



**THE DATASHEET OF  
SER GN AU OA**



# DIGITAST Microminiature SPDT, Key Switches

## Features/Benefits

- High reliability/long life
- Designed for low level switching
- Ready to implement on PCB
- Latching function available
- Several button options
- RoHS compliant and compatible

## Typical Applications

- Medical
- Instrumentation
- Industrial electronics
- Audio electronics



## Construction

FUNCTION: momentary or push-push  
 CONTACT ARRANGEMENT: 1 change over contact SPDT, NO  
 MODE OF SWITCHING: Non-shorting  
 DISTANCE BETWEEN BUTTON CENTERS:  
 HORIZONTAL MINIMUM: 12,7 (0.500) or 17,78 (0.700)  
 VERTICAL MINIMUM: 17,78 (0.700)  
 TERMINALS: PC pins  
 MOUNTING: Soldering, centering pins

## Mechanical

TOTAL TRAVEL:  $\leq 3$  (.0018)  
 SWITCHING TRAVEL: 1,5 (0.0591)  
 LATCHING TRAVEL: 1,8 (0.0709)  
 OPERATING FORCE: 1.5 +/- 0.5 N (150 +/- 50 grams)

## Electrical

SWITCHING POWER MAX.: 240 mW DC  
 SWITCHING VOLTAGE MAX.: 24 V DC  
 SWITCHING CURRENT MAX.: 10 mA DC  
 CARRYING CURRENT AT 20°C (push-push version): 100 mA  
 DIELECTRIC STRENGTH (50 Hz, 1 min): 500 V  
 OPERATING LIFE with or without max. switching power  
 Momentary:  $\geq 5 \times 10^6$  operations  
 Push-push:  $\geq 5 \times 10^5$  operations  
 CONTACT RESISTANCE: Initial  $\leq 50$  m $\Omega$   
 After  $5 \times 10^6$  operations:  $\leq 100$  m $\Omega$   
 INSULATION RESISTANCE:  $\geq 10^{10}$   $\Omega$   
 CAPACITANCE at f= 10 kHz:  $\leq 0.8$  pF  
 BOUNCE TIME:  $\leq 2.5$  ms  
 Operating speed 400 mm/s (15.75/s)

## Process

SOLDERABILITY:  
 Wave soldering, compatible with lead free soldering profile  
 Hand soldering, 350°C for 3 seconds

## Environmental

OPERATING TEMPERATURE: -25°C to 85°C.

## How To Order

Our easy build-a-switch concept allows you to mix and match options to create the switch you need. To order, select desired option from each category and place it in the appropriate box. **Some of the configurations may not be available or could require some development.**

### Switch

Reference  
SER BK AU OA

<p><b>Series</b></p> <p><b>SER</b> Narrow button <b>SET</b> Wide button <b>SERU</b> Switch body only (no button)</p>	<p><b>LED</b></p> <p><b>NONE</b> No LED <b>L</b> 1 LED <b>2L</b> 2 LED's</p>	<p><b>1st LED Color***</b></p> <p><b>NONE</b> No LED <b>RD</b> Red <b>YE</b> Yellow <b>GN</b> Green</p>	<p><b>LED Spacing*</b></p> <p><b>NONE</b> Narrow LED Spacing (TYP Europe) <b>7.62</b> Wide LED Spacing (TYP No. America)</p>	<p><b>2nd LED Color***</b></p> <p><b>NONE</b> No LED <b>RD</b> Red <b>YE</b> Yellow <b>GN</b> Green</p>	<p><b>Function</b></p> <p><b>EE</b> Latching <b>OA</b> Non-latching</p>	<p><b>Body Color</b></p> <p><b>NONE</b> White (STD) <b>BRN</b> Brown</p>
		<p><b>Button Color**</b></p> <p><b>None</b> (SERU) <b>BK</b> Black <b>GY</b> Gray <b>WH</b> White <b>RD</b> Red <b>BU</b> Blue</p>			<p><b>Contact Material</b></p> <p><b>AU</b> Gold</p>	

### Button

Reference  
SRK BK

<p><b>Button Style</b></p> <p><b>SR</b> Narrow <b>ST</b> Wide</p>	<p><b>LED Holes</b></p> <p><b>NONE</b> No LED holes <b>L</b> 1 LED hole <b>2L</b> 2 LED holes</p>	<p><b>Button Color**</b></p> <p><b>BK</b> Black <b>GY</b> Gray <b>WH</b> White <b>RD</b> Red <b>BU</b> Blue</p>	<p><b>Latching</b></p> <p><b>None</b> For use with momentary switch <b>EE</b> With "EE" staple for latching</p>
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\* LED spacing only applies when 1 LED requested  
 \*\* Additional button colors available by request  
 \*\*\* Additional LED colors available by request including Bi color configurations



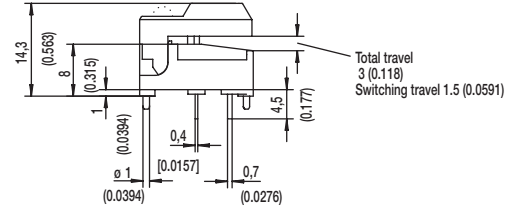
*Dimensions are shown: mm  
Specifications and dimensions subject to change*

Key Switches

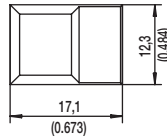
# DIGITAST Microminiature SPDT, Key Switches

## DESIGNATION

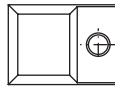
### SER NARROW BUTTON



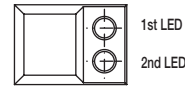
SER



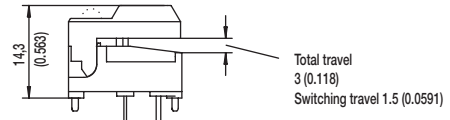
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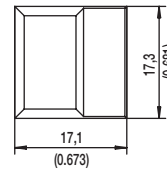
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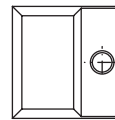
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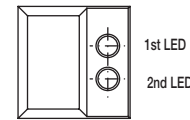
SET



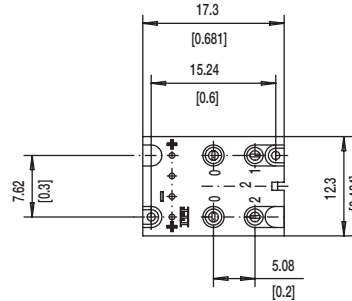
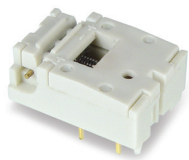
SETL



SET2L



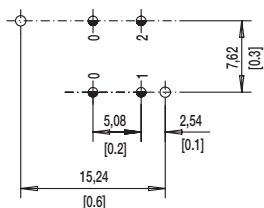
### SERU NO BUTTON



# DIGITAST Microminiature SPDT, Key Switches

## LED

### NONE NO LED

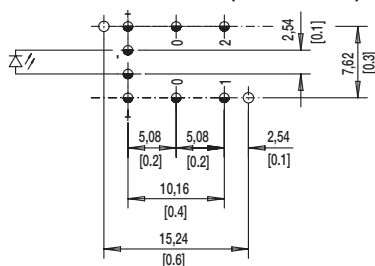


### L 1 LEDs

#### 7.62 mm Spacing (TYP No. America)



#### NARROW SPACING (TYP EUROPE)



TOP VIEW OF PCB

### 2L 2 LEDs



$\varnothing 1.0 \pm 0.1$  (0.0394  $\pm$  0.00349)

$\varnothing 1.1 \pm 0.05$  (0.0433  $\pm$  0.00197)

## BUTTON COLOR

**BK** BLACK

**GY** GRAY

Other button colors available by request [red (RD), green (GN), white (WH), yellow (YE), blue (BU), orange (OG)].

## LED COLOR

OPTION CODE	COLOR
<b>NONE</b>	Models without LED
<b>RD</b>	Red
<b>GN</b>	Green
<b>YE</b>	Yellow

## CONTACT MATERIAL

OPTION CODE	MATERIAL
<b>AU</b>	Gold

## FUNCTION

OPTION CODE	COLOR	SCHEMATIC
<b>OA</b>	Momentary	
<b>EE</b>	Push-Push	



*Dimensions are shown: mm  
Specifications and dimensions subject to change*

## Looking for pricing, stock, or lifecycle information?

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- ⊖ [C&K Components](#) Information

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- ✓ Shortage Management
- ✓ Alternative Solution
- ✓ Excess Inventory Management