SH6 SERIES SUBMINIATURE PUSHWHEEL SWITCHES

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE






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

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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.

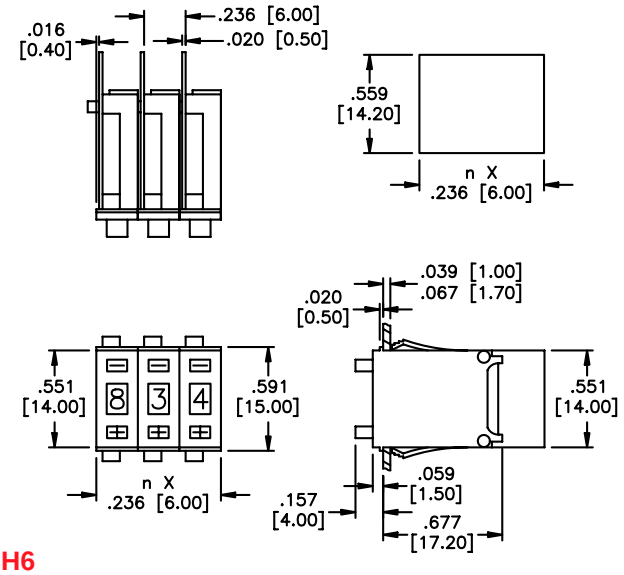
	C	$\overline{1}$	$\overline{2}$	$\overline{4}$	$\overline{8}$
0	●	●	●	●	●
1	●		●	●	●
2	●	●		●	●
3	●			●	●
4	●	●	●		●
5	●		●		●
6	●	●			●
7	●				●
8	●	●	●	●	
9	●		●	●	

SH6 & SH6G CODE 400 CHANGE-OVER

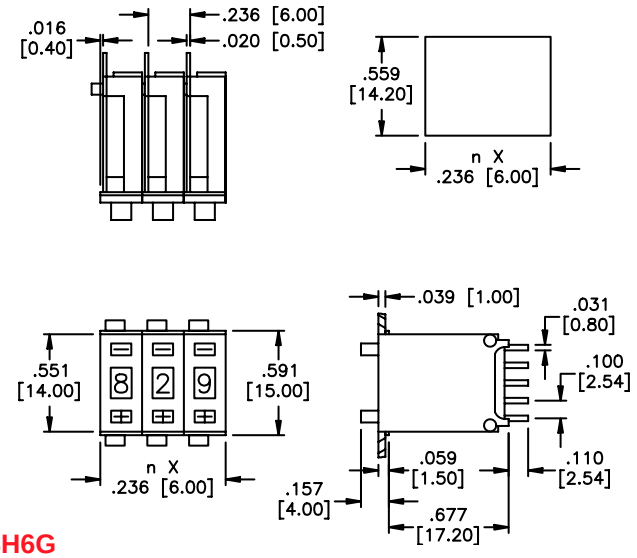
	C	A+	A-
+	●	●	
-	●		●
+	●	●	
-	●		●
+	●	●	
-	●		●
+	●	●	
-	●		●
+	●	●	
-	●		●

MECHANICAL OUTLINES WITH PANEL CUT-OUTS

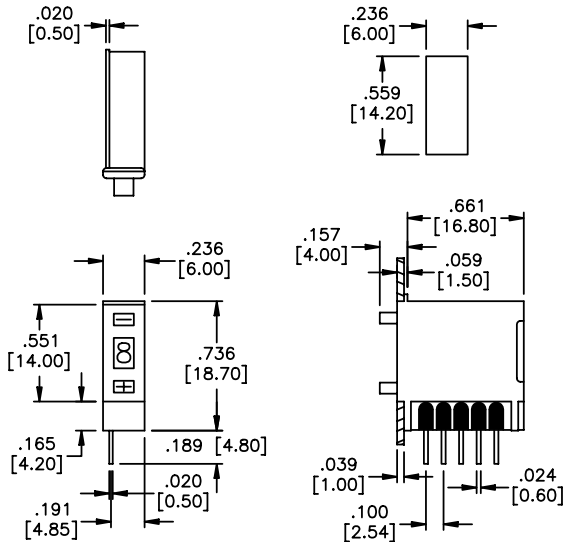
n = number of switches



SH6



SH6G

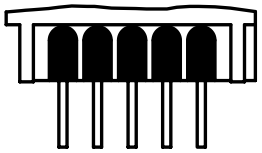


SH6S131/AKULS2

PIN CONNECTIONS



	1	2	4	8	C
131	1	2	4	8	C
137	$\overline{2}$	$\overline{8}$	C	$\overline{1}$	$\overline{4}$
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.

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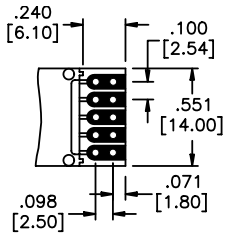
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APEM, 63 NECK ROAD, HAVERHILL, MA USA 01835-0788 TOLL FREE: (877) 246-7890 FAX: (978) 372-3534 E-mail: info@apem.com

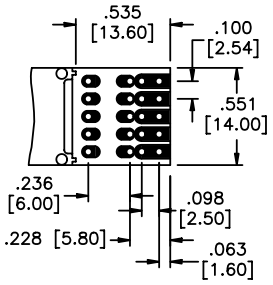
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PRINTED CIRCUIT OPTIONS

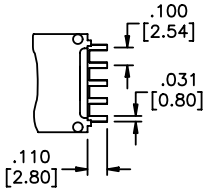
P.C. boards have .039" (1mm) holes and are suitable for soldering or socket connection.



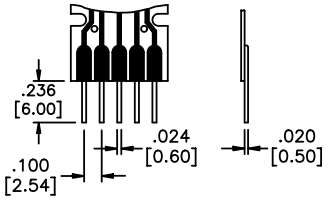
AK
short p.c. board



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

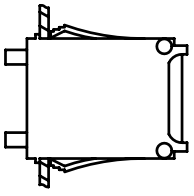


AKK
p.c. board w/fingers

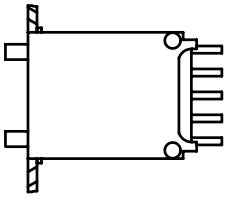


AKLS or **ALLS**
p.c. board w/solder pins

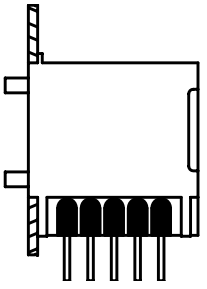
MOUNTING INFORMATION



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

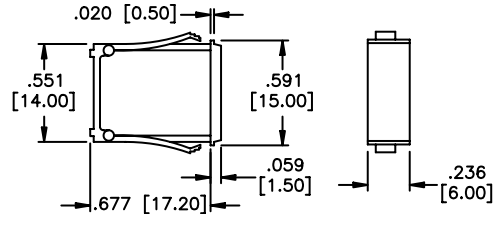
Series model	Code		P.C. board	Standard colors
S H 6	**1 3 1**	BCD (all models)	**A K** Short	Black housing and drum. White lettering
S H 6 G	**1 3 7**	BCD comp. (SH6 & SH6G only)	**A L** Long	
S H 6 S*	**4 0 0**	Change-over (SH6 & SH6G only)	**A K K** w/fingers	
(see outline dwgs.)	**1 3 1 / 1**	BCD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

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

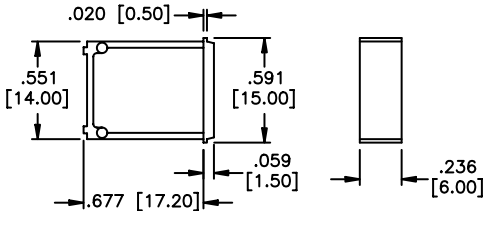
Example of complete model no.: SH6131AK2

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.

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