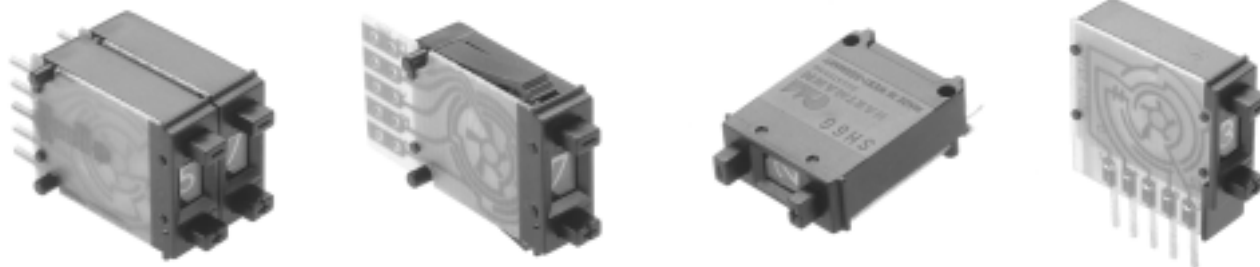


# SH6 SERIES SUBMINIATURE PUSHWHEEL SWITCHES



## FEATURES

- The smallest panel mounting pushwheel switches available .
- Snap action detent with audible click.
- Black housing & drum with white printing.
- Gangable front and rear mounting models.
- Gold wiping action contacts.
- P.C. board options include solderable lands, fingers or p.c. solder pins.

## SH6, SH6G & SH6S SPECIFICATIONS

Panel mounting hole:	
Height	.590"(15mm)
Width	.236"(6mm)
Installed depth with p.c. board:	
Short	.925"(23.5mm)
Long	1.213"(30.8mm)
Insertion from front	yes
Insertion from rear	yes

## CODES

Code	positions	marking	
131 BCD	10	0-9	see truth tables
137 BCD comp	10	0-9	see truth tables
400 change-over	10	+,-,+,-,etc..	see truth tables

## ELECTRICAL DATA

Operating voltage:	40 V max.
Contact load, static:	0.5 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	100,000
Actuation force, approx (oz.):	14
Weight, approx. (grams):	1.5
Character height:	.122"(3.1mm)
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
- Red digits
- Decimal point
- Special codes or printing

# SH6 SERIES SUBMINIATURE PUSHWHEEL SWITCHES

## TRUTH TABLES

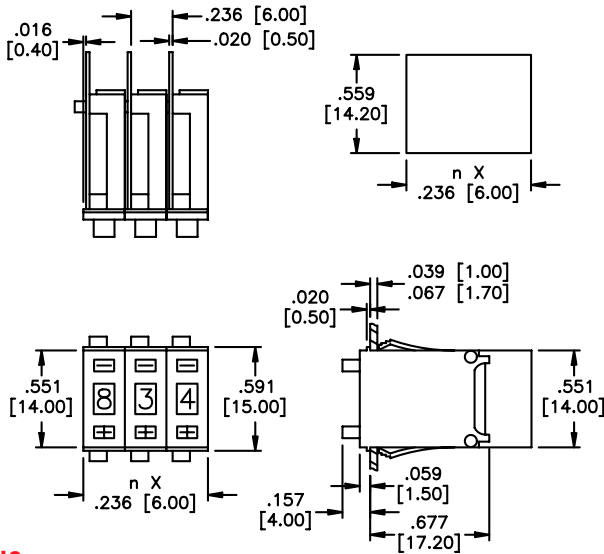
ALL MODELS CODE 131 BCD					
	C	1	2	4	8
0	●				
1	●	●			
2	●		●		
3	●	●	●		
4	●			●	
5	●	●		●	
6	●		●	●	
7	●	●	●	●	
8	●				●
9	●	●			●

SH6 & SH6G CODE 137 BCD COMP.					
	C	$\bar{1}$	$\bar{2}$	$\bar{4}$	$\bar{8}$
0	●	●	●	●	●
1	●		●		
2	●	●		●	
3	●			●	●
4	●	●	●		●
5	●		●		●
6	●	●			●
7	●				●
8	●	●	●	●	
9	●		●	●	

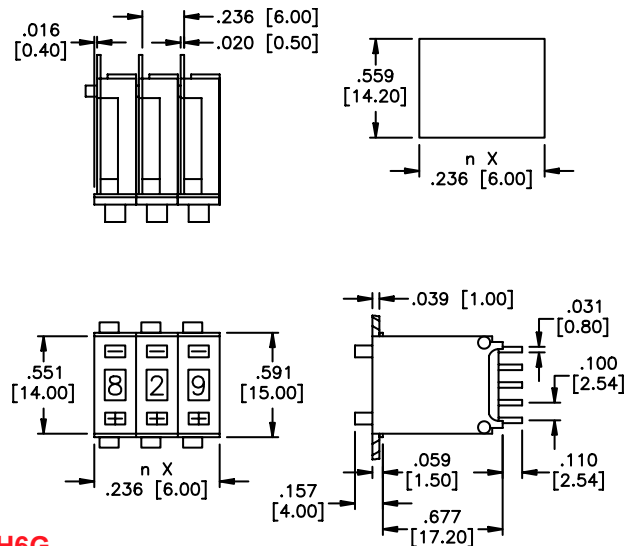
SH6 & SH6G CODE 400 CHANGE-OVER			
	C	A+	A-
+	●	●	
-	●		●
-	●	●	
-	●		●
+	●	●	
-	●		●
+	●	●	
-	●		●
-	●		●

## MECHANICAL OUTLINES WITH PANEL CUT-OUTS

n = number of switches

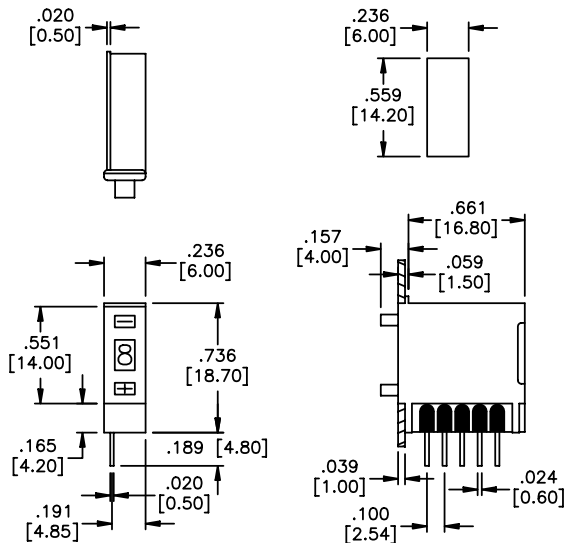


SH6



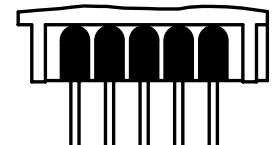
SH6G

T



SH6S131/AKULS2

## PIN CONNECTIONS



- |     |           |           |   |           |           |
|-----|-----------|-----------|---|-----------|-----------|
| 131 | 1         | 2         | 4 | 8         | C         |
| 137 | $\bar{2}$ | $\bar{8}$ | C | $\bar{1}$ | $\bar{4}$ |
| 400 | -         | +         | C |           |           |

- |       |   |   |   |   |   |
|-------|---|---|---|---|---|
| 131/1 | C | 8 | 1 | 4 | 2 |
|-------|---|---|---|---|---|

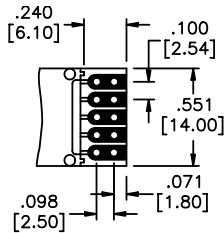
- The switching mode is shorting - i.e. - even during actuation, at least one output is connected to input C.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

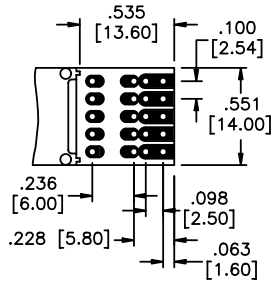
# SH6 SERIES SUBMINIATURE PUSHWHEEL SWITCHES

## PRINTED CIRCUIT OPTIONS

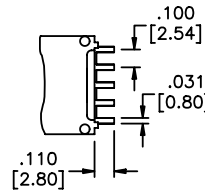
P.C. boards have .039" (1mm) holes and are suitable for soldering or socket connection.



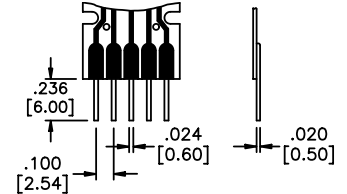
**AK**  
short p.c. board



**AL**  
long p.c. board  
(Allows customer to add resistors, diodes, ect.)

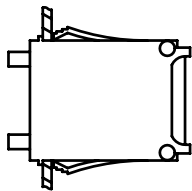


**AKK**  
p.c. board w/fingers

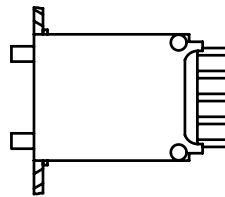


**AKLS or ALLS**  
p.c. board w/solder pins

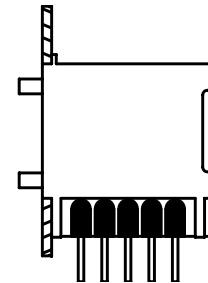
## MOUNTING INFORMATION



Front mounting (**SH6**)



Rear mounting (**SH6** and **SH6G**)



Rear mounting (**SH6S**)

**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

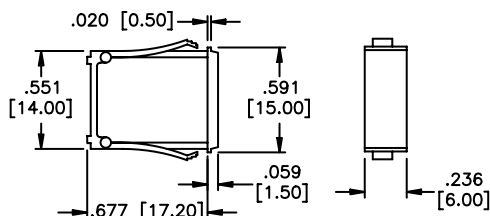
Series model	Code	P.C. board	Standard colors
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<b>S H 6</b>	<b>1 3 1</b> BCD (all models)	<b>A K</b> Short	Black housing and drum.
<b>S H 6 G</b>	<b>1 3 7</b> BCD comp. (SH6 & SH6G only)	<b>A L</b> Long	White lettering
<b>S H 6 S*</b>	<b>4 0 0</b> Change-over (SH6 & SH6G only)	<b>A K K</b> w/fingers	
(see outline dwgs.)	<b>1 3 1 / 1</b> BCD (SH6S only)	<b>A K L S</b> Short w/p.c. solder pins	
		<b>A L L S</b> Long w/p.c. solder pins	
		<b>A K U L S</b> Short w/rt. angle solder pins	

\* For this model, only **SH6S131/1AKULS2** available, see outline drawing.

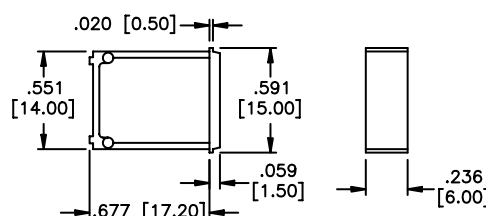
Example of complete model no.: **SH6131AK2**

## ACCESSORIES

Order separately



**SH6L2** Dummy housing



**SH6GL2** Dummy housing

### **SH6L2** or **SH6GL2**

#### Dummy switches

These are empty plastic housings with the same dimensions as SH6 & SH6G models (see outlines). Use to fill hole where switch is not needed.

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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Authorized Distributor

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[SH6131AL2](#) [SH6131AKLS2](#) [SH6131ALLS2](#) [SH6137AK2](#) [SH6137AKK2](#) [SH6137AKLS2](#) [SH6137ALLS2](#)  
[SH6G131AKLS2](#) [SH6G131AL2](#) [SH6G131ALLS2](#) [SH6G137AK2](#) [SH6G137AKK2](#) [SH6G137AL2](#) [SH6G137ALLS2](#)  
[SH6G400AK2](#) [SH6G400AKK2](#) [SH6G400AKLS2](#) [SH6G400AL2](#) [SH6G400ALLS2](#)