



Shan Pu

Push button Switches Series SPA



SPAA Type & SPAM Type

General Specifications

Circuit	DPDT
Current Rating	100mA
Voltage Rating	30V DC
Contact Resistance	100m Ohm Max(initial)
Insulation Resistance	100M Ohm Min at DC 500V
Operating Force	200gf±80gf
Total Travel	Max. 2.5mm; Lock 1.5mm
Mechanical Life	10,000 Cycles Min.
Operating Temperature	-10 °C ~ +65 °C
Function	Momentary or Alternate

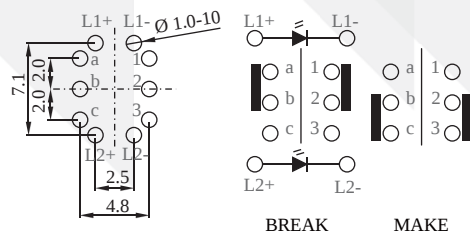
SPAT Type

General Specifications

Circuit	SPST
Current Rating	50mA
Voltage Rating	12V DC
Contact Resistance	100mOhm Max(initial)
Insulation Resistance	100MOhm Min
Operating Force	180gf±50gf
Total Travel	0.3mm±0.2mm
Mechanical Life	800,000 Cycles Min.
Operating Temperature	-10 °C ~ +60 °C
Function	Tactile

■ Circuit & PCB Layout

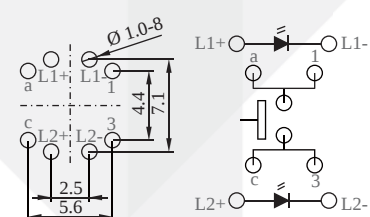
/ SPAA & SPAM



P.C. Board layout

CONTACT CONFIGURATION
BREAK MAKE

/ SPAT

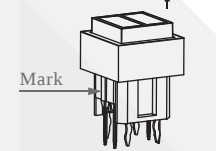
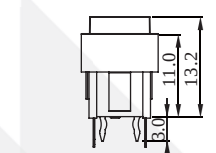
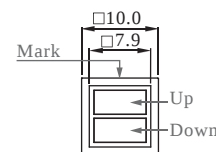


P.C. Board layout

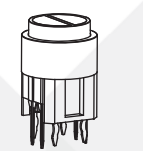
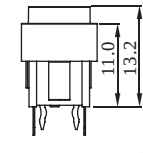
CONTACT CONFIGURATION

■ Dimension

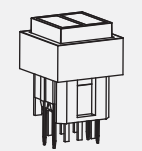
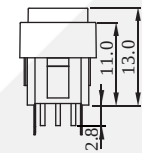
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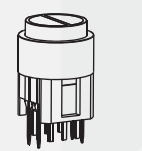
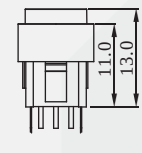
/ SPATSA



/ SPAACA SPAMCA



/ SPAASA SPAMSA



■ How to order

SPA

Switch Function
T Tactile
M Momentary
A Alternate

Housing Type

SA	
CA	

Diffuser Colors

Code	Up	Down
2V12	Red	Yellow
2V13	Red	Green
2V14	Red	White
2V23	Yellow	Green
2V24	Yellow	White
2V34	Green	White
2V44	White	White
2V17	Red	Blue
2V27	Yellow	Blue
2V37	Green	Blue
2V47	White	Blue

LED Colors

Code	Up	Down
12	Red	Yellow
13	Red	Green
14	Red	White
17	Red	Blue
23	Yellow	Green
24	Yellow	White
27	Yellow	Blue
34	Green	White
37	Green	Blue
47	White	Blue