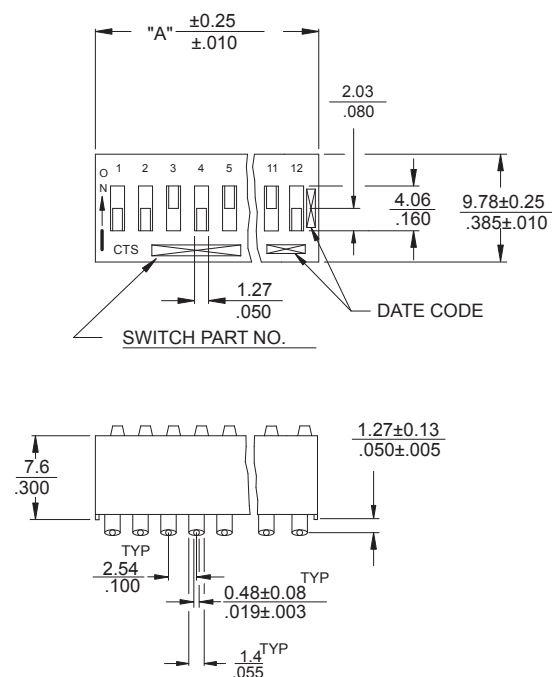
- Special side or top marking available—consult CTS

### Packaging

- Standard : Anti-Static tube packaging
- Optional : Tape and Reel packaging

## SPST

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## Ordering Information SPST Switches

"A" Overall Dimension	No. of Switch Positions	Part No.
3.96 / .156	1	204-1ST
7.26 / .286	2	204-2ST
9.80 / .386	3	204-3ST
12.34 / .486	4	204-4ST
14.88 / .586	5	204-5ST
17.42 / .686	6	204-6ST
19.96 / .786	7	204-7ST
22.50 / .886	8	204-8ST
25.04 / .986	9	204-9ST
27.58 / 1.086	10	204-10ST
32.66 / 1.286	12	204-12ST

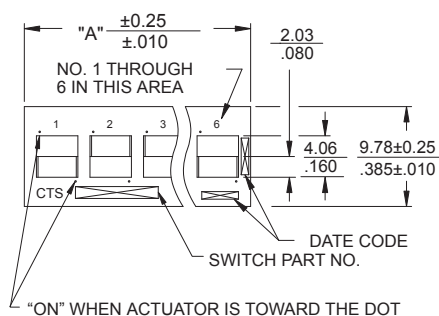
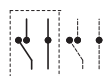
DIMENSION:  $\frac{\text{mm}}{\text{inch}}$

## SPDT / DPST

## Ordering Information SPDT/DPST Switches

SPDT

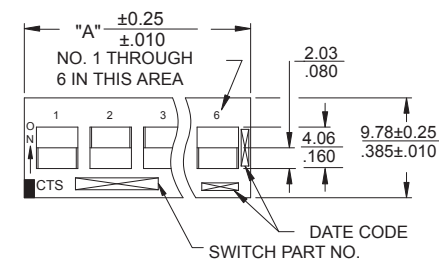
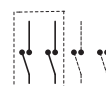
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"ON" WHEN ACTUATOR IS TOWARD THE DOT

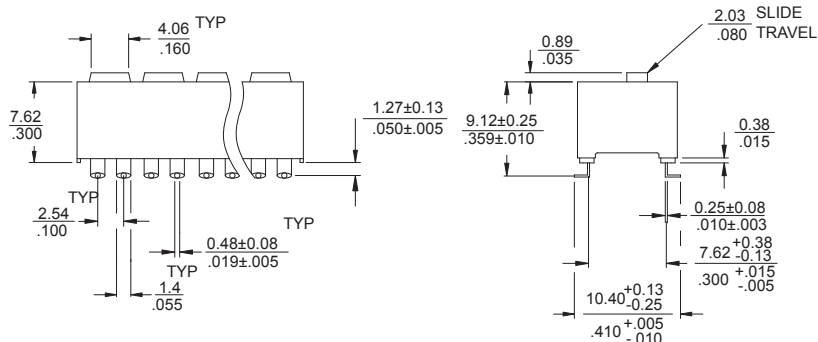
DPST

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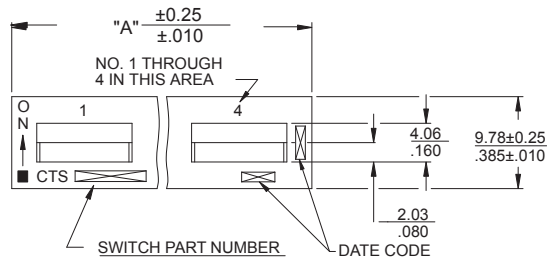


DIMENSION:  $\frac{\text{mm}}{\text{inch}}$

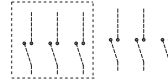
"A" Overall Dimension	Number of Switch Positions	Actuation	Part No.
7.26 / .286	1	SPDT/DPST	204-121/204-211
12.34 / .486	2	SPDT/DPST	204-122/204-212
17.42 / .686	3	SPDT/DPST	204-123/204-213
22.50 / .886	4	SPDT/DPST	204-124/204-214
27.58 / 1.086	5	SPDT/DPST	204-125/204-215
32.66 / 1.286	6	SPDT/DPST	204-126/204-216



## 3PST

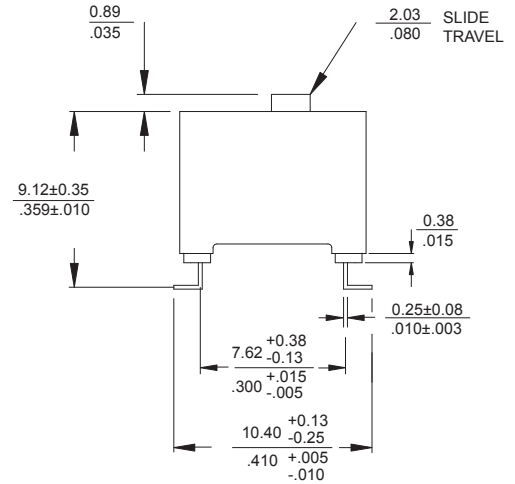
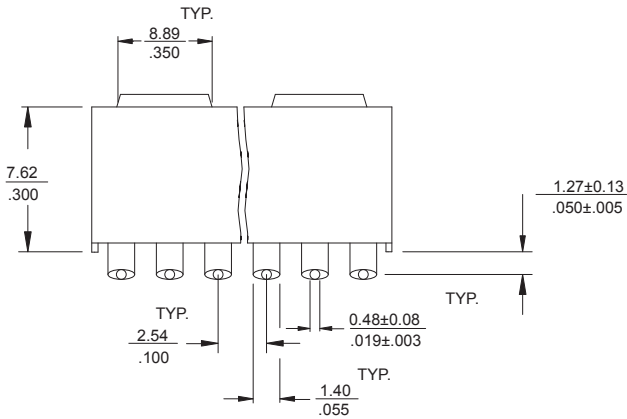


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## Ordering Information 3PST Switches

"A" Overall Dimension	No. of Switch Positions	Actuation	Part No
9.80 / .386	1	3PST	204-311
17.42 / .686	2	3PST	204-312
25.04 / .986	3	3PST	204-313
32.66 / 1.286	4	3PST	204-314

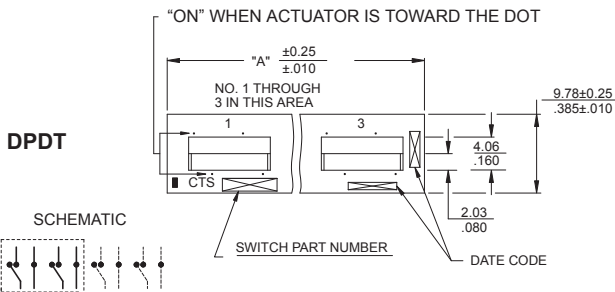


DIMENSION:  $\frac{\text{mm}}{\text{inch}}$

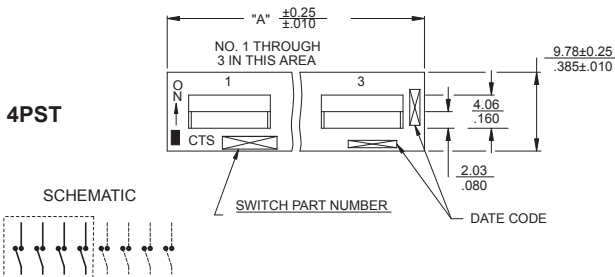
## DPDT / 4PST

## Ordering Information DPDT/4PST Switches

"A" Overall Dimension	No. of Switch Positions	Actuation	Part No
12.34 / .486	1	DPDT/4PST	204-221/204-411
22.50 / .886	2	DPDT/4PST	204-222/204-412
32.66 / 1.286	3	DPDT/4PST	204-223/204-413



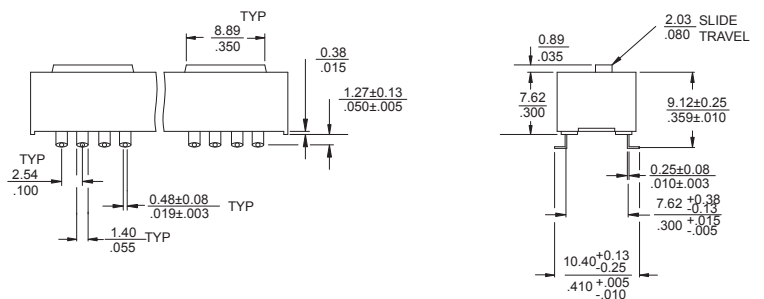
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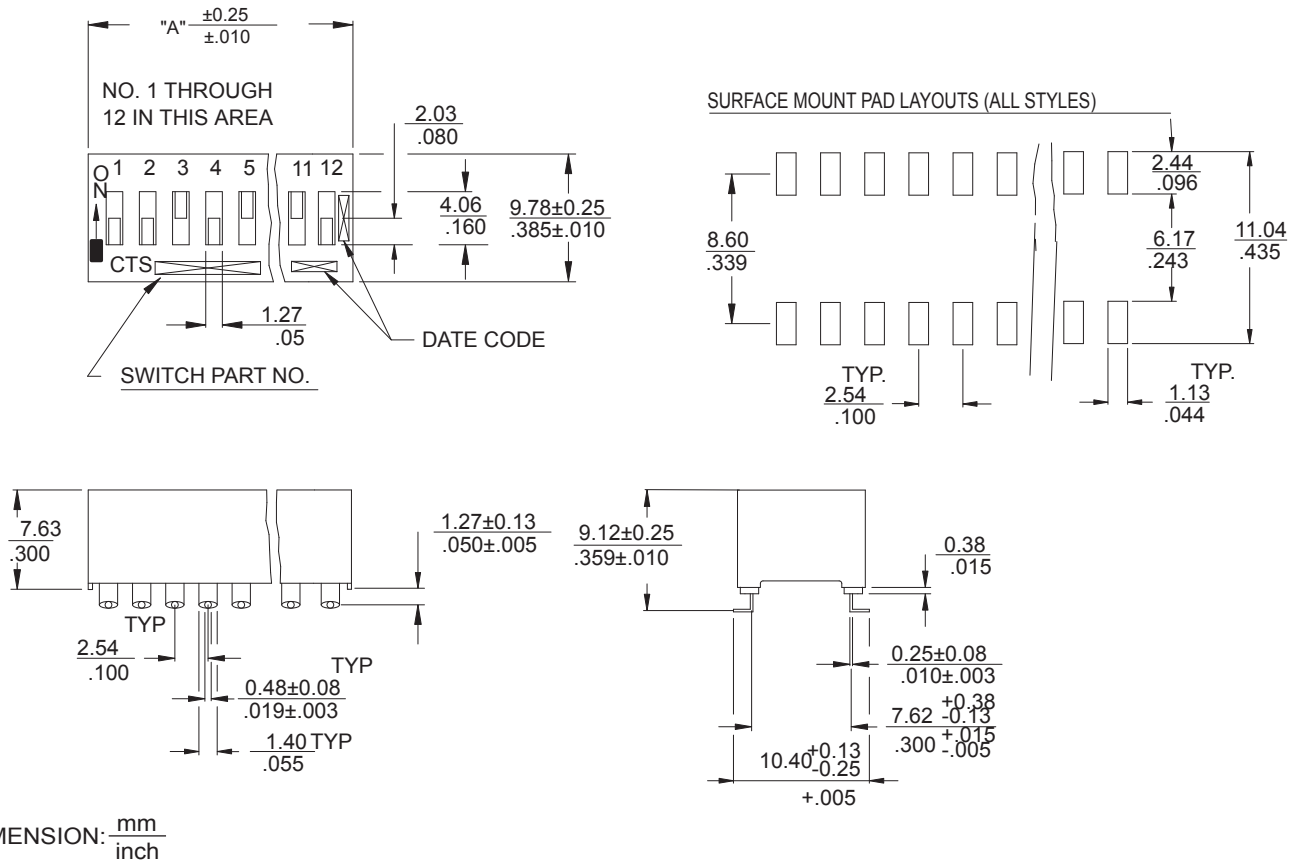
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DIMENSION:  $\frac{\text{mm}}{\text{inch}}$



# Low Profile Actuators (Available in SPST and SPDT )



## Ordering Information

