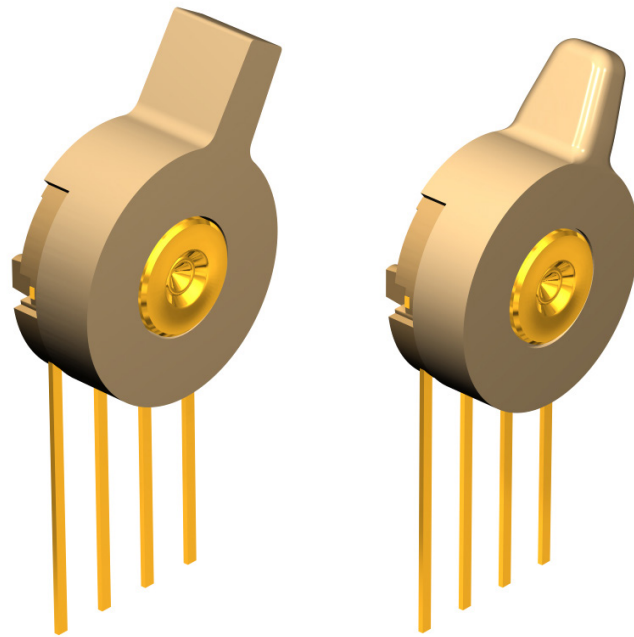


# Switches Model SA 26



## Features

- 3 (style A) or 2 (style B) position switch
- Different toggle styles available
- Very compact design
- Different plastic colors available
- Make-Before-Break (MBB)

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Sonion reserves the right to make changes at any time to improve reliability, function or design, in order to provide the best product possible.

## 1. History Revision

Revision Number/Date	Change from last revision
04 / Apr 07	History revision added. Durability of toggle added. Bounce time added. Storage humidity added. Switching current added. New knob styles added. Change of switch material. Diameter of plastic pin in 'Mechanical Dimensions' corrected to $\varnothing$ 0.85 mm. New lay-out
MT1021.A (07/08)	Tolerances on 'Mechanical Dimensions' corrected.
005/JUL-21-2009	Operational temperature and humidity removed
006/2014-01-10	Updated design and new RoHS logo directive (2011/65/EU)
007/2014-02-17	Discontinue Toggle 02 and Toggle 03
008/2019-09-03	Change of storage temperature and humidity (CR3860)

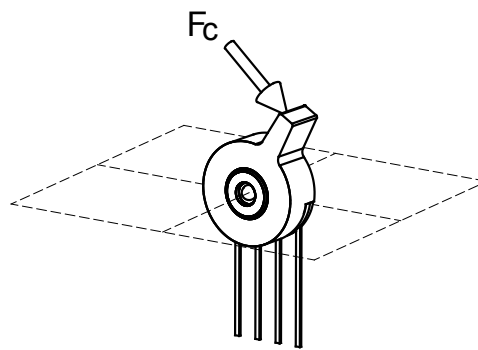
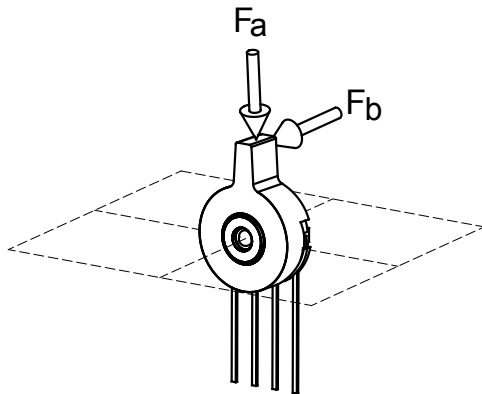
## 2. Mechanical Specifications

Rotational angle	60°
Switch operating torque	Min. 40 cNcm, Max. 85 cNcm
End stop torque	Min. 600 cNcm

Durability of toggle	
Fa, static	10 N
+/- Fb, static	10 N
Fc, static	10 N

Lifetime	Min. 50,000 cycles
Bending of terminals	Min. 2 bending cycles 90° with 0.25 N load

Definition of shear force and toggle retention force:  
Fb, Fc: Attack point is 0.75 mm from top of toggle

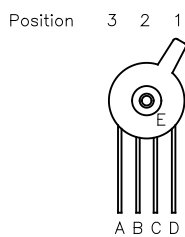


### 3. Electrical Specifications

Switch contact resistance	Max. 150 mΩ
Switch insulation resistance	Min. 1 MΩ
Switching mode	Make-Before-Break (MTB)
Bounce time	Max. 5 mS
Switching current	Max. 10 mA
Continuous current	Max. 500 mA

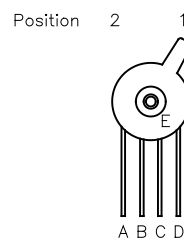
### 4. Switching Diagram

SA 26A 3 positions



Position \ Terminal	1	2	3
A	●		
B	●	●	
C		●	●
D			●
E	●	●	●

SA 26B 2 positions



Position \ Terminal	1	2
A	●	
B	●	
C		●
D		●
E	●	●

### 5. Material Specifications

All materials comply with RoHS directive (2011/65/EU)

Terminals	CuNiZn, gold flash plated
Selector springs	CuBe, gold plated
Detent springs	Stainless steel

Toggle	
New designs	PA 6.6, glass reinforced
Existing designs	POM or PA 6.6, glass reinforced
Base	PPS, glass reinforced

Lubricant, glue / seal, and paint specifications are proprietary information.

## 6. Environmental Conditions

Storage temperature	25°C
Storage humidity	60% RH
Purpose is to protect from high humidity and keep at driest condition as possible	

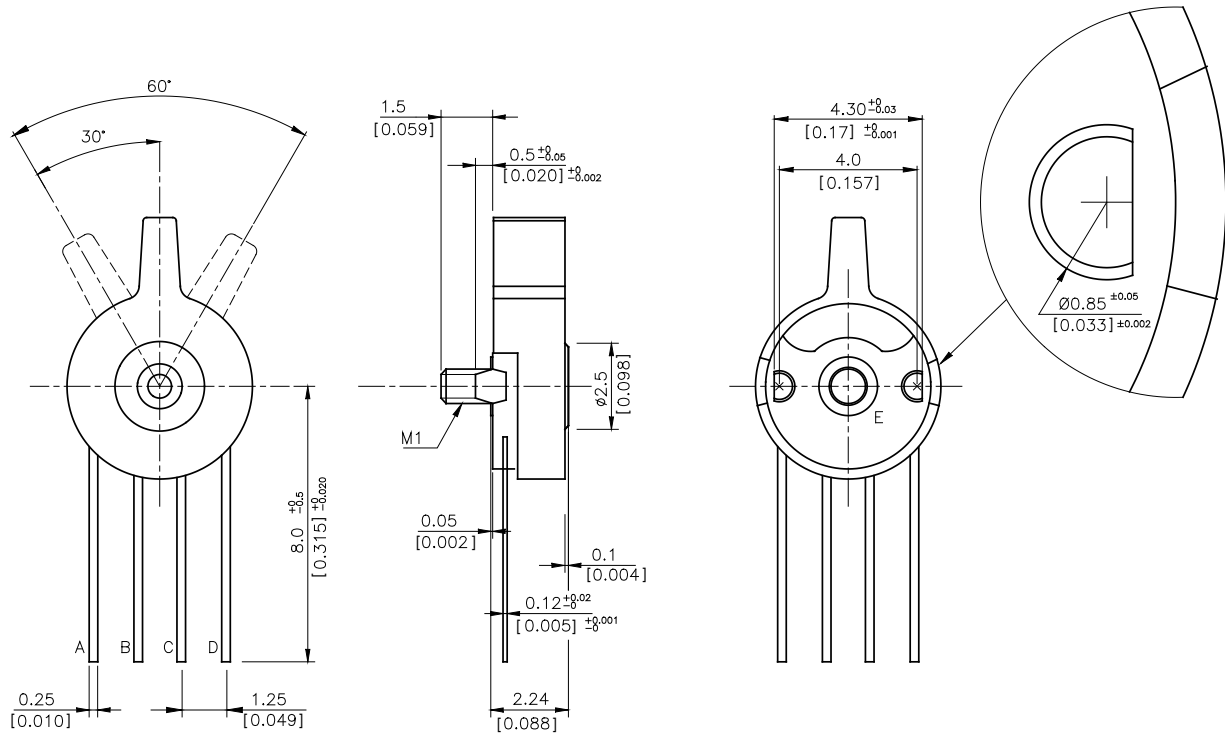
## 7. Recommended Process Parameters

Mounting	
Mechanically fixed by a M1 nut	
Fixation nut mounting torque	Max. 200 cNcm

Soldering	
Soldering temperature and time	300°C [572°F] for 3 s or 350°C [662°F] for 1 s
Soldering distance	Min. 0.3 mm [0.012"] from housing  Exceeding temperature, time and distance recommendations may damage the component. Mechanical stress on soldering terminals must be avoided during soldering.

Cleaning	
Cleaning solvents	Aqua wash (Alpha 2110), Benzine  Ultrasonic cleaning must be avoided as it may remove the lubricant inside the component.

## 8. Mechanical Dimensions

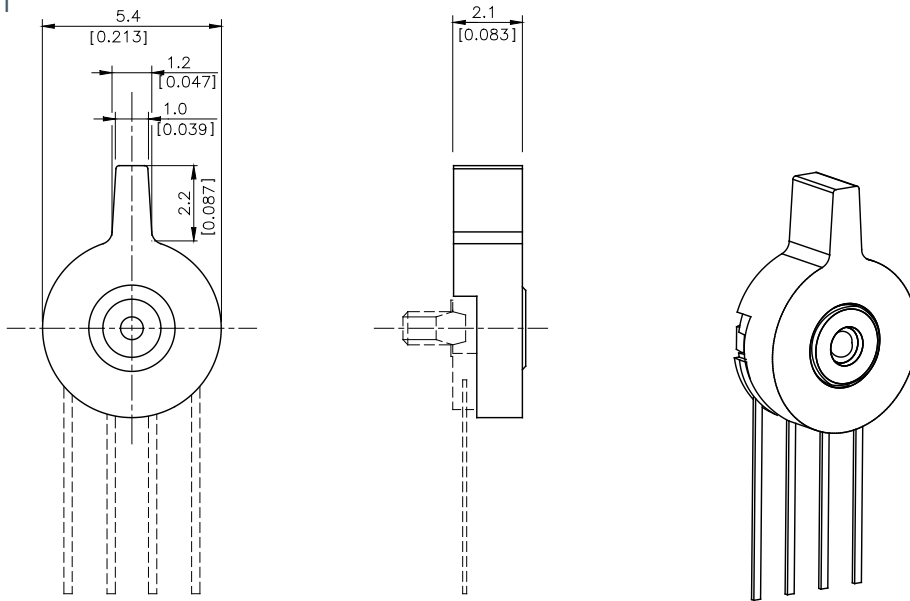


**Note:**

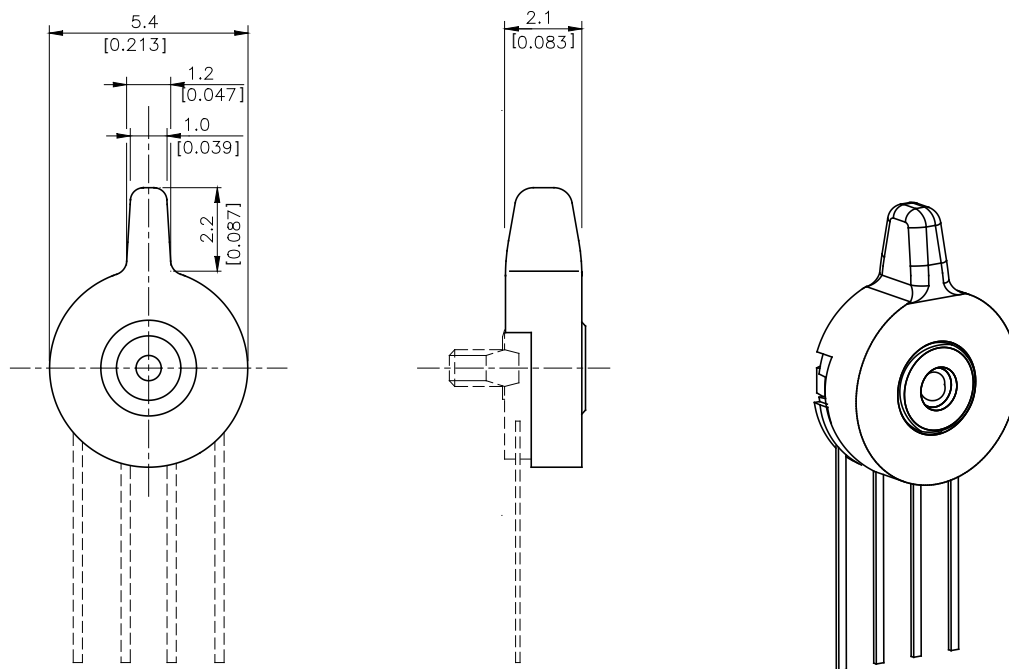
The standard measurement tolerance on the drawings is  $\pm 0.05$  mm/[0.002"]. Tolerances which differ from this value will be indicated on the drawings.

## 9. Toggle Styles

No. 01



No. 04



## 10. Plastic Colors

POM material: Please refer to the series 500 and 1600 included in the Sonion 'Plastic Color Assortment' binder

PA 6.6 material: Please refer to the series 100 included in the Sonion 'Plastic Color Assortment' binder



## 11. Product Specification Form

Name \_\_\_\_\_

Company \_\_\_\_\_

Customer Part No. \_\_\_\_\_

Parameters	Look at Page	Enter your choices	Guidelines
Model	2	SA 26	
Switch Diagram	5	A	3 positions
		B	2 positions
Toggle Styles	8		Please enter nos. 01 or 04
Plastic Colors	8		POM material: Please refer to the series 500 and 1600 included in the Sonion 'Plastic Color Assortment' binder  PA 6.6 material: Please refer to the series 100 included in the Sonion 'Plastic Color Assortment' binder