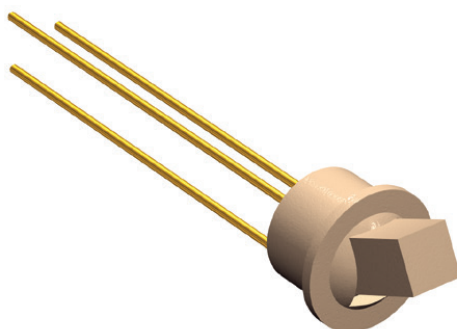
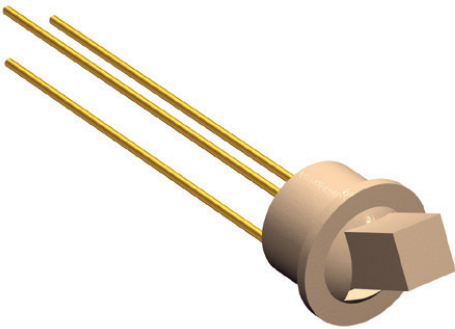




Switches Model SW 96



Features

- Circular design
- Very small dimensions, Ø2.54 mm/[0.1"]
- SW 96 with flanges
- Different plastic colors available

Contents

1. History Revision	3
2. Mechanical Specifications	4
3. Electrical Specifications	5
4. Material Specifications	5
5. Environmental Conditions	5
6. Recommended Process Parameters	6
7. Mechanical Dimensions	7
8. Housing Styles	8
9. Toggle Styles	10
10. Plastic Colors	12
11. Color Coding	12
12. Product Specification Form	13

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

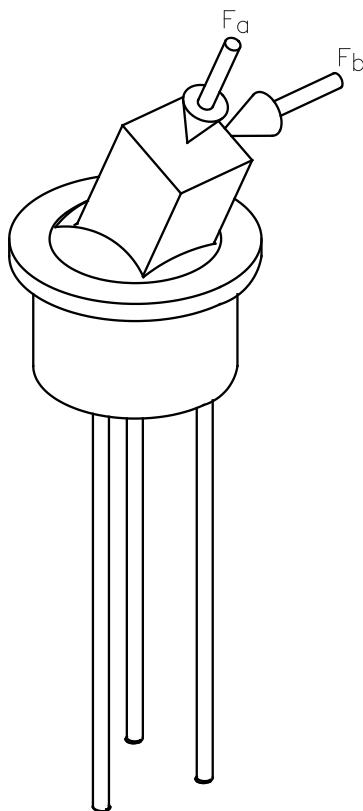
Revision Number/Date	Change from last revision
06 / Jan. 02	History Revision added. Solder terminals gold flash plated. Housing style 03 added. Toggle style 02, 06, 07 and 09 added.
07 / Apr. 08	Force definition drawing added. Storage humidity added. Operational temperature and humidity removed. New lay-out. New data sheet design.
MT1024.A (07/08)	No technical updates
008/JUL-22-2009	No technical updates
009/2014-01-10	Updated design and new RoHS logo directive (2011/65/EU)
010/2014-08-22	Discontinue SW 97 without flange
011/2015-06-09	Delete toggle style 04
012/2019-09-02	Change of storage temperature and humidity (CR3860)

2. Mechanical Specifications

Toggle angle	50° ±5°
Switch operating torque	Min. 5 cNcm, max. 15 cNcm
Terminal retention force	Min. 6 N
Durability of toggle:	
Fa, max. 20 cycles	4 N
Fb, max. 20 cycles	2 N
Lifetime	Min. 50,000 cycles
Bending of terminals	Min. 3 bending cycles 90°, min. 0.5 mm [0.02] from bottom

Definition of shear force and toggle retention force:

Fb: 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 current	Max. 10 mA
Continuous current	Max. 100 mA

Switching Diagram



4.Material Specifications

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

Terminals	AgCu3, gold flash plated
Detent spring	Stainless steel
Housing	PA 6.6, glass reinforced
Base	PEEK

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

5.Environmental Conditions

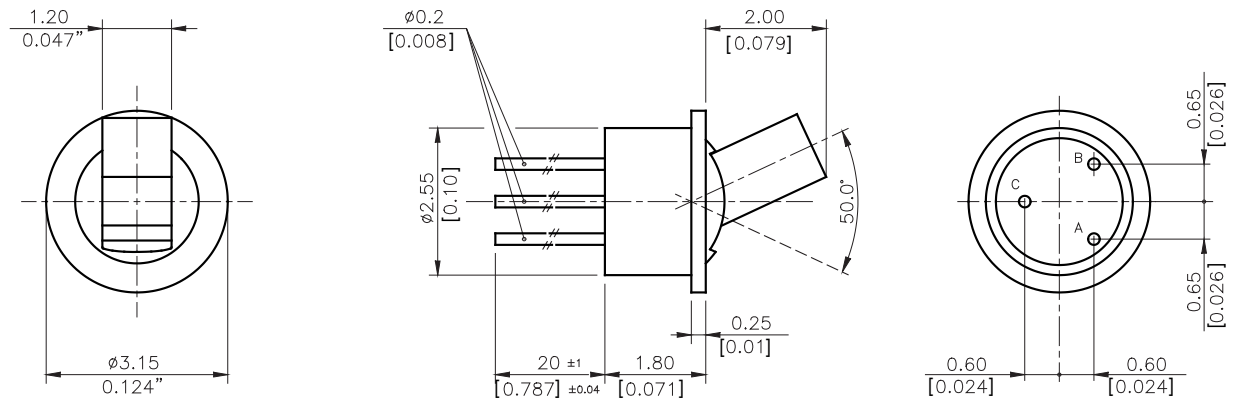
Storage temperature	25°C
Storage humidity	60% RH
Purpose is to protect from high humidity and keep as driest condition as possible	

6. Recommended Process Parameters

Gluing	
Types of glue	Cyanoacrylates (non-blooming) , i.e. Loctite 401, 408, 460 and Sicomet 50, 63, 77 Non-blooming types must be used to ensure that residuals from the curing process do not degrade the component.
Soldering	
Soldering temperature and time	300°C [572°F] for 3 s or 350°C [662°F] for 1 s
Soldering distance	Min. 0.5 mm [0.02"] 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.

7. Mechanical Dimensions

SW 96

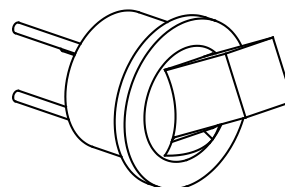
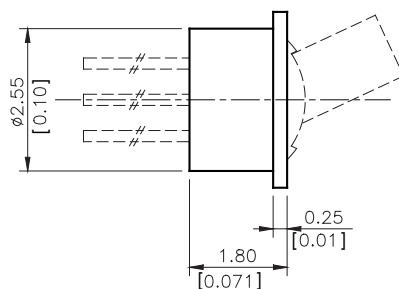
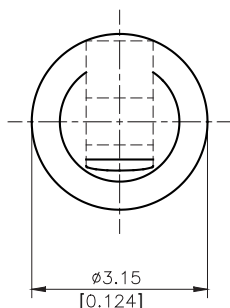


Note:

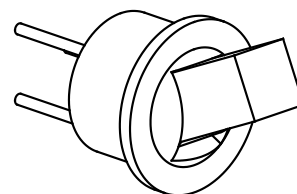
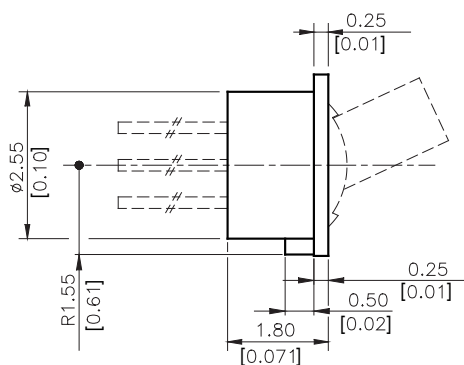
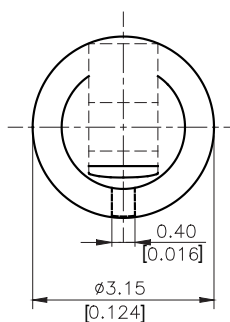
The standard measurement tolerance on the drawings is ± 0.05 mm/[0.002"]. Tolerances which differ from this value will be indicated on the drawings.

8. Housing Styles

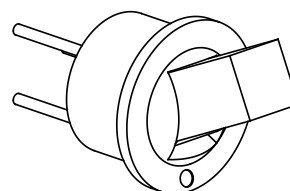
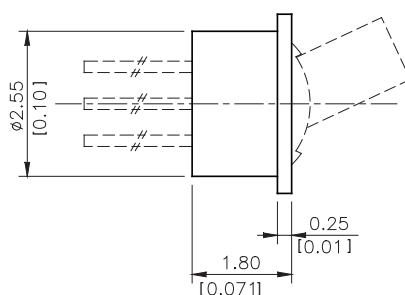
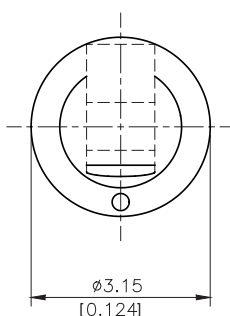
SW 96 No. 01



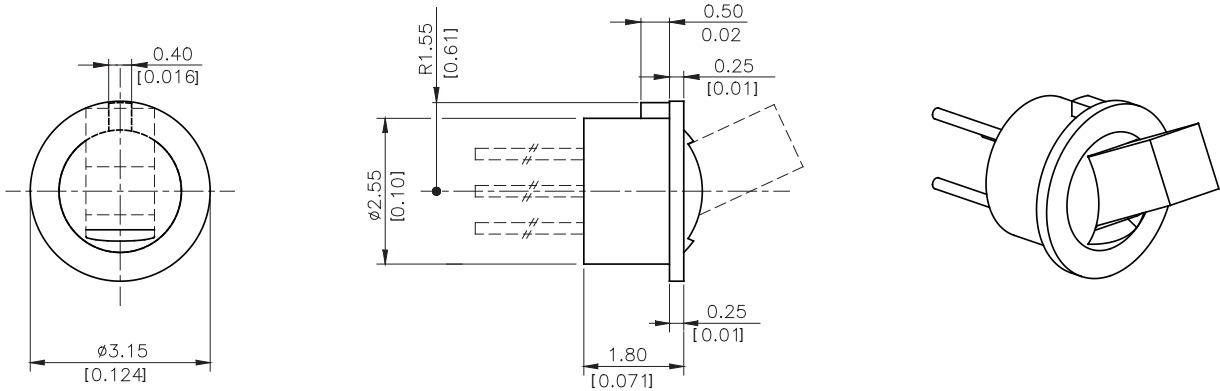
SW 96 No. 02



SW 96 No. 03

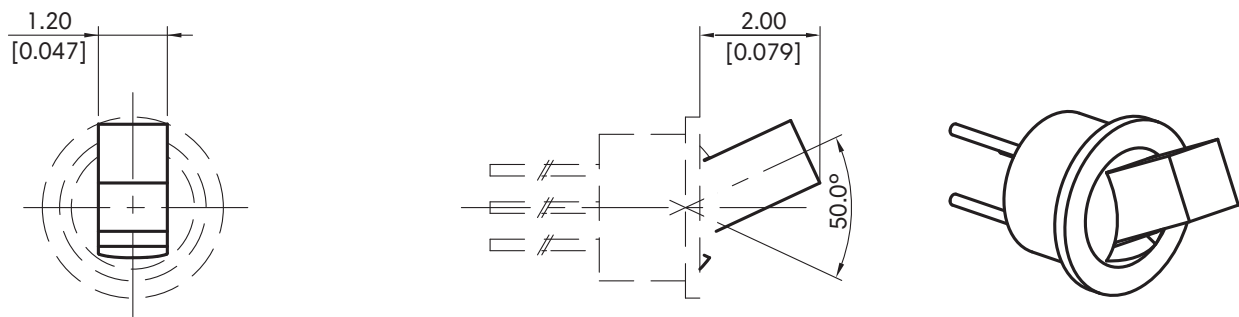


SW 96 No. 04

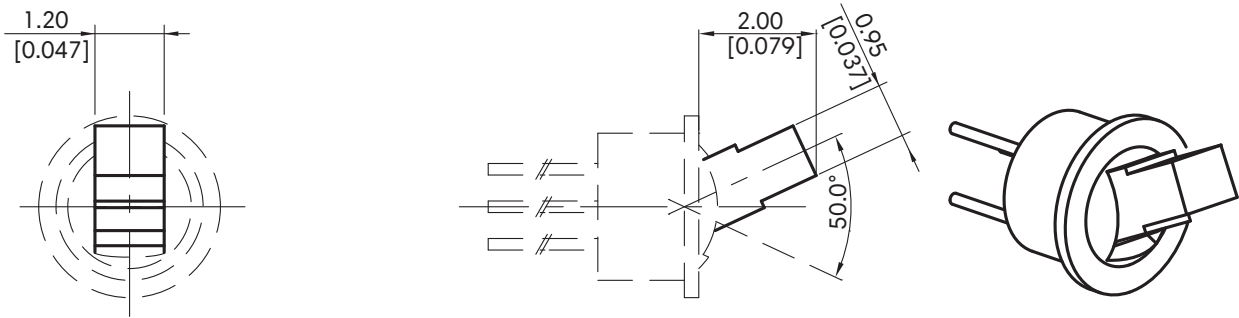


9.Toggle Styles

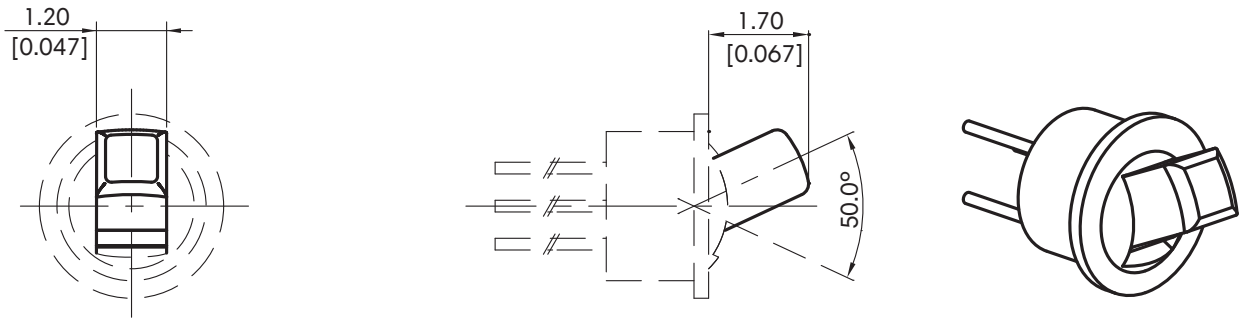
No. 01



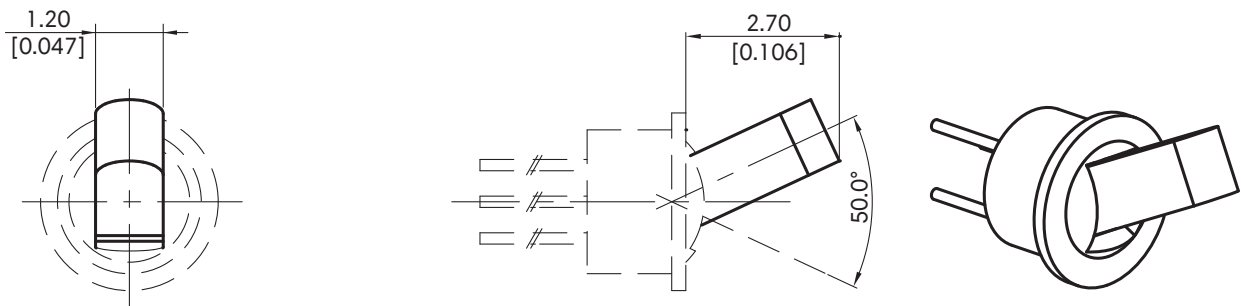
No. 02



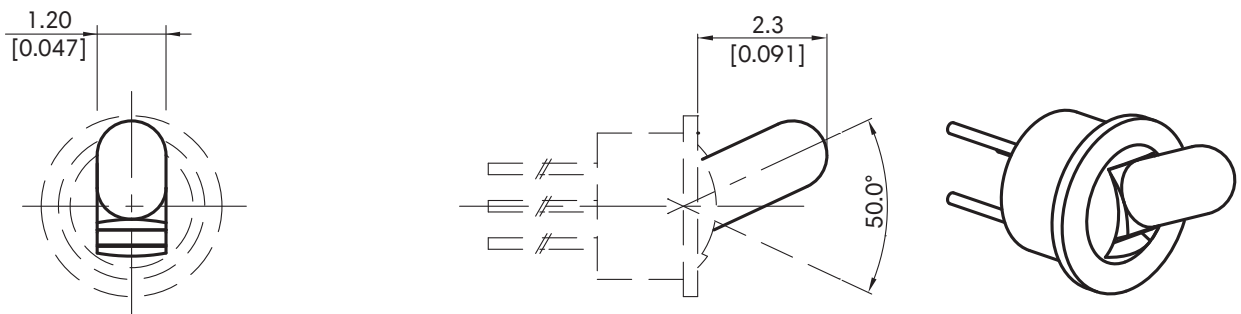
No. 03



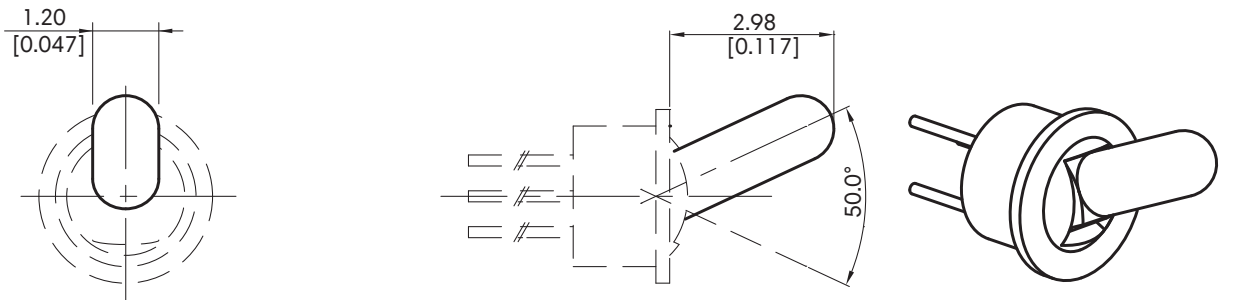
No. 05



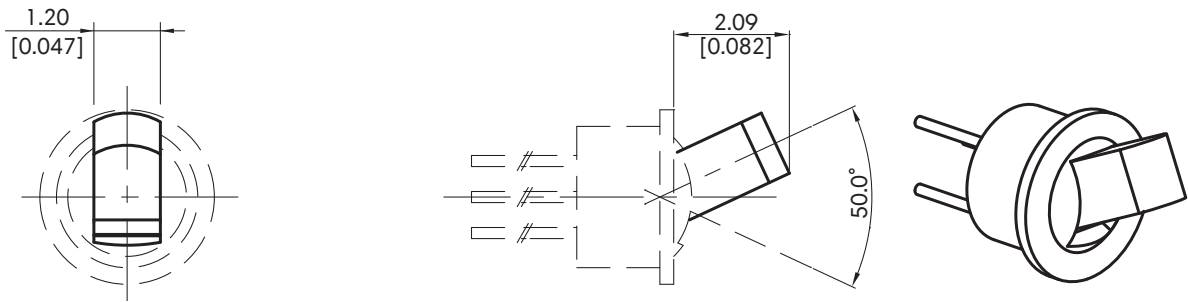
No. 06



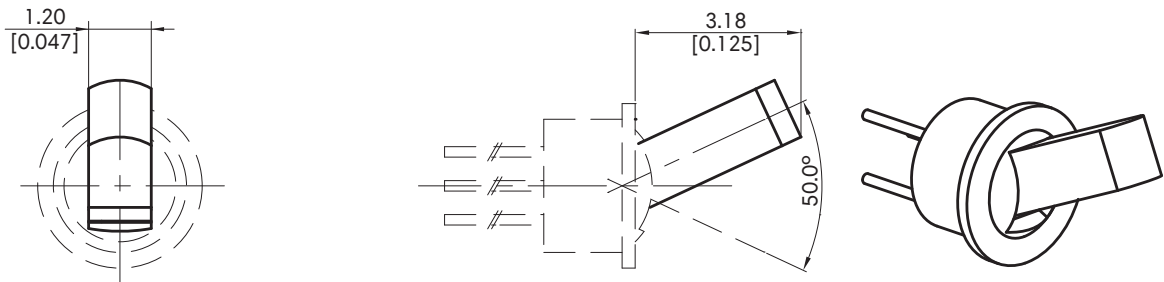
No. 07



No. 08



No. 09

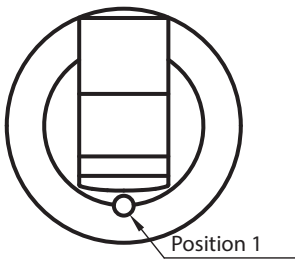


10. Plastic Colors

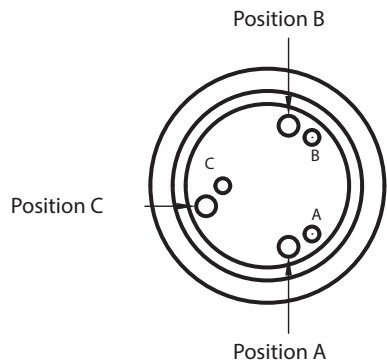
Please refer to the series 100 included in the Sonion 'Plastic Color Assortment' binder

11. Color Coding

Housing Color Coding



Bottom Color Coding



12. Product Specification Form

Name _____

Company _____

Customer Part No. _____

Parameters	Look at Page	Enter your choices	Guidelines
Model	2		Please enter SW 96
Housing	8-9		
Styles			
Toggle Styles	10-12		
Plastic Colors	12		Please refer to the series 100 included in the Sonion 'Plastic Color Assortment' binder
Color Coding Housing	12		Only available on housing style 03 of SW 96 Please enter color
Color Coding Bottom	12		Position A, please enter color
			Position B, please enter color
			Position C, please enter color