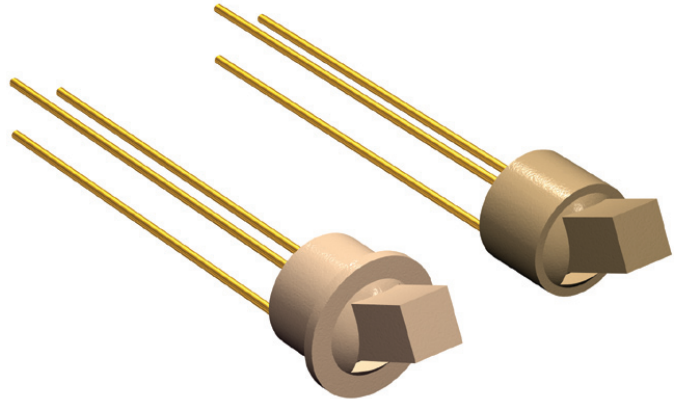


Features

- ⊕ Circular design
- ⊕ Very small dimensions, Ø2.54 mm/[0.1"]
- ⊕ SW 96 with flange
- ⊕ SW 97 without flange
- ⊕ Different plastic colors available



Contents

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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.

History Revision

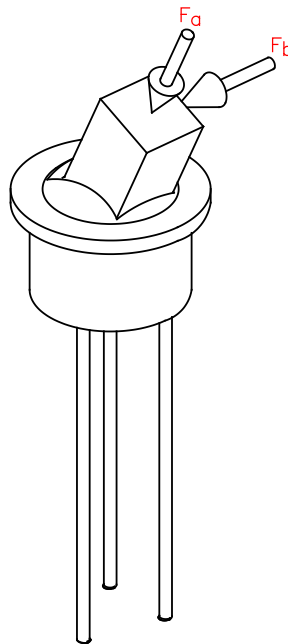
Revision Number/Date	Change from last revision
06 / Jan. 02	History Revision added. Solder terminals gold flash plated. Housing style 03 added. Toggle style 02, 06, 07 and 09 added.
07 / Apr. 08	Force definition drawing added. Storage humidity added. Operational temperature and humidity removed. New lay-out. New data sheet design.
MT1024.A (07/08)	No technical updates
008/JUL-22-2009	No technical updates

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:

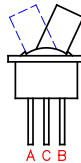
Fb: Attack point is 0.75 mm from top of toggle



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



Material Specifications

All materials comply with RoHS directive (2002/95/EC)



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.

Environmental Conditions

Storage temperature	-40 to +60°C
Storage humidity.....	10 to 95% RH

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

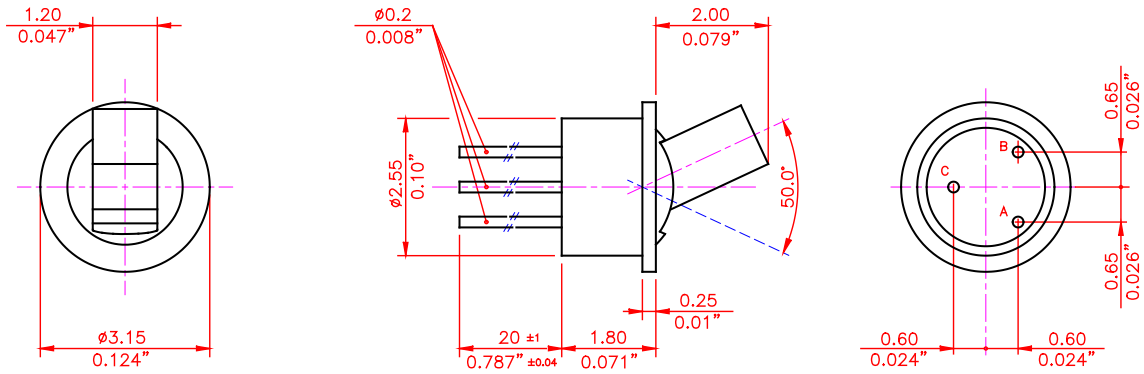
Soldering distance..... Min. 0.5 mm [0.02"] from housing
Exceeding temperature, time and distance recommendations may damage the component. Mechanical stress on soldering terminals must be avoided during soldering.

Cleaning:

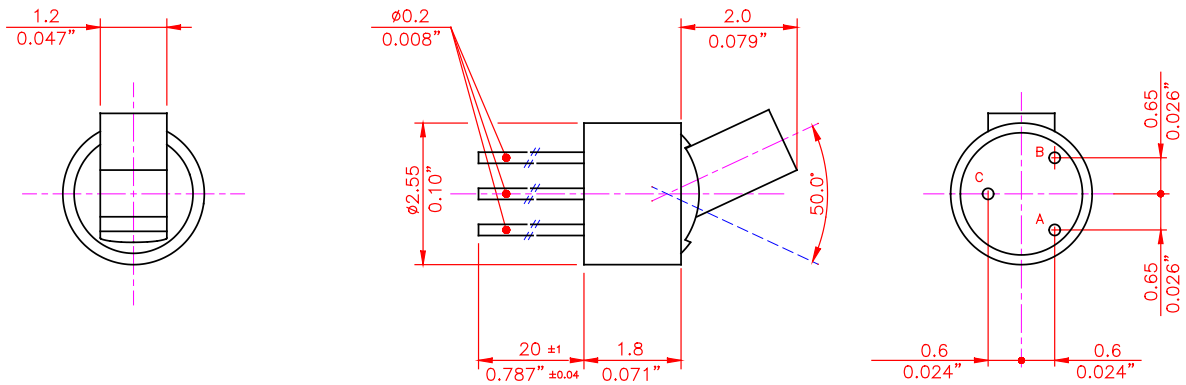
Cleaning solvents..... Aqua wash (Alpha 2110), Benzine
Ultrasonic cleaning must be avoided as it may remove the lubricant inside the component.

Mechanical Dimensions

SW 96



SW 97

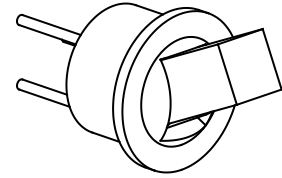
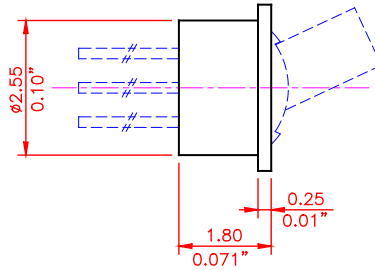
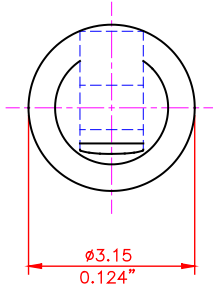


Note:

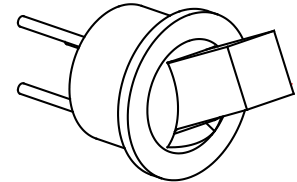
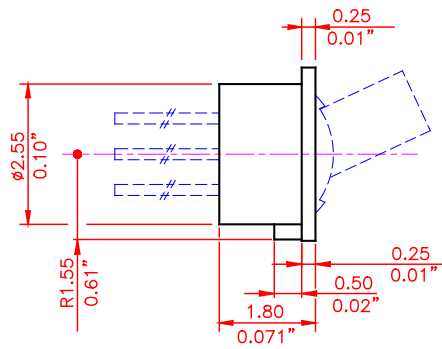
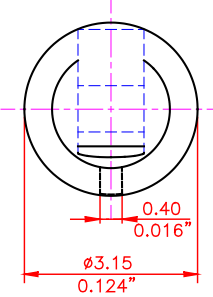
The standard measurement tolerance on the drawings is ± 0.05 mm/[0.002"]. Tolerances which differ from this value will be indicated on the drawings.

Housing Styles

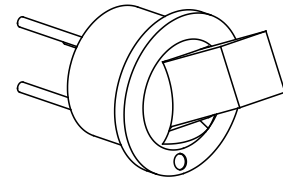
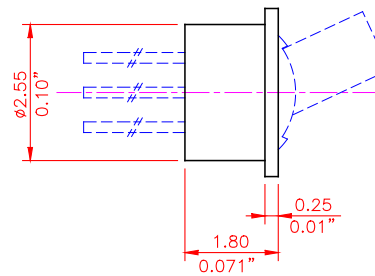
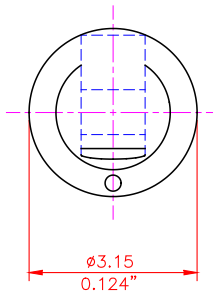
SW 96 No. 01



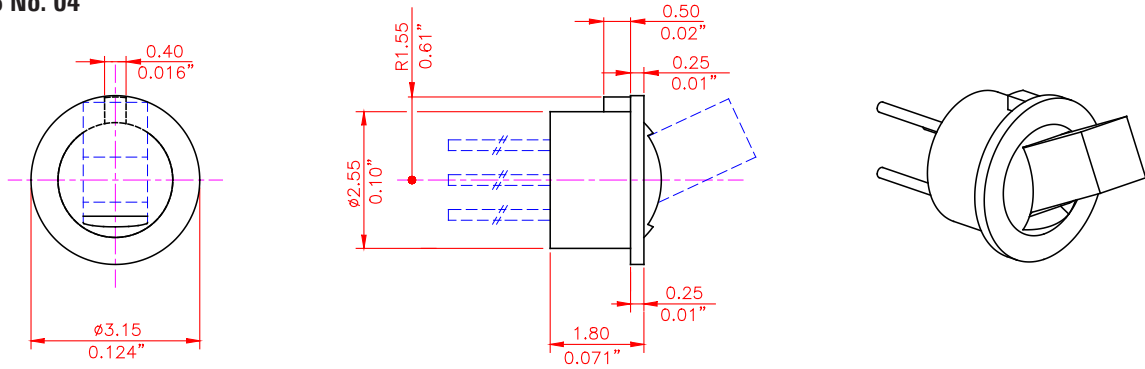
SW 96 No. 02



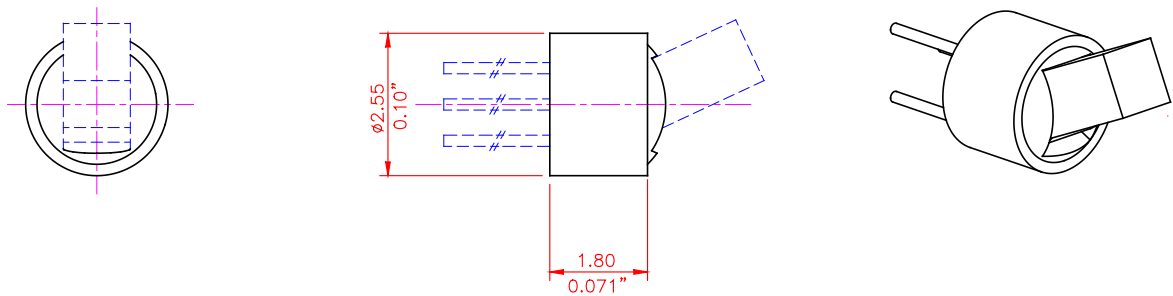
SW 96 No. 03



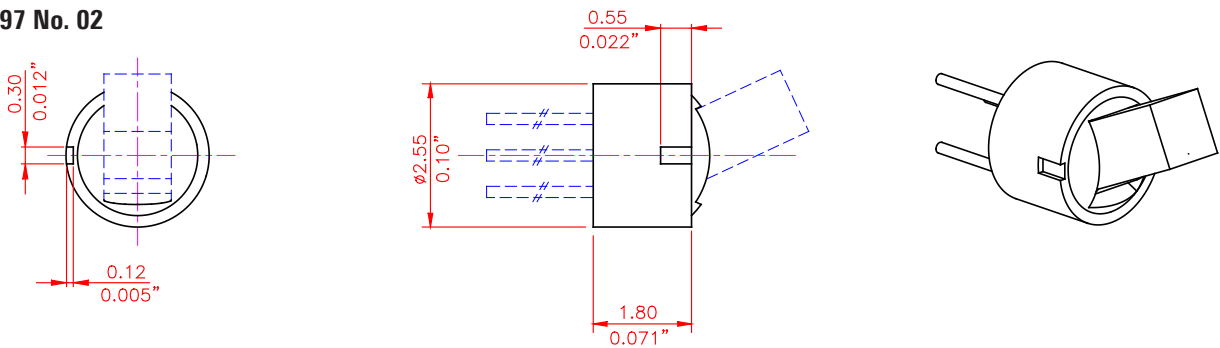
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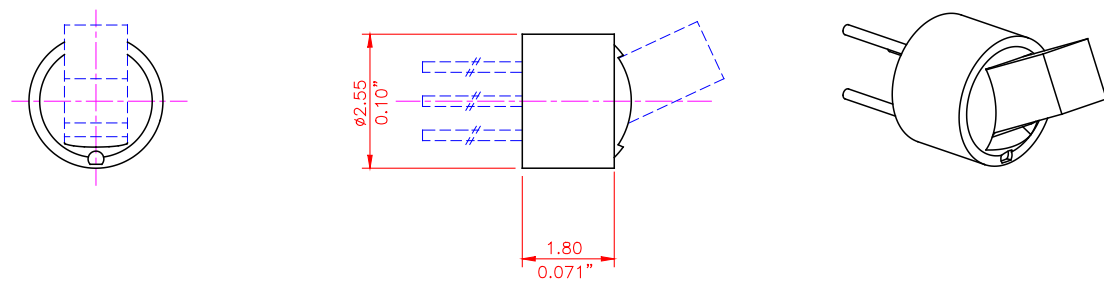
SW 97 No. 01



SW 97 No. 02

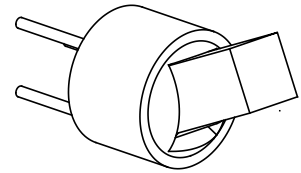
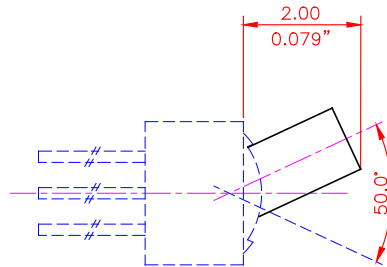
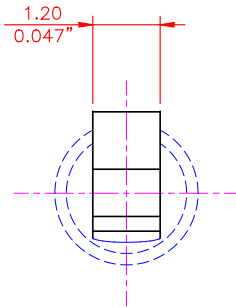


SW 97 No. 03

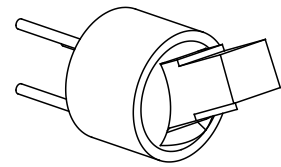
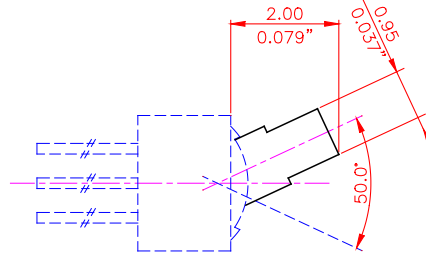
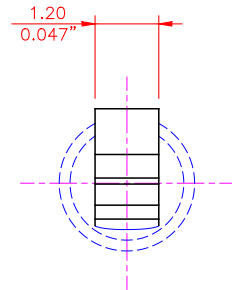


Toggle Styles

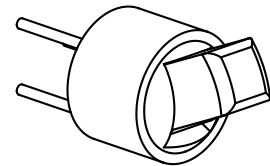
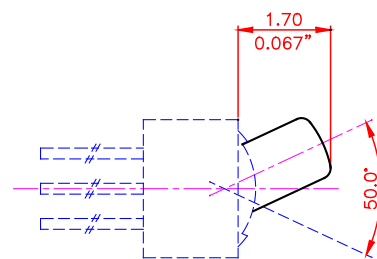
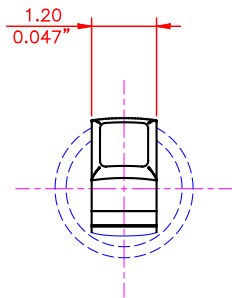
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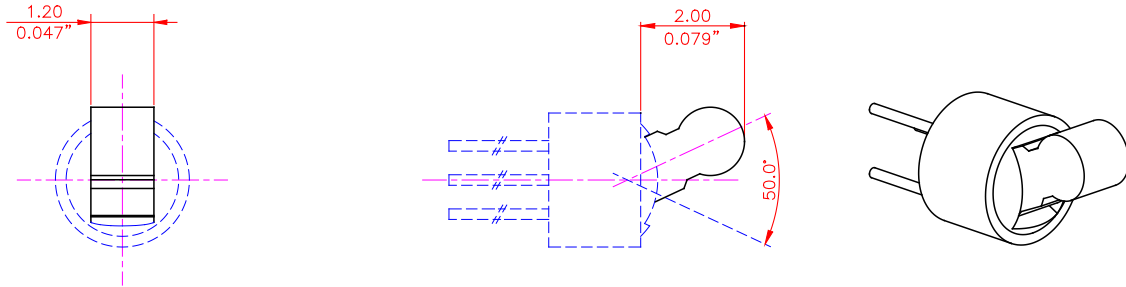
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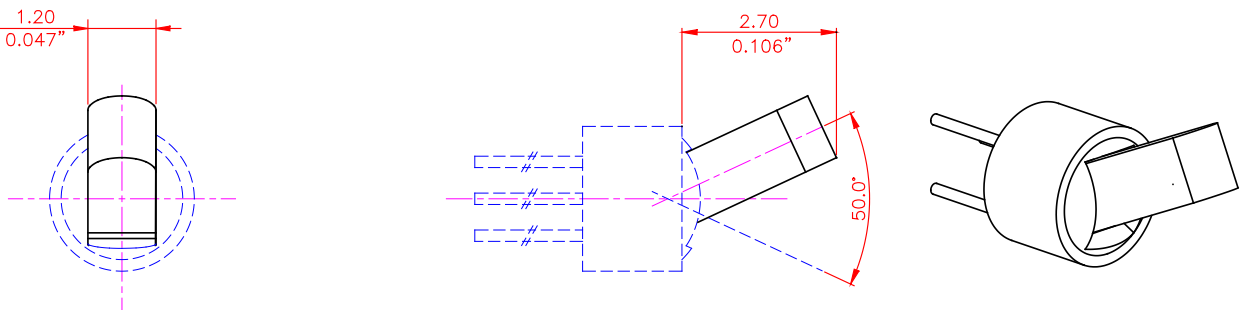
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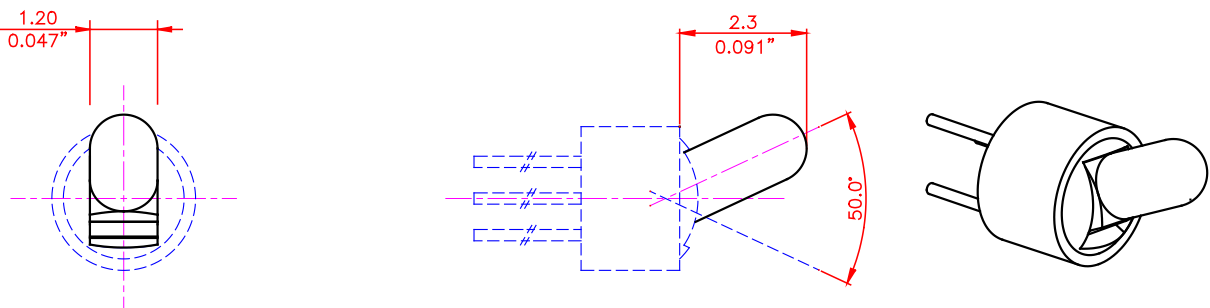
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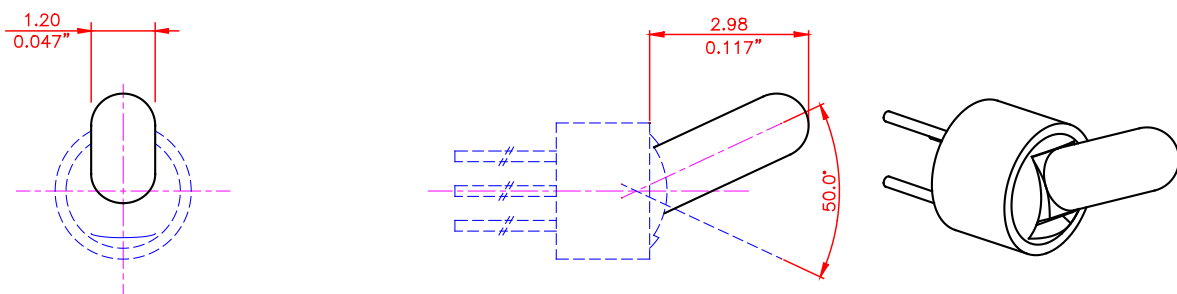
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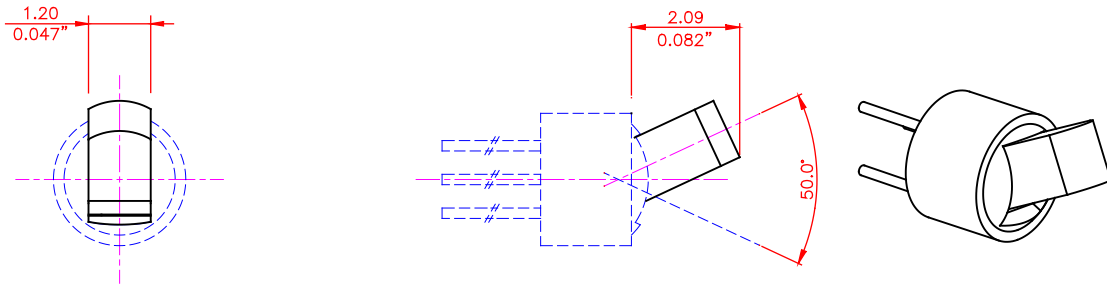
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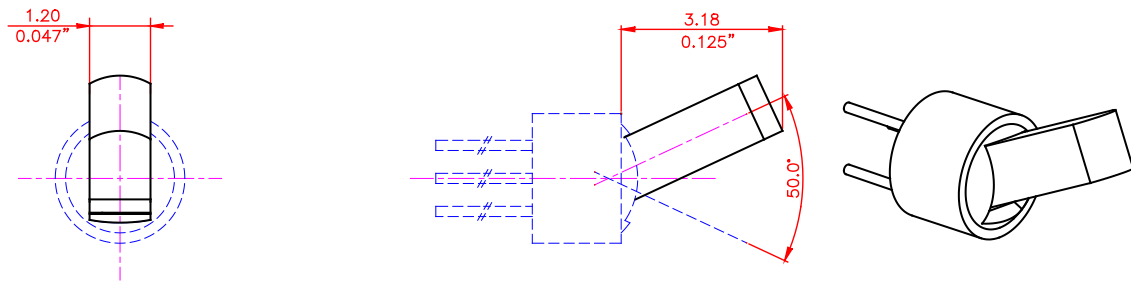
No. 07



No. 08



No. 09

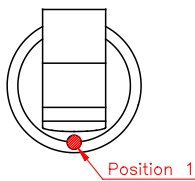


Plastic Colors

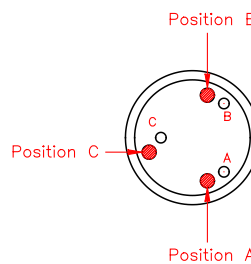
Please refer to the series 100 included in the Sonion 'Plastic Color Assortment' binder

Color Coding

Housing Color Coding



Bottom Color Coding



Product Specification Form

Name: _____

Company: _____

Customer Part No.: _____

Parameters	Look at Page	Enter your choices	Guidelines
Model	1		Please enter SW 96 or SW 97
Housing Styles	7-8		
Toggle Styles	9-11		
Plastic Colors	11		Please refer to the series 100 included in the Sonion 'Plastic Color Assortment' binder
Color Coding Housing	11		Only available on housing style 03 of SW 96 and SW 97 Please enter color
Color Coding Bottom	11		Position A, please enter color
			Position B, please enter color
			Position C, please enter color