

## OMRON A7P SERIES THUMBWHEEL SWITCHES

A7P dustproof modules, with easy-to-set push buttons and easy-to-read large dial characters for high reliable performance at low voltage and very small current, with plus (+) and minus (-) push buttons for positive forward and reverse rotation of each digital wheel. Unique modular snap-together ganging eliminates the need for nut and bolt assembly. Dimensions: .39" wide x 1.3" high x 1.69" deep for output codes '03' and '06' and 2.17" for output code '07'. Temperature Range: 14°F to 149°F. Contact Rating: 1mA to 0.1A @ 500VDC/28VDC (resistive load), with carry current of 1mA max. and contact resistance of 200 milliohms max.

Cat. No.	Output Code/Description	Net Price
----------	-------------------------	-----------

### SWITCH UNITS FRONT MOUNTING SOLDER TERMINAL

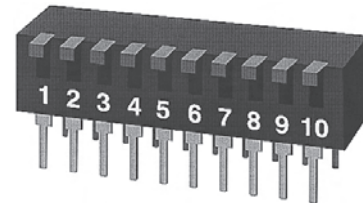
A7PS-203-1	03 (decimal code)	\$16.20
A7PS-206-1	06 (binary code)	14.21
A7PS-207-1	07 (binary code w/diode provision)	15.14

### ACCESSORIES

A7P-M-1	Black End Caps (2)	2.67
A7P-PA-1	Black Blank Spacer	2.03
NRT-C	Solder Terminal Connector	11.64

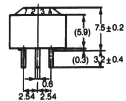
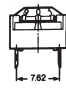
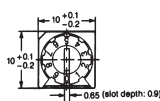
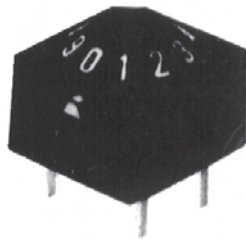
Light grey and high grade version also available.

Cat. No.	Type	No. of Switching Positions	Output Code Type	Net Price
A6A-10C	Standard	10	BCD 1-2-4-8 Complement Only	\$6.14
A6A-10CS	Extended Shaft	10	BCD 1-2-4-8 Complement Only	6.92
A6A-10R	Standard	10	BCD 1-2-4-8	6.14
A6A-10RF	Flat	10	BCD 1-2-4-8	6.14
A6A-10RS	Extended Shaft	10	BCD 1-2-4-8	6.92
A6A-10RW	Thumbwheel	10	BCD 1-2-4-8	7.38
A6A-16C	Standard	16	Hexadecimal 1-2-4-8 Complement Only	6.35
A6A-16R	Standard	16	Hexadecimal 1-2-4-8	6.35
A6A-16RS	Extended Shaft	16	Hexadecimal 1-2-4-8	7.13
A6A-16RW	Thumbwheel	16	Hexadecimal 1-2-4-8	7.59

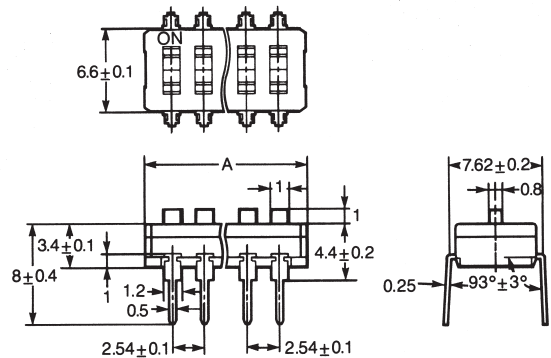


## Dip Switches

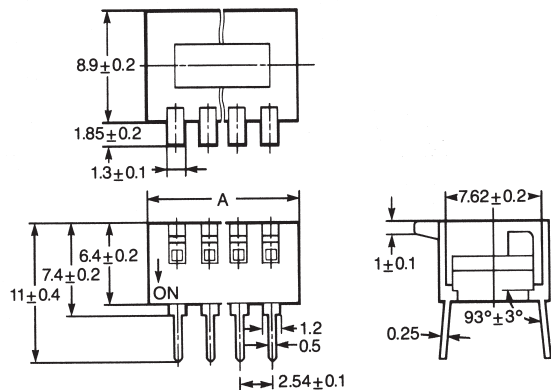
### OMRON A6A SERIES DIP SWITCHES



DIMENSIONS  
A6A-10R, A6A-10C



A6D-103 (RAISED ACTUATOR TYPE)

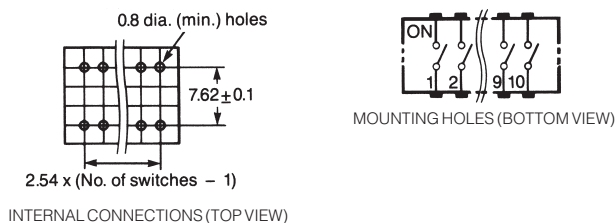


A6D-100 (SIDE ACTUATED TYPE)

### FEATURES:

- Subminiature size (10 × 10 × 7.5 mm), ideal for high-density packaging
- Completely sealed construction prevents flux entry during automatic flow soldering
- BCD and hexadecimal types available (each complement type also available)
- Position switching operation possible with a turn of a screwdriver from either top or side; the screwdriver slot on the top can rotate either direction for desired setting
- Thumbwheel and extended shaft type also available.

Continued on next page....



## A6D SERIES DIP SWITCH

### FEATURES:

- Offers both sealed and unsealed constructions.
- Completely sealed units allow immersion-cleaning without taping.
- Designed to standards of DIL-IC; top actuated types are auto insertable.
- Bifurcated movable contacts.
- Subminiature size to save space by reducing the volume of 41% and mounting surface to 67% of conventional type.
- Smooth, sure switching action.

### A6D-□103 (RAISED ACTUATOR TYPE)

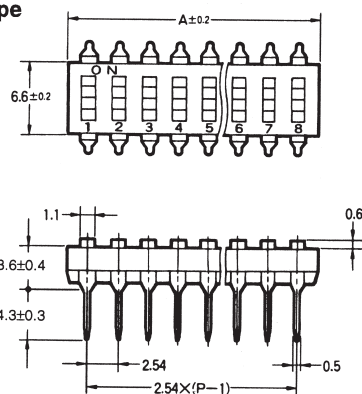
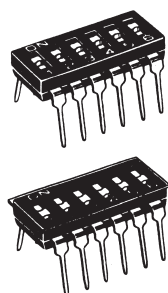
Model	Dimensions A±0.2
A6D-2103	7.1
A6D-4103	12.2
A6D-6103	17.3
A6D-8103	22.4
A6D-0103	27.4

### A6D DIP SWITCH

Cat. No.	Number of pins	Sealed	Actuator	Net Price
A6D-2100	2	Yes	Top	\$2.83
A6D-2103	2	Yes	Raised	3.18
A6DR-2100	2	Yes	Side	4.15
A6D-4100	4	Yes	Top	3.01
A6D-4103	4	Yes	Raised	3.18
A6DR-4100	4	Yes	Side	4.26
A6D-6100	6	Yes	Top	3.37
A6D-6103	6	Yes	Raised	3.61
A6DR-6100	6	Yes	Side	4.88
A6D-8100	8	Yes	Top	3.55
A6D-8103	8	Yes	Raised	3.93
A6DR-8100	8	Yes	Side	5.53
A6D-0100	10	Yes	Top	5.58
A6D-0103	10	Yes	Raised	5.58
A6DR-0100	10	Yes	Side	6.81

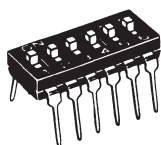
### Flat Actuator with SMT Terminal Standard/With Seal Tape

A6T-□101  
A6T-□102

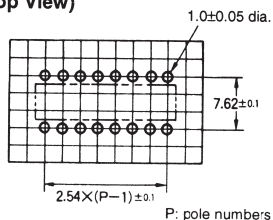


### Raised Actuator with DIP Terminal

A6T-□104

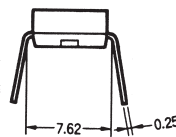


### PCB Dimensions (Top View)

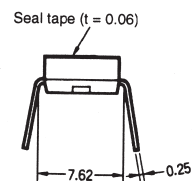


### Flat Actuator

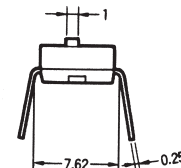
#### Standard



#### With Seal Tape



### Raised Actuator



## A6T LOW-COST DIP SWITCH WITH SLIDE PINS

- Allows automatic mounting with DIP IC insertion machines
- Washable models with seal tape available
- Ratings: 25mA @ 24VDC

No. of Poles	Cat. No.			A
1	A6T-1101	A6T-1102	A6T-1104	3.48
2	A6T-2101	A6T-2102	A6T-2104	6.02
4	A6T-4101	A6T-4102	A6T-4104	11.10
6	A6T-6101	A6T-6102	A6T-6104	16.18
8	A6T-8101	A6T-8102	A6T-8104	21.26
10	A6T-0101	A6T-0102	A6T-0104	26.34

Cat. No.	Actuator Type	No. of Poles	Tape Seal	Net Price
A6T-1101	Flat	1	No	\$1.15
A6T-1102	Flat	1	Yes	1.26
A6T-1104	Raised	1	No	1.26
A6T-2101	Flat	2	No	1.21
A6T-2102	Flat	2	Yes	1.31
A6T-2104	Raised	2	No	1.31
A6T-4101	Flat	4	No	1.36
A6T-4102	Flat	4	Yes	1.46
A6T-4104	Raised	4	No	1.46
A6T-6101	Flat	6	No	1.67
A6T-6102	Flat	6	Yes	1.77
A6T-6104	Raised	6	No	1.51
A6T-8101	Flat	8	No	2.15
A6T-8102	Flat	8	Yes	2.25
A6T-8104	Raised	8	No	2.15
A6T-0101	Flat	10	No	2.53
A6T-0102	Flat	10	Yes	2.63
A6T-0104	Raised	10	No	2.60

# Non-Amplified Photomicrosensors

Cat. No.	Appearance	Slot Width	Output	Terminals	Net Price
<b>TRANSMISSIVE TYPE</b>					
EE-SX198		3.0mm	Phototransistor	PCB	\$2.59
EE-SX199		3.0mm	Phototransistor	PCB	2.59
EE-SX1103		2.0mm	Phototransistor	PCB	1.89
EE-SX1105		2.0mm	Phototransistor	PCB	1.60

Continued on next page....

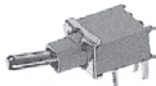


FIG. 11

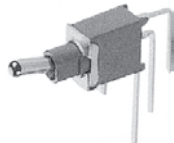


FIG. 12

## SERIES 34D SEALED SUBMINIATURE TOGGLE SWITCHES

Silver contacts rated for 3A at 125VAC, 1.5A at 250VAC. Gold contacts rated for 0.4VA max. at 20V max (AC or DC). Housing: Stainless steel. Case: Diallyl phthalate, UL94V-0. Epoxy sealed. Actuator: Brass, nickel plated. Contacts and terminals: Copper alloy, gold plate over nickel plate. Operating temperature: -30°C to +85°C. IP67 degree of protection.

Cat. No.	Contacts	Circuit	Fig.	Net Price
<b>RIGHT ANGLE PC MOUNT, HORIZONTAL ACTUATION</b>				
34DWMDP12B4M6RE	Gold	DPDT, On-None-On	11	\$5.43
34DWMS11B4M6RE	Gold	SPDT, On-None-On	11	4.19
34DWMS12B4M6RE	Gold	SPDT, On-None-On	11	4.19
34DWMS22B4M6RE	Gold	SPDT, On-None-Mom	11	4.19
34DWMS32B4M6RE	Gold	SPDT, On-Off-On	11	4.19
34DWMS42B4M6RE	Gold	SPDT, Mom-Off-Mom	11	4.19
34DWMS52B4M6RE	Gold	SPDT, On-Off-On	11	4.19

<b>RIGHT ANGLE PC MOUNT, VERTICAL ACTUATION</b>				
34DWMS12B4M7RE	Gold	SPDT, On-None-On	12	4.71
34DWMS42B4M7RE	Gold	SPDT, Mom-Off-Mom	12	4.21



FIG. 13

## SERIES 34E SURFACE MOUNT SEALED SUBMINIATURE TOGGLE SWITCHES

Gold contacts rated for 0.4VA max. at 20V max (AC or DC). Case and bushing: Glass filled nylon, UL94V-0. Epoxy sealed. Actuator: Brass, chrome plated. Terminals: Copper alloy, tin-lead alloy over nickel plate. Contacts: Copper alloy, gold plate over nickel plate. Operating temperature: -30°C to +85°C.

Cat. No.	Contacts	Circuit	Net Price Each	
			1-499	500-Up
34EWMS12M6RE	Gold	SPDT, On-None-On	\$4.33	\$3.61



FIG. 19

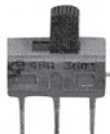


FIG. 20

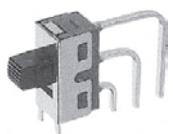


FIG. 21



FIG. 22

## SERIES 48A SEALED MINIATURE SLIDE SWITCHES

Silver contacts rated for 5A at 125VAC, 2A at 250VAC. Gold contacts rated for 0.4VA max. at 20V max (AC or DC). Case: Diallyl phthalate UL94V-0. Housing: Stainless steel. Epoxy sealed. Actuator: Nylon. Operating temperature: -30°C to +85°C. UL Recognized.

Cat. No.	Contacts	Circuits	Fig.	Net Price
<b>PANEL MOUNT, HORIZONTAL ACTUATION</b>				
48ASSP1S1M1QE	Silver	SPDT, On-None-On	19	\$2.49
<b>PC MOUNT, HORIZONTAL ACTUATION</b>				
48ASDP1S1M2QE	Silver	DPDT, On-None-On	20	3.50
48ASSP1S1M2QE	Silver	SPDT, On-None-On	20	2.52
48ASSP1S1M2RE	Gold	SPDT, On-None-On	20	2.58
48ASSP3S1M2RE	Gold	SPDT, On-None-On	20	2.66

<b>RIGHT ANGLE PC MOUNT, VERTICAL ACTUATION</b>				
48ASDP1S1M7RE	Gold	DPDT, On-None-On	21	3.94
48ASSP1S1M7QE	Silver	SPDT, On-None-On	21	2.66
48ASSP1S1M7RE	Gold	SPDT, On-None-On	21	2.82

<b>RIGHT ANGLE PC MOUNT, HORIZONTAL ACTUATION</b>				
48ASSP1S1M6QE	Silver	SPDT, On-None-On	22	2.62
48ASSP1S1M6RE	Gold	SPDT, On-None-On	22	2.80



FIG. 23

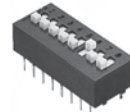


FIG. 24

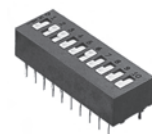
## SERIES 48B SEALED SUBMINIATURE SLIDE SWITCHES

Silver contacts rated for 3A at 125VAC, 1.5A at 250VAC. Gold contacts rated for 0.4VA max. at 20V max (AC or DC). Case: Diallyl Phthalate UL94V-0. Housing: Stainless steel. Epoxy sealed. Actuator: Nylon. Operating temperature: -30°C to +85°C.

Cat. No.	Contacts	Circuits	Fig.	Net Price
<b>PC MOUNT, HORIZONTAL ACTUATION</b>				
48BFSP1M2QE	Silver	SPDT, On-None-On	23	\$3.32
48BFSP1M2RE	Gold	SPDT, On-None-On	23	3.49
<b>PC MOUNT, VERTICAL ACTUATION</b>				
48BFSP1M6QE	Silver	SPDT, On-None-On	24	3.46
48BFSP1M6RE	Gold	SPDT, On-None-On	24	3.68



RAISED SLIDE



RECESSED SLIDE

## SLIDE DIP SWITCHES—SERIES 78 RAISED AND RECESSED SLIDE TYPES

Rated to make and break 1 mA, 5 Vdc; or 50 mA, 30 Vdc; or 150 mA, 30 Vdc for 10,000 operations. Base contacts are copper alloy, gold plated over nickel plate. Width is .380" (9.65 mm); height is .315" (8.0 mm) for raised slides and .265" (6.73 mm) for recessed slides.

### ORDERING INFORMATION

Cat. No.	Description	Length Inch (mm)	Number/Tube	Net Price
<b>SERIES 78, SLIDE ACTUATED, SPST</b>				
78B02ST	2 Stations, Raised Slide	0.28" (7,1)	35	\$2.13
78B03ST	3 Stations, Raised Slide	0.38" (9,7)	27	2.20
78B04ST	4 Stations, Raised Slide	0.48" (12,2)	21	2.27
78B05ST	5 Stations, Raised Slide	0.58" (14,7)	18	2.34
78B06ST	6 Stations, Raised Slide	0.68" (17,3)	15	2.41
78B07ST	7 Stations, Raised Slide	0.78" (19,8)	13	2.45
78B08ST	8 Stations, Raised Slide	0.88" (22,4)	12	2.51
78B09ST	9 Stations, Raised Slide	0.98" (24,9)	10	2.58
78B10ST	10 Stations, Raised Slide	1.08" (27,4)	9	2.61
78B12ST	12 Stations, Raised Slide	1.28" (32,5)	8	2.76
78RB02ST	2 Stations, Recessed Slide	0.28" (7,1)	35	2.13
78RB03ST	3 Stations, Recessed Slide	0.38" (9,7)	27	2.20
78RB04ST	4 Stations, Recessed Slide	0.48" (12,2)	21	2.27
78RB05ST	5 Stations, Recessed Slide	0.58" (14,7)	18	2.34
78RB06ST	6 Stations, Recessed Slide	0.68" (17,3)	15	2.41
78RB07ST	7 Stations, Recessed Slide	0.78" (19,8)	13	2.45
78RB08ST	8 Stations, Recessed Slide	0.88" (22,4)	12	2.51
78RB09ST	9 Stations, Recessed Slide	0.98" (24,9)	10	2.58
78RB10ST	10 Stations, Recessed Slide	1.08" (27,4)	9	2.61
78RB12ST	12 Stations, Recessed Slide	1.28" (32,5)	8	2.76



## MACHINE INSERTABLE, MIDIP® SWITCH—SERIES 90

Compatible with leading TO-116 IC insertion equipment. Rated to make and break 10 mA, 30 Vdc; or 10 mA, 50 mVdc for 2,000 operations per position. Base contacts are copper alloy, gold plated over nickel plate. Terminals are molded (sealed) into base. Top seal is polyimide film. Width is .290" (7.37 mm) max.; height above board is .195" (4.95 mm) max.

### ORDERING INFORMATION

Cat. No.	Description	Length Inch (mm)	Number/Tube	Net Price
<b>SERIES 90, MACHINE INSERTABLE, SPST</b>				
90B02ST	2 Stations, Recessed Slide	0.27" (6,9)	60	\$2.50
90B03ST	3 Stations, Recessed Slide	0.37" (9,4)	47	2.56
90B04ST	4 Stations, Recessed Slide	0.47" (11,9)	37	2.19
90B05ST	5 Stations, Recessed Slide	0.57" (14,5)	31	2.50
90B06ST	6 Stations, Recessed Slide	0.67" (17,0)	26	2.56
90B07ST	7 Stations, Recessed Slide	0.77" (19,6)	23	2.60
90B08ST	8 Stations, Recessed Slide	0.87" (22,1)	20	2.16
90B09ST	9 Stations, Recessed Slide	0.97" (24,6)	18	2.72
90B10ST	10 Stations, Recessed Slide	1.07" (27,2)	16	2.88

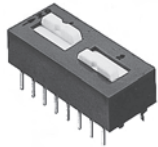


FIGURE A  
.315 (8,0)H  
.380 (9,65)W

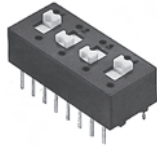


FIGURE B  
.315 (8,0)H  
.380 (9,65)W

## SERIES 78 SLIDE SWITCHES

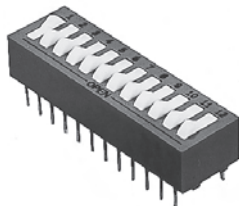
### 2 POLE, 3 POLE, AND 4 POLE SINGLE THROW SLIDE SWITCHES (FIG. A)

Rated for 10,000 operations to make and break the following loads: 1 mA, 5 Vdc; or 50 to 150 mA, 30 Vdc. Base contacts are copper alloy, gold plated over nickel plate. All switches are tape sealed.

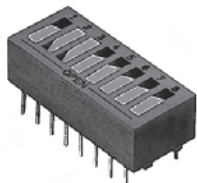
### SPDT AND DPDT SLIDE SWITCHES WITH SEPARATE CIRCUITS (FIG. B)

Rating and materials are the same as the switches in Figure A. In Single Pole/Double Throw switches, each slide operates two adjacent separate circuits, opening one of them, while closing the other. (In Double Pole/Double Throw switches, 1 slide switches 4 circuits at once, opening circuits 1 and 3, while closing 2 and 4, etc.). This circuitry, used in telephone switching, makes these switches form, fit, and function equivalents. For true SPDT (DPDT) circuitry, adjacent terminal pairs may be tied on the board. Dot on the cover indicates the closed position of individual terminal pairs. All switches are tape sealed.

Cat. No.	Description	Length Inch (mm)	Number/Tube	Net Price
<b>SERIES 78, MULTI POLE, SINGLE THROW</b>				
78F01ST	1 Station, 2PST, Raised Slide	0.28" (7.1)	35	\$2.85
78F02ST	2 Stations, 2PST, Raised Slide	0.48" (12.2)	21	3.02
78F03ST	3 Stations, 2PST, Raised Slide	0.68" (17.3)	15	3.16
78F04ST	4 Stations, 2PST, Raised Slide	0.88" (22.4)	12	3.34
78F05ST	5 Stations, 2PST, Raised Slide	1.08" (27.2)	9	3.47
78G01ST	1 Station, 3PST, Raised Slide	0.38" (9.7)	27	2.99
78G02ST	2 Stations, 3PST, Raised Slide	0.68" (17.3)	15	3.18
78G03ST	3 Stations, 3PST, Raised Slide	0.98" (24.9)	10	3.37
78H01ST	1 Station, 4PST, Raised Slide	0.48" (12.2)	21	3.02
78H02ST	2 Stations, 4PST, Raised Slide	0.88" (22.4)	12	3.34
<b>SERIES 78, SPDT &amp; DPDT CIRCUITRY</b>				
78J01ST	1 Station, SPDT	0.28" (7.1)	35	3.51
78J02ST	2 Stations, SPDT	0.48" (12.2)	21	3.64
78J03ST	3 Stations, SPDT	0.68" (17.3)	15	3.81
78J04ST	4 Stations, SPDT	0.88" (22.4)	12	3.98
78J05ST	5 Stations, SPDT	1.08" (27.2)	9	4.94
78K01ST	1 Station, DPDT	0.48" (12.2)	21	5.08
78K02ST	2 Stations, DPDT	0.88" (22.4)	12	5.50



RAISED ROCKER



RECESSED ROCKER



PIANO-DIP®

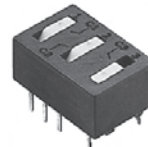
## ROCKER DIP SWITCHES—SERIES 76 RAISED AND RECESSED ROCKERS AND PIANO-DIP®

Rated to make and break 1 mA, 5 Vdc; or 50 mA, 30 Vdc; or 150 mA, 30 Vdc for 10,000 operations per position. Base contacts are copper alloy, gold plated over nickel plate. Width is .380" (9.65 mm); height is .315" (8.0 mm) for raised rocker style, .267" (6.27 mm) for recessed style, .301" (7.65 mm) for the PIANO-DIP® switch. Piano-DIP® standard is up-off. All switches are tape sealed.

Cat. No.	Description	Length Inch (mm)	Number/Tube	Net Price
<b>SERIES 76, ROCKER ACTUATED, SPDT</b>				
76SB02ST	2 Stations, Raised Rocker	0.28" (7.1)	35	\$2.22
76SB03ST	3 Stations, Raised Rocker	0.38" (9.7)	27	2.31
76SB04ST	4 Stations, Raised Rocker	0.48" (12.2)	21	2.35
76SB05ST	5 Stations, Raised Rocker	0.58" (14.7)	18	2.45
76SB06ST	6 Stations, Raised Rocker	0.68" (17.3)	15	2.49
76SB07ST	7 Stations, Raised Rocker	0.78" (19.8)	13	2.53
76SB08ST	8 Stations, Raised Rocker	0.88" (22.4)	12	2.60
76SB09ST	9 Stations, Raised Rocker	0.98" (24.9)	10	2.67
76SB10ST	10 Stations, Raised Rocker	1.08" (27.4)	9	2.71
76SB12ST	12 Stations, Raised Rocker	1.28" (32.5)	8	2.84
76RSB02ST	2 Stations, Recessed Rocker	0.28" (7.1)	35	2.22
76RSB03ST	3 Stations, Recessed Rocker	0.38" (9.7)	27	2.31
76RSB04ST	4 Stations, Recessed Rocker	0.48" (12.2)	21	2.35
76RSB05ST	5 Stations, Recessed Rocker	0.58" (14.7)	18	2.45
76RSB06ST	6 Stations, Recessed Rocker	0.68" (17.3)	15	2.49
76RSB07ST	7 Stations, Recessed Rocker	0.78" (19.8)	13	2.53
76RSB08ST	8 Stations, Recessed Rocker	0.88" (22.4)	12	2.60
76RSB09ST	9 Stations, Recessed Rocker	0.98" (24.9)	10	2.67
76RSB10ST	10 Stations, Recessed Rocker	1.08" (27.4)	9	2.71
76RSB12ST	12 Stations, Recessed Rocker	1.28" (32.5)	8	2.84
<b>SERIES 76, PIANO-DIP SWITCH, SPDT</b>				
76PSB02ST	2 Stations, Side Actuated	0.28" (7.1)	35	2.60
76PSB03ST	3 Stations, Side Actuated	0.38" (9.7)	27	2.67
76PSB04ST	4 Stations, Side Actuated	0.48" (12.2)	21	2.74
76PSB05ST	5 Stations, Side Actuated	0.58" (14.7)	18	2.78
76PSB06ST	6 Stations, Side Actuated	0.68" (17.3)	15	2.84
76PSB07ST	7 Stations, Side Actuated	0.78" (19.8)	13	2.92
76PSB08ST	8 Stations, Side Actuated	0.88" (22.4)	12	2.95
76PSB09ST	9 Stations, Side Actuated	0.98" (24.9)	10	3.07
76PSB10ST	10 Stations, Side Actuated	1.08" (27.4)	9	3.17
76PSB12ST	12 Stations, Side Actuated	1.28" (32.5)	8	3.32



RAISED ROCKER  
.315 (8,0)H  
.380 (9,65)W



RECESSED ROCKER  
.267 (6,78)H  
.380 (9,65)W

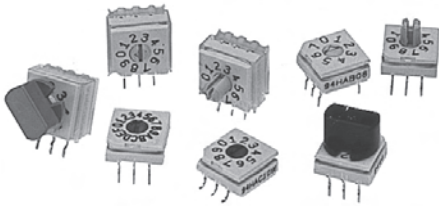


TOGGLE ACTUATED  
.467 (11,86)H  
.380 (9,65)W

## SERIES 76 ROCKER AND TOGGLE SWITCHES SPDT AND DPDT ROCKER AND TOGGLE SWITCHES WITH COMMON POLES

Rated to make and break 50 mA 30 Vdc, and 150 mA 30 Vdc for 10,000 operations. Base contacts are copper alloy, gold plated over nickel plate. SPDT (DPDT) circuits are 3 (6) terminal circuits for true SPDT (DPDT) switching and compact spacing. Common pole terminals are marked with a C, and first and second throws are marked as 1 and 2. All switches have tape seal with the exception of the toggle actuated.

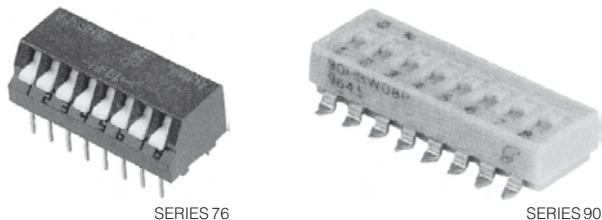
Cat. No.	Description	Length Inch (mm)	No./Tube	Net Price
76SC02ST	2 Stations, SPDT, Raised Rocker	0.38" (9.7)	27	\$4.76
76SC03ST	3 Stations, SPDT, Raised Rocker	0.58" (14.8)	18	5.08
76SC04ST	4 Stations, SPDT, Raised Rocker	0.78" (19.8)	13	5.38
76RSC02ST	2 Stations, SPDT, Recessed Rocker	0.38" (9.7)	27	4.76
76RSC03ST	3 Stations, SPDT, Recessed Rocker	0.58" (14.8)	18	5.08
76RSC04ST	4 Stations, SPDT, Recessed Rocker	0.78" (19.8)	13	5.38
76STC02T	2 Stations, SPDT, Toggle Actuated	0.38" (9.7)	27	4.53
76STC03T	3 Stations, SPDT, Toggle Actuated	0.58" (14.8)	18	4.83
76STC04T	4 Stations, SPDT, Toggle Actuated	0.78" (19.8)	13	5.14
76SD01ST	1 Station, DPDT, Raised Rocker	0.38" (9.7)	27	4.89
76SD02ST	2 Stations, DPDT, Raised Rocker	0.78" (19.8)	13	5.50
76RSD01ST	1 Station, DPDT, Recessed Rocker	0.38" (9.7)	27	4.89
76RSD02ST	2 Stations, DPDT, Recessed Rocker	0.78" (19.8)	13	5.50
76STD01T	1 Station, DPDT, Toggle Actuated	0.38" (9.7)	27	4.64
76STD02T	2 Stations, DPDT, Toggle Actuated	0.78" (19.8)	13	5.25



## SERIES 94 CODED ROTARY DIP SWITCHES

Series 94 actuator sealed Rotary DIP switches have binary (Octal, BCD, Hexadecimal) output with 8, 10 or 16 positions. Complement codes are also available. Perpendicular or right angle mounting with flush or choice of two shaft lengths. Switches rated for 30 mA, 50 Vdc and 125 mA; 30 Vdc for 10,000 cycles of operation. Perpendicular and surface mount types have terminals on 0.1" (2,54 mm) by 0.3" (7,62 mm) grid. Right angle mount on a 0.1" (2,54 mm) by 0.1" (2,54 mm) grid. Terminals are copper alloy. Maximum process temperature: 250°C for 10 seconds. Suffix RA indicates right angle; W, surface mount.

Cat. No.	Code and Positions	Net Price
<b>FLUSH ACTUATOR TYPE</b>		
94HAB08T	Octal/8	\$4.22
94HAB08RAT	Octal/8	4.71
94HAB08WT	Octal/8	4.22
94HAB10T	BCD/10	4.22
94HAB10RAT	BCD/10	4.71
94HAB10WT	BCD/10	4.22
94HAB16T	Hex/16	4.22
94HAB16RAT	Hex/16	4.71
94HAB16WT	Hex/16	4.22
<b>EXTENDED ACTUATOR 0.270" TYPE</b>		
94HBB08T	BCD/8	4.22
94HBB08RAT	BCD/8	4.71
94HBB10T	BCD/10	4.22
94HBB10RAT	BCD/10	4.71
94HBB16T	Hex/16	4.22
94HBB16RAT	Hex/16	4.71
<b>EXTENDED ACTUATOR 0.170" TYPE</b>		
94HCB08T	BCD/8	4.22
94HCB08RAT	BCD/8	4.71
94HCB10T	BCD/10	4.22
94HCB10RAT	BCD/10	4.71
94HCB16T	Hex/16	4.22
94HCB16RAT	Hex/16	4.71



## SURFACE MOUNT DIP SWITCHES

**Series 76**, side actuated, PIANO-DIP switch. Popular standard size, side actuated DIP switch is molded out of high temperature plastic for surface mount applications. Stands approx. .305" (7,75 mm) off board. Gull wing terminals on standard centers fit 0.125" (3,18 mm) by 0.070" (1,78 mm) rectangular pads, spaced on 0.100" (2,54 mm) centers, 0.280" (7,11 mm) between rows. SPST circuitry. Logic level switching. Product is provided without tape seal, requiring careful board cleaning.

**Series 78**, top side, slide actuated DIP switches. Standard, raised slide package is molded out of high temperature plastic for surface applications. Stands approx. 0.32" (8,13 mm) off board. Gull wing terminals fit the layout pattern noted for the Series 76 switch. SPST circuitry. Logic level switching. Product is provided without tape seal, requiring careful board cleaning.

**Series 90**, the original, low profile, surface mount DIP switch. Recessed slides accommodate reflective tape seal. All units provided with tape seal. Stands approx. 0.190" (4,83 mm) off board. Choice of gull wing or J-bend terminals, fit 0.07" (1,78 mm) by 0.125" (3,18 mm) rectangular pads, spaced on 0.100" (2,54 mm) centers, 0.250" (12,7 mm) between rows. SPST circuitry. Logic level switching. "W" in part number indicates gull wing terminals; J, J-bend terminals.

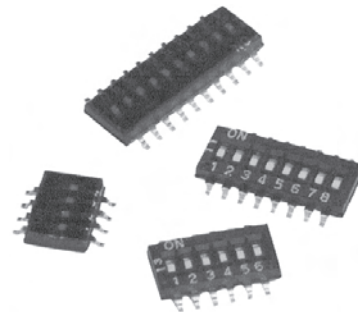
Cat. No.	Stations/Length In. (mm)	No./Tube	Net Price
<b>SERIES 76, SURFACE MOUNT PIANO-DIP™</b>			
76HPSB02GWT	2/0.280" (7,1)	35	\$2.91
76HPSB04GWT	4/0.480" (12,2)	21	3.01
76HPSB06GWT	6/0.680" (17,3)	15	3.18
76HPSB08GWT	8/0.880" (22,4)	12	3.41
76HPSB10GWT	10/1.080" (27,2)	9	3.74

## SERIES 90, SURFACE MOUNT, LOW PROFILE, SLIDE, TOP ACTUATED, GULL WING TERMINALS

90HBW02PT	2/0.27" (6,88)	60	3.44
90HBW03PT	3/0.37" (9,40)	47	3.54
90HBW04PT	4/0.47" (11,94)	37	3.03
90HBW05PT	5/0.57" (14,48)	31	3.44
90HBW06PT	6/0.67" (17,02)	26	3.54
90HBW07PT	7/0.77" (19,56)	23	3.57
90HBW08PT	8/0.87" (22,10)	20	2.96
90HBW09PT	9/0.97" (24,64)	18	3.76
90HBW10PT	10/1.07" (27,18)	16	3.98

## SERIES 90, SURFACE MOUNT, LOW PROFILE, SLIDE, TOP ACTUATED, J-BEND TERMINALS

90HBJ02PT	2/0.27" (6,88)	60	3.82
90HBJ03PT	3/0.37" (9,40)	47	3.93
90HBJ04PT	4/0.47" (11,94)	37	3.36
90HBJ05PT	5/0.57" (14,48)	31	3.82
90HBJ06PT	6/0.67" (17,02)	26	3.93
90HBJ07PT	7/0.77" (19,56)	23	3.96
90HBJ08PT	8/0.87" (22,10)	20	3.29
90HBJ09PT	9/0.97" (24,64)	18	4.18
90HBJ10PT	10/1.07" (27,18)	16	4.42



## SERIES 97 HALF PITCH DIP SWITCHES

Series 97, requires half the board space of standard DIP switches. Process compatible to 240°C. Contact rating: 25mA at 25VDC switching. 100mA at 50VDC non-switching. Mechanical life: 1000 cycles min. Contact resistance: 100 milliohms minimum at 100VDC. Base and cover: Nylon UL94V-0. Actuators: Nylon thermoplastic UL94V-0. Base contacts: Alloy copper with gold-plating over nickel. Terminals: Brass with gold plating.

Cat. No.	Description	Length Inch (mm)	Number/Tube	Net Price
97C02T	2 stations	.148 (3.76)	130	\$3.17
97C04T	4 stations	.248 (6.30)	75	3.26
97C06T	6 stations	.348 (8.84)	54	3.35
97C08T	8 stations	.448 (11.38)	40	3.44
97C10T	10 stations	.548 (13.92)	33	3.71
97C02ST	2 stations with tape seal	.148 (3.76)	130	3.30
97C04ST	4 stations with tape seal	.248 (6.30)	75	3.39
97C06ST	6 stations with tape seal	.348 (8.84)	54	3.48
97C08ST	8 stations with tape seal	.448 (11.38)	40	3.57
97C10ST	10 stations with tape seal	.548 (13.92)	33	3.85

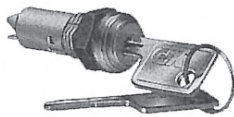
# Cannon Switches & DIP Switches



## C&K Y SERIES TUMBLER SWITCHLOCKS

Y Series panel mount switchlocks. **CONTACT RATING:** 4 amps @ 125VAC or 28 VDC; 2 amps @ 250VAC (UL/CSA). **DIELECTRIC STRENGTH:** 1,00 VRMS min. @ sea level. **LOCK:** Zinc alloy with stainless steel facing. **KEYS: (Y101132C)**—two nickel plated brass keys, **(Y1011U2W)**—two zinc alloy keys with chrome plating. **SWITCH HOUSING:** Glass filled polyester (UL 94V-0). **CONTACT AND TERMINALS:** Copper, silver plated. **TERMINAL SEAL:** Epoxy.

Cat. No.	No. of Poles	Indexing	No. of Positions	Net Price Each	
				1-499	500-Up
<b>FOUR TUMBLER WITH DETENT, SOLDER LUG TERMINALS</b>					
Y101132C203NQ	SP	45°	2-4	\$11.61	
<b>SIX TUMBLER WITH ANTI-STATIC SWITCH, SOLDER LUG TERMINALS</b>					
Y1011U2W203NQ	SP	90°	2	15.82	



## C&K YM SERIES MINIATURE INTERNATIONAL SWITCHLOCKS

YM Series panel mount switchlocks. **CONTACT RATING:** 4 amps @ 125VAC or 28 VDC; 2 amps @ 250 VAC (UL/CSA). **DIELECTRIC STRENGTH:** 1000 VRMS min. @ sea level. **LOCK:** Zinc alloy with stainless steel facing. **KEYS:** Two nickel plated brass. **SWITCH HOUSING:** 6/6 nylon (UL 94V-2). **CONTACTS AND TERMINALS:** Copper, silver plated.

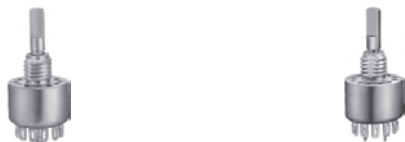
Cat. No.	No. of Poles	Indexing	No. of Positions	Net Price Each	
				1-499	500-Up
YM06132C205NQ	SPST	90°	2	\$13.10	\$9.21



## C&K A SERIES PANEL MOUNT ROTARY SWITCHES

A series non-shorting rotary switches. **CONTACT RATING:** Switch—2.5 amps @ 125VAC; 350 mA @ 125 VDC; 150 mA @ 250 VDC (UL/CSA). **CURRENT CARRY CAPACITY:** 5 amps. **DIELECTRIC STRENGTH:** 1000 VRMS min. @ sea level. **HOUSING AND BUSHING:** Glass filled 6/6 nylon (UL 94V-0). **MOVABLE CONTACTS:** Coin silver, silver plated. **STATIONARY CONTACTS AND TERMINALS:** Brass, silver plated.

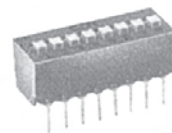
Cat. No.	Circuit	Net Price Each		
		1-499	500-2499	2500-Up
<b>SOLDER TERMINALS</b>				
A11215RNZQ	SP 12-Position	\$5.93	\$3.76	\$3.40
A20615RNZQ	DP 6-Position	6.28	3.98	3.60
A30415RNZQ	3P 4-Position	6.21	3.92	3.55
A40315RNZQ	4P 3-Position	6.80	4.30	3.89
<b>PC TERMINALS</b>				
A11215RNCQ	SP 12-Position	5.93	3.76	3.40
A20615RNCQ	DP 6-Position	6.28	3.98	3.60
A30415RNCQ	3P 4-Position	6.21	3.92	3.55
A40315RNCQ	4P 3-Position	6.80	4.30	3.89



## C&K M SERIES HALF-INCH ROTARY SWITCHES

**CARRY RATING:** 6A continuous. **SWITCH RATING:** 250mA max. at 125VAC or 28VDC. Nonshorting contacts. **INDEXING:** prefix ME and MF in type number = 38°; prefix MG and MG in type number = 30°. **OPERATING TEMPERATURE:** -30°C to +85°C. **ACTUATOR:** zinc alloy, nickel-plated. **HOUSING AND BUSHING:** zinc alloy. **BASE:** diallylphthalate or melamine phenolic. **CONTACTS AND TERMINALS:** copper allow, silver-plated. All terminals insert molded. **PANEL MOUNTING:** 0.250" (6.35) dia. hole. **HARDWARE:** nut, lockwasher. All models have 360° rotation with no stops. Stop rings are supplied for user selectable stops.

Cat. No.	Circuit	No. of Pos.	Net Price Each		
			1-499	500-2499	2500-Up
<b>SOLDER TERMINAL</b>					
ME00L1NZQD	SP	10	\$11.33	\$7.57	\$6.85
MG00L1NZQD	SP	12	11.61	7.75	7.02
MF00L1NZQD	DP	5	12.59	8.42	7.62
MH00L1NZQD	DP	6	12.94	8.66	7.84
<b>PC TERMINALS</b>					
ME00L1NCQD	SP	10	11.68	7.87	7.12
MF00L1NCQD	DP	5	12.94	8.72	7.89
MF00L1NCQD	DP	6	12.94	8.72	7.89



VERTICAL MOUNT



RIGHT ANGLE MOUNT

## C&K BD SERIES WASHABLE DIP SWITCHES

Withstands machine soldering and cleaning. **CARRY RATING:** 100mA max. at 50VDC. **SWITCH RATING:** 100mA max. at 5VDC or 25mA max. at 25VDC. SPST function. **OPERATING TEMPERATURE:** -40°C to +85°C. **ACTUATOR:** Gf nylon (UL94V-0). **HOUSING:** Gf polyester (UL94V-0). **CONTACTS:** WE#1 over palladium silver over nickel. **TERMINALS:** Tin-lead alloy. **TERMINAL SPACING:** 0.100" (2.54).

Cat. No.	No. of Pos.	Dim. "A"	Net Price Each		
			1-499	500-2499	2500-Up
<b>VERTICAL MOUNT DIP SWITCHES</b>					
BD01	1	.180"	\$1.05	\$1.05	\$0.72
BD02	2	.280"	1.73	1.07	.74
BD03	3	.380"	1.75	1.07	.74
BD04	4	.480"	1.92	1.17	.81
BD05	5	.580"	1.96	1.19	.81
BD06	6	.680"	2.03	1.23	.85
BD07	7	.780"	2.10	1.29	.89
BD08	8	.880"	2.17	1.33	.93
BD10	10	1.080"	2.36	1.43	.99
BD12	12	1.280"	2.52	1.53	1.07
<b>RIGHT ANGLE MOUNT</b>					
BD02AV	2	.280"	2.80	1.82	1.74
BD04AV	4	.480"	2.97	1.92	1.84
BD06AV	6	.680"	3.11	2.00	1.92
BD08AV	8	.880"	3.25	2.08	2.00



## C&K TDA SERIES ULTRA-MINIATURE SURFACE MOUNT HALF-PITCH DIP SWITCHES

Surface mountable, low-profile, SPST DIP switches with spacing of 0.050" between terminals. Body height of 0.098". Gulf wing terminals are tin-lead plated. Taped sealed switch is vacuum pick and place compatible, and will withstand machine soldering and cleaning. Can withstand vapor phase and IR soldering up to 260°C. **CONTACT RATING:** 0.4VA @ 20VDC. **CONTACTS:** Gold plated. **LIFE EXPECTANCY:** 1,000 cycles min. **INITIAL CONTACT RESISTANCE:** 100 milliohms max.

Cat. No.	No. of Pos.	Terminals	Net Price Each		
			1-2499	2500-9999	10000-Up
TDA02H0SK1	2	0.150"	\$1.48	\$1.36	\$1.16
TDA04H0SK1	4	0.250"	1.57	1.43	1.23
TDA06H0SK1	6	0.350"	1.86	1.71	1.46
TDA08H0SK1	8	0.450"	3.39	1.96	1.67
TDA10H0SK1	10	0.550"	5.03	2.89	2.47



### C&K BP SERIES WASHABLE DIP SWITCHES

**BODY HEIGHT:** 8mm, width 13mm. **CARRY RATING:** 100mA max. @ 50VDC. **SWITCH RATING:** 100mA max. @ 5VDC or 25mA max. @ 25VDC. SPST function. **OPERATING TEMPERATURE:** -20°C to +60°C. **ACTUATOR AND HOUSING:** UL94V-0. **CONTACTS:** gold plated. **TERMINALS:** tin-plated, epoxy seal. **TERMINAL SPACING:** 0.100" (2.54).

Cat. No.	No. of Pos.	Net Price Each		
		1-2499	2500-9999	10000-Up
BP02KE	2	\$1.31	\$1.19	\$1.04
BP03KE	3	1.41	1.29	1.12
BP04KE	4	1.43	1.31	1.14
BP05KE	5	1.50	1.36	1.19
BP06KE	6	1.62	1.48	1.29
BP07KE	7	1.66	1.52	1.32
BP08KE	8	1.66	1.52	1.32



PC



SURFACE MOUNT

### C&K SDA SERIES LOW PROFILE DIP SWITCHES

SPST, withstand soldering and cleaning processes. To order flush actuator, replace "H1" with "H0". **RATING:** 100 mA max @ 20 VDC for 2,000 cycles. Terminals are tin-lead. SK models are surface mount. H0: flush actuator.

Cat. No.	No. of Pos.	Overall Length	Net Price Each	
			1-499	500-Up
<b>EXTENDED ACTUATOR, PC TERMINALS</b>				
SDA04H1KD	4	.476"	\$1.26	\$0.79
SDA05H1KD	5	.578"	1.33	.83
SDA06H1KD	6	.676"	1.38	.85
SDA07H1KD	7	.778"	1.47	.91
SDA08H1KD	8	.876"	1.61	1.01
SDA09H1KD	9	.978"	1.80	1.11
SDA10H1KD	10	1.076"	1.94	1.19
SDA12H1KD	12	1.279"	2.12	1.31

### FLUSH ACTUATOR, SURFACE MOUNT TERMINALS

SDA02H0SK	2	.278"	1.13	1.13
SDA03H0SK	3	.378"	1.92	1.19
SDA04H0SK	4	.476"	2.01	1.23
SDA05H0SK	5	.578"	2.08	1.29
SDA06H0SK	6	.676"	2.17	1.35
SDA07H0SK	7	.778"	2.29	1.41
SDA08H0SK	8	.876"	2.50	1.55
SDA09H0SK	9	.978"	2.75	1.72
SDA10H0SK	10	1.076"	2.92	1.80
SDA12H0SK	12	1.279"	3.20	1.98

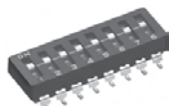


FIGURE 1

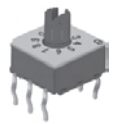
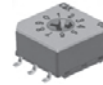


FIGURE 2

### C&K SD SERIES SEALED DIP SWITCHES

Tape-sealed, low-profile SPST DIP switches withstand soldering and cleaning processes. SK models are surface mount. H0: flush actuator. To order extended actuator, replace "H" with "H1". **RATING:** 100mA max @ 20VDC for 2000 cycles. Terminals are tin-lead.

Cat. No.	No. of Pos.	Overall Length (in.)	Figure	Net Price Each	
				1-499	500-Up
SD02H0SK	2	.258	1	\$1.25	\$1.25
SD03H0SK	3	.358	1	1.31	1.31
SD05H0SK	5	.558	1	2.73	1.43
SD06H0SK	6	.658	1	3.01	1.49
SD07H0SK	7	.758	1	3.15	.97
SD08H0SK	8	.858	1	3.25	1.72
SD09H0SK	9	.958	1	3.55	1.90
SD10H0SK	10	1.058	1	3.74	2.00
SD12H0SK	12	1.258	1	3.90	2.20
SD02H0K	2	.258	2	.89	.89
SD03H0K	3	.358	2	.93	.93
SD04H0K	4	.458"	2	1.82	.97
SD05H0K	5	.558	2	1.96	1.01
SD06H0K	6	.658	2	2.08	1.05
SD07H0K	7	.758	2	2.22	1.11
SD09H0K	9	.958	2	2.45	1.33
SD10H0K	10	1.058	2	2.57	1.43
SD12H0K	12	1.258	2	2.69	1.55



### C&K CD SERIES ULTRA-MINIATURE DIP CODED ROTARY SWITCHES

Cat. No.	Description	Terminals	Net Price Each	
			1-2499	2500-Up
CD08RM0AK	BCD	Right-Angle	\$3.91	\$3.65
CD08RM0CK	BCD	PC	3.31	3.09
CD08CM0AK	BCD Comp.	Right-Angle	3.91	3.65
CD08CM0CK	BCD Comp.	PC	3.31	3.09
CD08RL1AK	BCD	Right-Angle	4.38	4.09
CD08RL1CK	BCD	PC	4.38	4.09
CD08CL1AK	BCD Comp.	Right-Angle	4.38	4.09
CD10RM0AK	BCD	Right-Angle	3.91	3.65
CD10RM0CK	BCD	PC	3.31	3.09
CD10CM0AK	BCD Comp.	Right-Angle	3.91	3.65
CD10CM0CK	BCD Comp.	PC	2.60	2.51
CD10RL1AK	BCD	Right-Angle	4.38	4.09
CD10RL1CK	BCD	PC	3.80	3.55
CD10CL1AK	BCD Comp.	Right-Angle	3.45	3.32
CD16RM0AK	BCD	Right-Angle	4.31	4.02
CD16RM0CK	BCD	PC	3.63	3.39
CD16CM0AK	BCD Comp.	Right-Angle	4.31	4.02
CD16CM0CK	BCD Comp.	PC	4.31	4.02
CD16RL1AK	BCD	Right-Angle	4.78	4.46
CD16RL1CK	BCD	PC	4.16	3.88
CD16CL1AK	BCD Comp.	Right-Angle	4.78	4.46



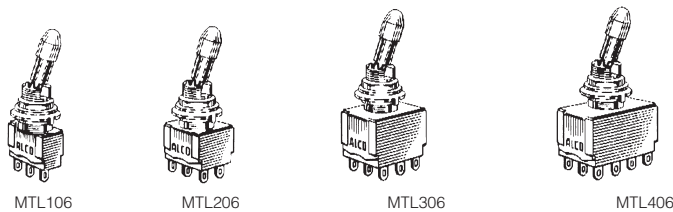
### C&K 7000 SERIES PANEL-MOUNT TOGGLE SWITCHES

**CONTACT RATING:** 5 amps @ 120VAC or 28 VDC; 2 amps @ 250VAC; **ACTUATOR:** Brass, chrome-plated. **END CONTACTS:** Coin silver, silver plated. **CENTRE CONTACTS & ALL TERMINALS:** Copper alloy, silver-plated. **TERMINAL SEAL:** Epoxy. **HARDWARE:** Nut & locking ring—brass, nickel-plated. Lock-washer—steel, nickel-plated. **OPERATING TEMPERATURE:** -30°C to 85°C. Fits panel cutout 0.250" dia. Solder terminals. 3 and 4-Pole models case height is 0.415".

Continued on next page....

# Augat Alcoswitch Switches

MANU  
012  
CODE

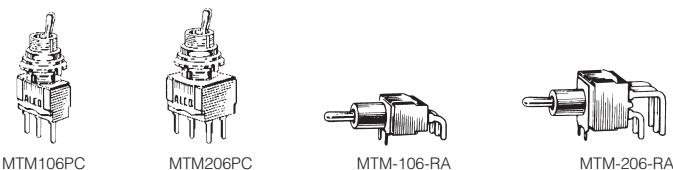


## MTL SERIES LOCKING TOGGLES

With .590" lever, must be pulled out to operate.

Cat. No.	Contacts	Switching Action	Net Price Each	
			1-499	500-Up
<b>SOLDER LUG TERMINALS</b>				
MTL-106D04	SPDT	On-None-On	\$10.93	\$6.64
MTL-106E04	SPDT	On-Off-On	12.53	7.61
MTL-206N04	DPDT	On-None-On	18.23	11.07
MTL-206P04	DPDT	On-Off-On	17.61	10.71
MTL-206PA04	SP3T(A)	On-On-On	24.97	15.18
MTL-306D04	3PDT	On-None-On	19.71	11.97
MTL-406N04	4PDT	On-None-On	12.53	7.61

(A) DPDT with shunts for SP3T function.

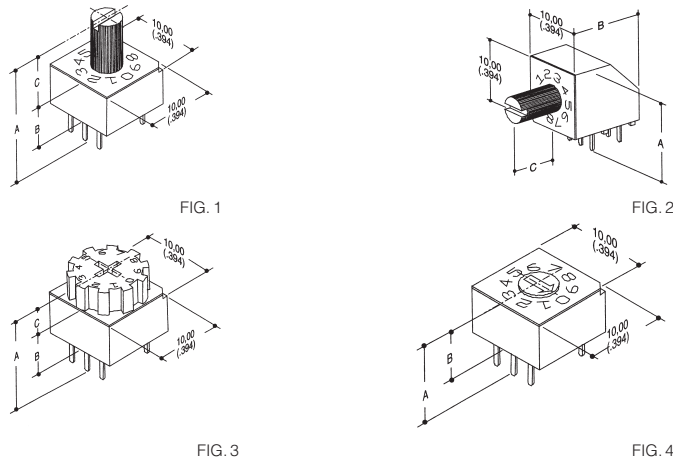


## MTM SERIES WITH .270" SHORT LEVERS

RA types have right angle PC terminals and unthreaded .250" bushing.

Cat. No.	Contacts	Switching Action	Net Price Each	
			1-499	500-Up
<b>PC TERMINAL, .190" LONG</b>				
MTM-106D-PC04	SPDT	On-None-On	\$12.64	\$7.67
MTM-206N-PC04	DPDT	On-None-On	6.68	5.83

(On) indicates momentary position.



## ALCO DR SERIES ROTARY DIP SWITCHES

**MATERIAL SPECIFICATIONS:** fixed contacts: Gold flashed brass. Moving contacts: Gold flashed beryllium copper. Rotor Material: Glass filled PBT resin. Case material: Glass filled PBT resin. Terminals: PC mount, Gold flashed brass. **PERFORMANCE SPECIFICATIONS:** Contact rating: 0.4VA at 20VDC max. Life expectancy: 10,000 rotations. Operating temperature: -30°C to +85°C.

Cat. No.	Dimensions (Inches)		
	A	B	C
DRD1004	.382	.236	—
DRD1604	.382	.236	—
DRD10RA04	.540	.472	.012
DRD16RA04	.540	.472	.012
DRM1004	.670	.236	.287
DRM1604	.670	.236	.287
DRM10RA04	.540	.472	.287
DRM16RA04	.540	.472	.287

Cat. No.	Dimensions (Inches)		
	A	B	C
DRW1004	.512	.236	.130
DRW1604	.512	.236	.130
DRW10RA04	.540	.472	.130

## DR SERIES

Cat. No.	Type of Actuator and Terminals	Fig.	Lead Spacing (Inches)	Net Price
<b>10-POSITION BCD (RED ACTUATOR)</b>				
DRD10E04	Flush	4	.100 x .300	\$4.60
DRM1004	Mini Shaft	1	.100 x .300	3.65
DRW1004	Mini Wheel	3	.100 x .300	3.35
DRW10RA04	Mini Wheel, Right Angle	2*	.100 x .200	7.25
<b>16-POSITION HEXADECIMAL (BLACK ACTUATOR)</b>				
DRD16E04	Flush	4	.100 x .300	4.95
DRM1604	Mini Shaft	1	.100 x .300	3.78
DRM16RA04	Mini Shaft, Right Angle	2	.100 x .200	5.08
DRW1604	Mini Wheel	3	.100 x .300	6.22

\*Actuator style varies from drawing.

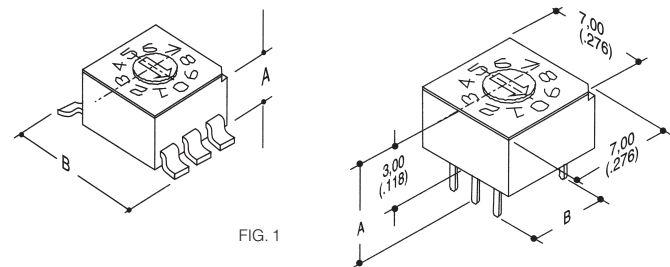


FIG. 1

FIG. 2

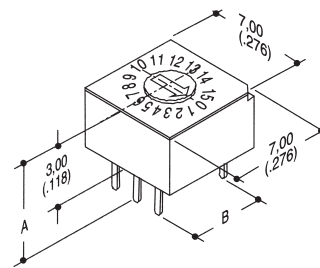
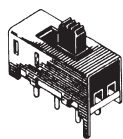


FIG. 3

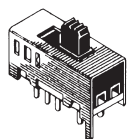
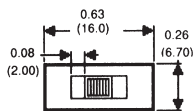
## ALCO MRD SERIES SUBMINIATURE ROTARY DIP SWITCHES

Augat MRD series 7mm DIP switch, available in surface mount and thru-hole packaging providing 10 position BCD and 16 position hexadecimal connections. Approximately 40% less PCB space in a package that is 50% lower in profile off the PCB when compared to other rotary DIP switches. The MRD series utilizes a highly reliable gold plated contact rated to 20,000 steps and the terminals are plated in tin lead for process capability. The housing is constructed of high temperature plastic capable of IR soldering, and is process sealed to help prevent contamination from flux and washing. **MATERIAL SPECIFICATIONS:** Rotor material: Nylon. Case Material: PPS. **PERFORMANCE CHARACTERISTICS:** Contact rating: 0.4VA max. at 20VDC max.

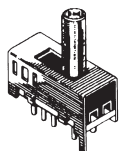
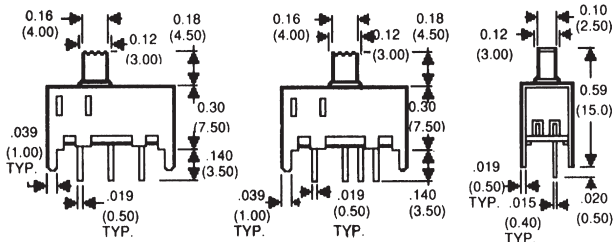
Cat. No.	Description	Fig.	Dim. A	Dim. B	Net Price
<b>10-POSITION BCD (RED ACTUATOR)</b>					
MRD1004	PC Version	2	.281"	.325"	\$5.41
MRD10C04	PC Version, Compliment Circuit	2	.281"	.325"	5.34
MRD10S04	Surface Mount	1	.136"	.357"	10.22
<b>16-POSITION HEXADECIMAL (BLACK ACTUATOR)</b>					
MRD1604	PC Version	3	.281"	.325"	8.68
MRD16C04	PC Version, Compliment Circuit	3	.281"	.325"	5.34
MRD16S04	Surface Mount	1	.136"	.357"	5.93
MRD16CS04	Surface Mount, Compliment Circuit	1	.136"	.357"	4.14



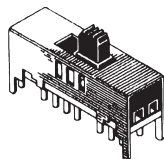
MHS122



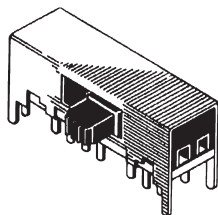
MHS233



MHS233K



MHS433

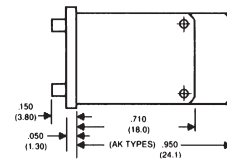
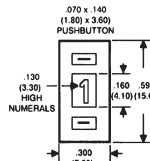
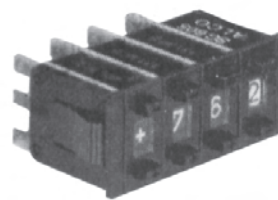


MHS433RA

## ALCO MHS SERIES INSTRUMENTATION GRADE MINIATURE PC SLIDE SWITCHES

Low profile miniature slide switches with mounting tabs on the frames for added stability on PC boards. Package height is .300". Contact rating: silver, 300mA at 125VAC; gold plated, 0.4VA at 20VDC or peak AC. Initial contact resistance: 20 milliohms max. Life expectancy: 15,000 operations. Epoxy terminal seal. Steel case, thermoplastic actuator.

Cat. No.	Contacts	Switching Action	Net Price
<b>VERTICAL MOUNT, SILVER CONTACTS</b>			
MHS-122	SPDT	On-None-On	\$1.84
MHS-123	SPDT	On-Off-On	2.07
MHS-133	SP3T	On-On-On	1.72
MHS-222	DPDT	On-None-On	1.94
MHS-223	DPDT	On-Off-On	2.22
MHS-233	DP3T	On-On-On	2.34
MHS-433	4P3T	On-On-On	2.99
<b>VERTICAL MOUNT, ALUMINUM BATON ACTUATOR, SILVER CONTACTS</b>			
MHS-233K	DP3T	On-On-On	2.59
<b>RIGHT ANGLE MOUNT, SILVER CONTACTS</b>			
MHS-433-RA	4P3T	On-On-On	2.59

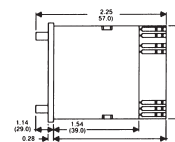
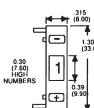


## ALCO PICO SERIES PUSHWHEEL CODE SWITCHES

The smallest panel-mounted pushwheel code switches in the industry, each using only .300" W x .590" H panel space, with .950" extension behind panel. Dependable 2-pushbutton bi-directional operation. Gold-clad wiping contacts rated 0.4VA at 20VDC max. PC terminal spacing .100". Snap-together design; snap-in end plates —no inconvenient hardware.

Cat. No.	Wheel	Code Description
PICO-131-AK	0-9	1-2-4-8 BCD

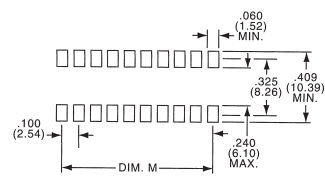
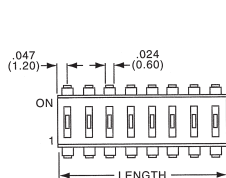
NOTE: Contact your Electro Sonic sales representative for pricing.



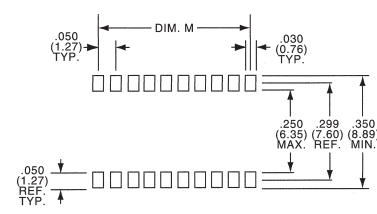
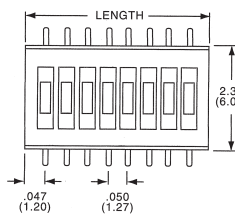
## ALCO DPS9 SERIES PUSHWHEEL CODE SWITCHES

Can directly retrofit common thumbwheel switches, with popular .315" per section width, 1.30" H x 2.25" D. Large readout characters. Reliable dual pushbutton mechanism. Gold clad wiping contacts rated 0.4VA at 20VDC or peak AC. Snap-together modular design with snap-in mounted end plates.

Cat. No.	Wheel	Code Description	Net Price
DPS9-131-AK	0-9	1-2-4-8 BCD	\$15.34
DPS9-137-AK	0-9	1-2-4-8 BCD Complement	15.00
DPS9-SG-902	0-15	Hexadecimal	20.63
DPS9-10-P	End Plates (Pair)		3.45

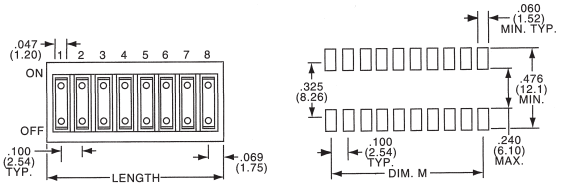


GDS

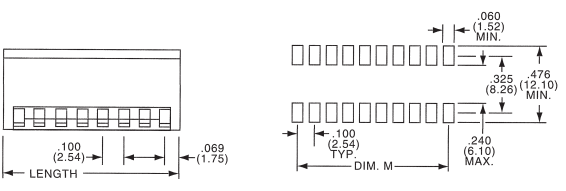


GDH

Continued on next page...



GDR



GDH

## ALCO GD SERIES SURFACE MOUNT AND PC BOARD DIP SWITCHES

The GD Series DIP Switches offer you thru board and surface mount terminal configurations. High Temperature polymers provide compatibility with reflow soldering temperature as high as 260°C. Standard tap seal with unique corner notch to facilitate removal, and bifurcated gold contacts. **SPECIFICATIONS:** Contacts and terminals: Gold flash over nickel plated milliohms maximum. Insulation resistance: 100 megohms minimum at 100VDC. Dielectric strength: 300VAC RMS at sea level. Life expectancy: 1000 cycles minimum. Operating temperature: -30°C to +85°C. Base/cover material: High temperature nylon (UL94V-0). Actuation force: 600 grams maximum.

### GDS LOW PROFILE SLIDE ACTUATOR .100" TERMINAL SPACING

Cat. No.	Poles	Lengths	Dim. M
<b>PC BOARD MOUNT</b>			
GDS0204	2	.194"	.100"
GDS0404	4	.394"	.300"
GDS0604	6	.594"	.500"
GDS0804	8	.794"	.700"
GDS1004	10	.994"	.900"

### SURFACE MOUNT

GDS02S04	2	.194"	.100"
GDS04S04	4	.394"	.300"
GDS06S04	6	.594"	.500"
GDS08S04	8	.794"	.700"
GDS10S04	10	.994"	.900"

### GDH LOW PROFILE SLIDE ACTUATOR HALF PITCH .050" TERMINAL SPACING

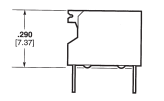
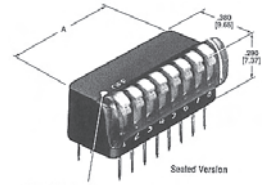
Cat. No.	Poles	Lengths	Dim. M	Net Price Each	
				1-999	1000-Up
<b>SURFACE MOUNT</b>					
GDH02S04	2	.144"	.050"	\$3.13	\$1.91
GDH04S04	4	.244"	.150"	3.90	2.39
GDH06S04	6	.344"	.250"	4.59	2.68
GDH08S04	8	.444"	.350"	4.59	2.68
GDH10S04	10	.544"	.450"	5.34	3.27

### GDR LOW PROFILE RECESSED ROCKER HALF PITCH .050" TERMINAL SPACING

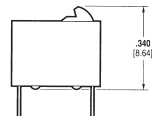
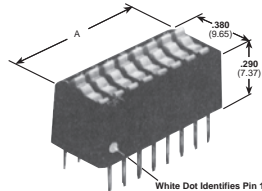
Cat. No.	Poles	Lengths	Dim. M	Net Price Each	
				1-999	1000-Up
<b>PC BOARD MOUNT</b>					
GDR0204	2	.238"	.100"	\$2.92	\$1.79
GDR0404	4	.438"	.300"	2.92	1.79
GDR0604	6	.638"	.500"	3.38	2.06
GDR0804	8	.838"	.700"	3.39	2.06
GDR1004	10	1.038"	.900"	3.39	2.06

### GDP LOW PROFILE PIANO ACTUATOR HALF PITCH .050" THROUGH HOLE

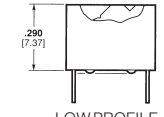
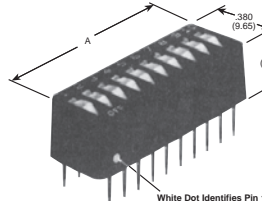
Cat. No.	Poles	Lengths	Dim. M	Net Price Each	
				1-999	1000-Up
<b>THROUGH HOLE MOUNT</b>					
GDP0204	2	.238"	.100"	\$2.06	\$1.26
GDP0404	4	.438"	.300"	2.06	1.26
GDP0604	6	.638"	.500"	2.06	1.26
GDP0804	8	.838"	.700"	2.06	1.26
GDP1004	10	1.038"	.900"	2.06	1.26



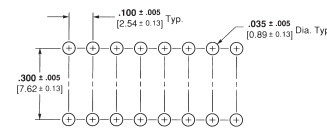
SEALED VERSION



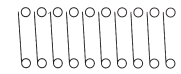
STANDARD VERSION



LOW PROFILE



RECOMMENDED PC BOARD HOLE PATTERN



CONTACT ARRANGEMENT (SWITCHES SHOWN IN OPEN POSITION)

## AMP 7100 SERIES DIP SWITCHES SPST STANDARD AND LOW PROFILE

2000 cycle life design; .000030 (0.00076) gold over nickel plating in the contact area with legs plated to meet Amp Solderability Specs. 109-11-3. The contact lead spacing is .100 x .300 (2.54 x 7.62) with lead length .140 (3.56) below the mounting surface. The current and voltage rating is 1.0 amp max. at 40VDC and switching: 60 mA at 5 VDC (resistive load), 15mA at 24VDC (resistive load). Dry circuit contact resistance is 100 milliohms max. Insulation resistance: 1 x 10<sup>9</sup> ohms at 100VDC with a 500 VDC min. dielectric and 5 picofarad capacitance max. 94V-0 rated glass-filled polyester housing, with a 94V-0 white thermoplastic rocker.

### DIP SWITCHES—7100 SERIES

Cat. No.	No. of Sw.	Overall Length	
		1-999	1000-Up
<b>SPST (UNSEALED) STANDARD PROFILE LOW PROFILE</b>			
2-5435640-9	2	.280	
3-5435640-0	3	.380	
5435640-2	4	.480	
5435640-3	5	.580	
5435640-4	6	.680	
5435640-1	7	.780	
5435640-5	8	.880	
5435640-7	10	1.080	
<b>SPST SIDE ACTUATED, LOW PROFILE UNSEALED SEALED</b>			
1-5435802-0	2	.280	
5435802-2	3	.380	
5435802-3	4	.480	
5435802-4	5	.580	
5435802-5	6	.680	
5435802-6	7	.780	
5435802-1	8	.880	
5435802-7	9	.980	
5435802-8	10	1.080	
<b>SPST (UNSEALED) STANDARD PROFILE LOW PROFILE</b>			
9-5435668-2	3	.480	
5435668-3	4	.580	
5435668-4	5	.680	
5435668-5	6	.780	
2-5435668-6	7	.880	
5435668-7	8	.980	
5435668-9	10	1.080	

Contacts: Copper alloy with .000030 (0.00076) gold over .000050 (0.00127) nickel in contact area and .000150 (0.00381) tin-lead over .000050 (0.00127) nickel on solder legs, plated to meet AMP Solderability Specifications 109-11-3.  
**NOTE:** Contact your Electro Sonic sales representative for pricing.