

# SMD Switch, Short Stroke, 6 mm Horizontal Actuator









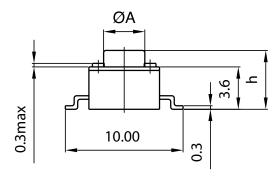


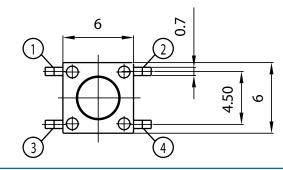


# Weblinks

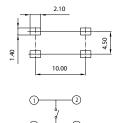
html-datasheet, General Product Information, CE declaration of conformity, RoHS, CHINA-RoHS, CAD-Drawings, Product News, Detailed request for product

## **Dimension**





# **Drilling diagrams**



#### DATA LSH, LPH, LPS, LPV, SMS, PMS, MTG SWITCHES-MOMENTARY ACTION



## **BENEFITS**

- Simple assembly, long life time, short lead time
- Reliable tactile feedback
- Various designs with 1/4 and 1/2 inch are possible with different heights
- Variable colour design and lettering
- Available for through hole and SMD assembly
- Tested to degree of protection IP 40 and IP 67

	LSH/LPH LPS//LPV	SMS	PMS	MTG	
Electrical data					
Contact material				gold	silver
Switching voltage max.	[V] 12 DC	30 AC / 42 DC	30 AC / 42 DC	max. 24 DC	max. 48 DC
Switching current max. [r	nA] 50	50	50	max. 50	max. 125
Rated breaking capacity	[W]	0.12	0.12	0.48	2.40
Lifetime (at rated breaking capacity)	> 105	>10 <sup>6</sup>	> 106	>106	>106
Initial contact resistance, new [r	nΩ] max. 100	<50	<50	<50	<50
Initial contact resistance, after lifetime [r	nΩ] max. 100	<150	< 150	<50	< 50
Insulation resistance [r	nΩ]	>108	>108	>108	>108
Contact bounce time	ms] typ. 0.1	typ. 0.15	typ. 0.15	typ. 0.1	typ. 0.1
Mechanical data					
Actuating force IP 40 IP 67		1.6 ± 0.4 1.8 ± 0.4	1.6 ± 0.4 1.8 ± 0.4	2.5 ± 0.5	2.5 ± 0.5
	nm] 0.25 + 0.2/-0.1	0.35 ± 0.1	0.35 ± 0.1	0.45 ± 0.1	0.45 ± 0.1
į.	[N] 50 N/3s	> 100	> 100	> 50	> 50
Lifetime [operation	1.4	>106	>106	>108	>106
Other data	iisj >10	>10	>10	>10	>10
Degree of protection	IP 40	IP 40/IP 67	IP 40/IP 67	IP 40	IP 40
Soldering method	IR-Reflow	IR-Reflow	Wave	Wave	Wave
· ·					
Soldering heat resistance (LSH) IR Reflow [°C	2/s] 240/20				
(LPV/LPS/LPH) [°C/s					
Jedec J-STD-0	20C	245/5	248,5/1	248,5/1	248,5/1
			240,01	240,0/1	240,0/1
Ambient temperature	-20 − +70	-40 - +85	-40 -+85	-25 – +85	-25 – +85
Storage temperature	-30 - +85	-40 - +85	-40 -+85	-25 – +85	-25 – +85
Cleaning agent proof		Zestron	Zestron		
Flux-proof		IP67	IP67		
Materials					
Sealing membrane IP 67		VMQ		VMQ	
Contact material gold		CuZn37 Ni + Au		CuZn -3 µm Ni +2 µm Au	
Contact material silver				CuZn -2.5 µm Ag passivated	
Terminals	CuZn+Cu+Ag 0,7µm	CuZn37 - Sn			
Socket		Thermoplast PA 4.6 Thermoplast PES		last PES	
Actuator		Thermoplast PPS Thermoplast PC		plast PC	
Cover plate		X 12C	X 12CrNi177		

# **5.SCHURTER**

## **OVERVIEW LSH, LPH**

#### **SWITCHES-MOMENTARY ACTION**



	LSH	LPH			
FEATURES					
Degree of protection	IP 40	IP 40			
Models/Leads	Gullwing, height variable	Through hole, height variable			
PART NUMBER *					
Actuator dimensions					
2.40 mm x 2.40 mm					
2.80 mm x 2.80 mm					
Actuator ØA/Overall height h					
3.50 mm / 3.85 mm					
** 3.40 mm / 4.30 mm	1301.9314. xx	1301.9301			
3.40 mm / 5.00 mm	1301.9315. xx	1301.9302			
3.30 mm / 6.15 mm					
3,30 mm / 7.00 mm	1301.9316. xx	1301.9303			
3.30 mm / 7.30 mm	1301.9317. xx	1301.9304			
3,30 mm / 8.00 mm	1301.9318. xx	1301.9305			
3.20 mm / 9.50 mm	1301.9319. xx	1301.9306			
3.00 mm / 11.35 mm					
3,40 mm/ 12.50 mm	1301.9320. xx	1301.9307			
Packaging					
loose in boxes					
taped and reeled	24				
Dimensions:	10 00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6.5 0.30 0.30 0.00 0.00 0.00 0.00 0.00 0.			
Solder pads: Drilling diagram:	2.10	4-Ø 1 holes			
Circuit diagram:	©	• <u> </u>			

<sup>\*</sup> X in the Part No. must be replaced by the desired version

<sup>\*\*</sup> Not recommended for use with an additional actuator cap

