



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!



## Contact us

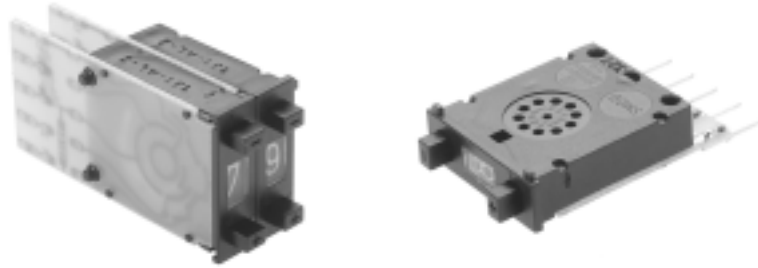
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# SMCD SERIES MINIATURE PUSHWHEEL SWITCHES



## FEATURES

- Miniature pushwheel switches with large visible readout characters.
- Models available with ESD protection - consult factory.
- Bi-directional snap action detent pushbutton mechanism.
- Black housing and drum with white printing.
- Gangable front and rear mounting models with spacers and side covers.
- Gold wiping action contacts.
- P.C. board options include solderable lands.

## SMCD SPECIFICATIONS

Panel mounting hole:	
Height	.945"(24mm)
Width	.315"(8mm)
Installed depth with p.c. board:	
Short	1.260"(32mm)
Long	1.654"(42mm)
Insertion from front	yes
Insertion from rear	yes

## CODES

Code	positions	marking	
111 Decimal	10	0-9	see truth tables
131 BCD	10	0-9	see truth tables
137 BCD comp	10	0-9	see truth tables
301 Hexadecimal	16	0-9, A-F(0-15)	see truth tables
400 change-over	10	+,-,+,-,etc..	see truth tables

## ELECTRICAL DATA

Operating voltage:	40 V max.
Contact load, static:	1 A max.
Contact load, dynamic:	100 mA max.
Contact resistance (type AK):	less than 100 mOhm

## TECHNICAL DATA

Operating temperature range:	-20°C to 80°C
Electric life, min. switching cycles	1,000,000
Actuation force, approx (oz.):	14
Weight, approx. (grams):	4
Character height:	10 digit .193" (4.9mm)
	16 digit .134" (3.4mm)
Audible click	yes
Vibration DIN IEC 68, parts 2-6	yes
Shock DIN 40046, part 7	yes

## MATERIALS

Body:	PPO
PC board:	FR 4 DIN 40802 IEC 249-2, Contact surface gold over nickel on copper
Sliding contact:	Gold over nickel on copper alloy

## STANDARD COLORS

Housing, Drum, Printing	
2 = black 3 = white	2,2,3

Other special features are available upon request including:

- Factory or customer set stops (10 digit models)
- L.E.D. illumination (transparent wheel)
- Red digits
- Decimal point
- Special codes or printing
- Gray housing
- See sockets at end of Pushwheel section.

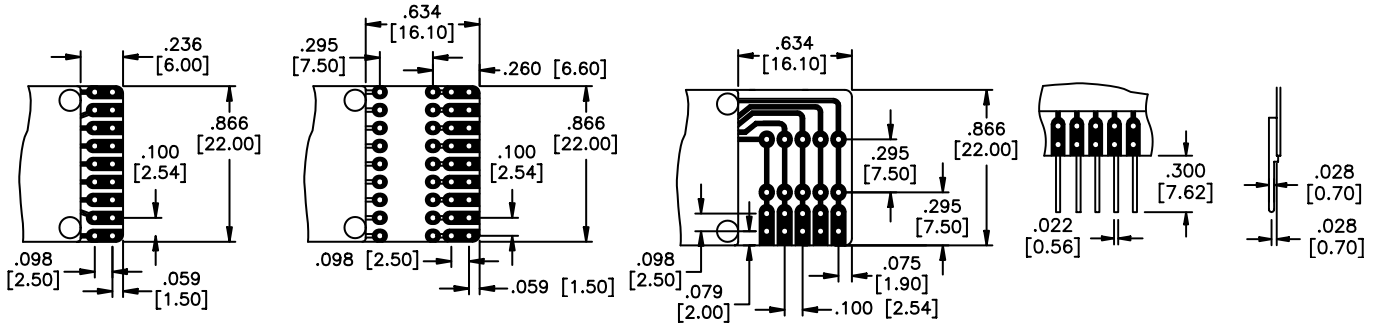




# SMCD SERIES MINIATURE PUSHWHEEL SWITCHES

## PRINTED CIRCUIT OPTIONS

P.C. boards have .039" (1mm) holes and are suitable for soldering or socket connection (with the exception of LED illumination option).



**AK** short p.c. board

**AL** long p.c. board

Allows customer to add resistors, diodes, ect.

**ALU** long p.c. board

**LS** p.c. board w/solder pins

**Ordering information:** Below is an order format that enables you to 'build your own switch' and specify the correct switch model number by simply selecting from available options shown and filling in the boxes. Consult factory for fully assembled switches.

### 'BUILD YOUR OWN SWITCH' ORDER FORMAT

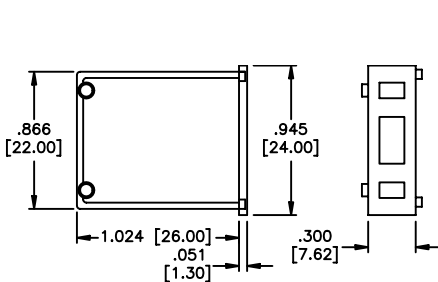
Series model	Code	P.C. board	Terminations	Standard colors
S M C D				2
	1 1 1 Decimal	A K Short	(NONE)	Black housing.
	1 3 1 BCD	A L Long	L S with p.c.	& drum, white
	1 3 7 BCD comp.	A L U Long (rt. angle)	solder pins	lettering.
	3 0 1 Hexadecimal.			
	4 0 0 Change-over			

**Example of complete model no.: SMCD137ALLS2**  
**Order SP12 as a separate line item for limit stop pin (for 10 position models only).**

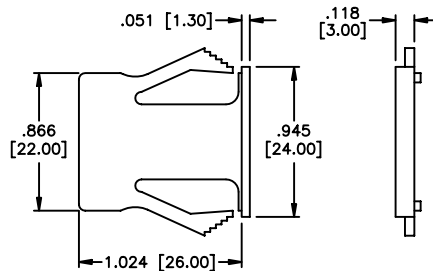
## ACCESSORIES

Order separately

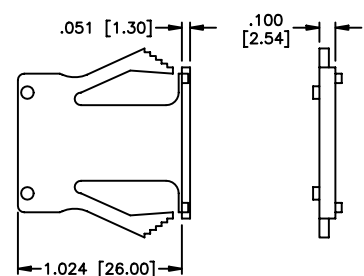
**SMCL2** Dummy switches - These are empty plastic housings with the same dimensions as SMCD model (see outline). Use to fill hole where switch is not needed. **SMCRD2 & SMCRND2** switches for rear mounting available on request.



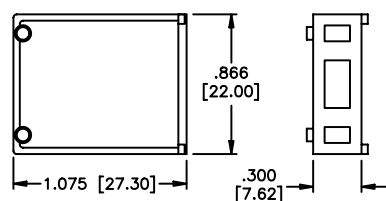
**SMCL2** Dummy housing



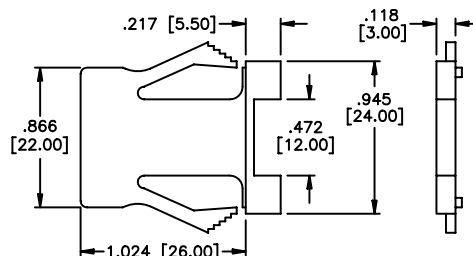
**SMCPK2** Pair of side covers



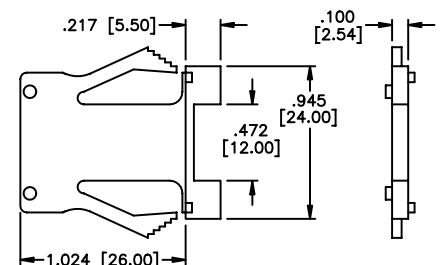
**SMCA2** Spacer



**SMCL2** Dummy housing



**SMCPK2** Pair of side covers



**SMCA2** Spacer

