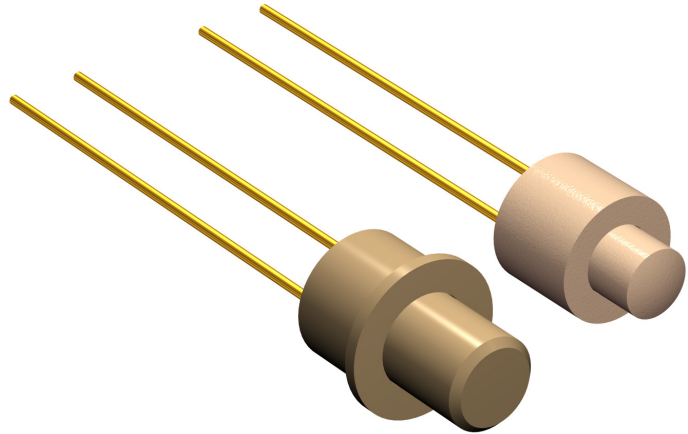


### Features

- ⊕ Very small dimensions, Ø2.54 [0.1"]
- ⊕ With or without flange
- ⊕ With different travel of the knob
- ⊕ With different activating force
- ⊕ Different plastic colors available
- ⊕ Different lead wire lengths available



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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
07 / Jan. 02	History Revision added. Solder terminals gold flash plated. Electrical load specified for continuous and switching currents.
08 / Aug. 05	New lay-out. Force definition added.
MT1012.A (02/09)	Knob no. 16 added.
009/JUL-20-2009	No technical updates
010/JUL-13-2011	Operational temperature removed.

### Mechanical Specifications

Switch travel:

Standard .....	0.35 mm [0.014"]
Reduced.....	0.15 mm [0.006"]

Switch activating force

- Standard .....	Min. 75 cN, Max. 150 cN, for knob style 01, 02 and 03
- Low.....	Min. 35 cN, Max. 60 cN, for knob style 01 and 03

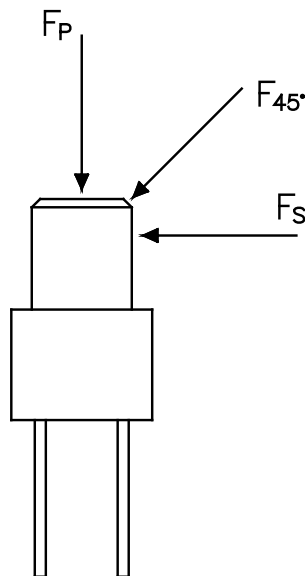
Lifetime .....	Min. 100,000 cycles
Bending of terminals .....	Min. 3 bending cycles 90°, Min. 0.5 mm/[0.02"] from bottom

Terminal retention force.....	Min. 4 N
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Durability of knob:

F <sub>p</sub> : continuous .....	Max. 5 N
F <sub>p</sub> : max. 20 cycles .....	Max. 20 N
F <sub>45°</sub> : max. 20 cycles .....	Max. 5 N
F <sub>s</sub> : max. 20 cycles.....	Max. 5 N

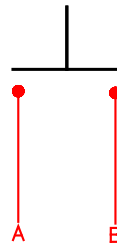
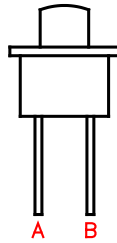
### Definition of shear force and knob retention force



### 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)



Switch terminals.....	Ag, gold flash plated
Housing .....	PA 6.6, glass reinforced
Knob .....	PA 6.6, glass reinforced
Base.....	PEEK

### Environmental Conditions

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

### Recommended Processing Conditions

#### Gluing:

Types of glue.....	Cyanoacrylate (non-blooming), i.e. Loctite 401, 408, 460 and Sicomet 50, 63, 77 <b>Non-blooming types must be used to ensure that residuals from the curing process do not degrade the component.</b>
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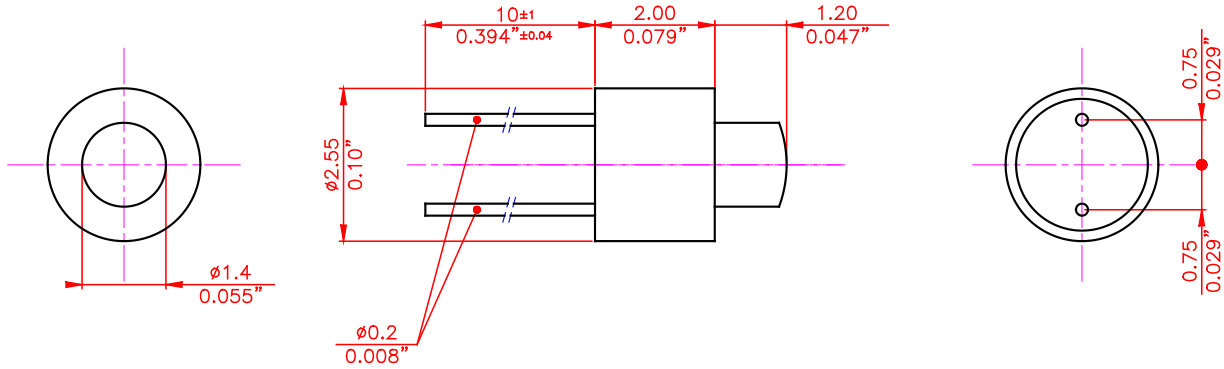
#### Soldering:

Soldering temperature and time .....	Max. 300°C [570°F] for 3 s or 350°C [660°F] for 1 s
Soldering distance.....	Min. 0.3 mm [0.012"] from housing <b>Exceeding temperature, time and distance recommendations may damage the component. Mechanical stress on soldering terminals must be avoided during soldering.</b>

#### Cleaning:

Cleaning solvents .....	Aqua wash (Alpha 2110), Benzine <b>Ultrasonic cleaning must be avoided as it may remove the lubricant inside the component.</b>
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### Mechanical Dimensions

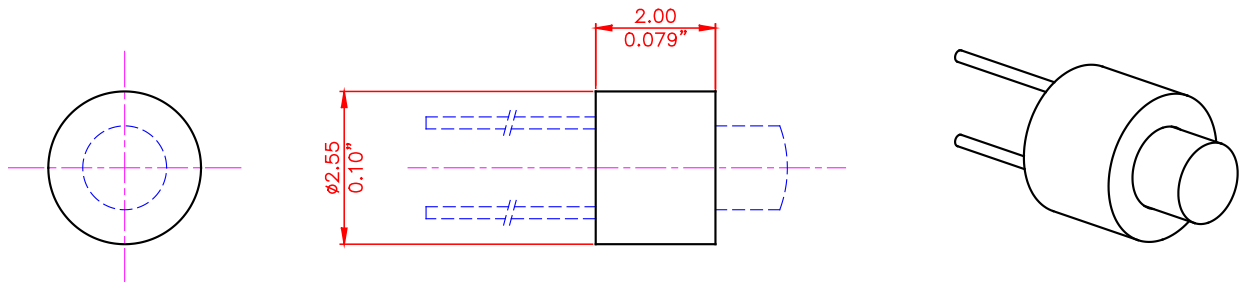


#### Note:

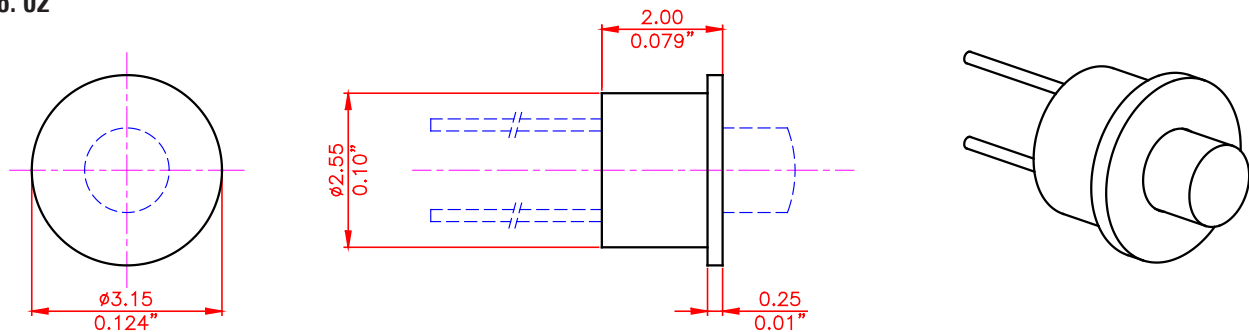
The standard measurement tolerance on the drawings is  $\pm 0.05$  mm/[0.002"]. Tolerances which differ from this value will be indicated on the drawings.

### Housing Styles

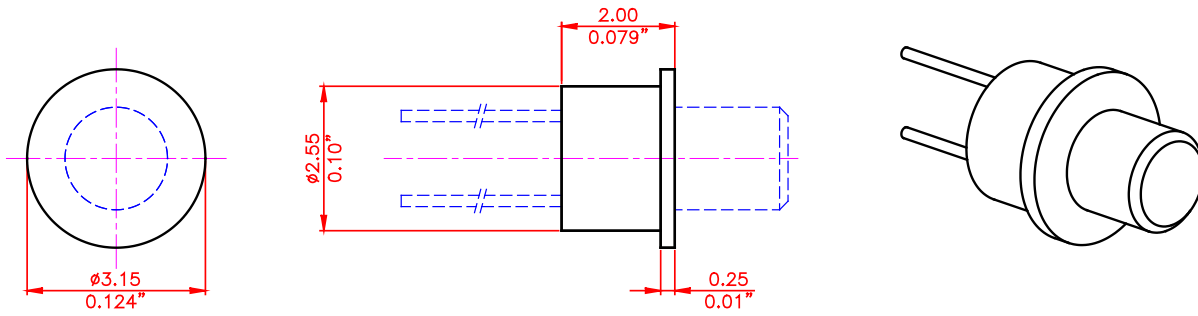
#### No. 01



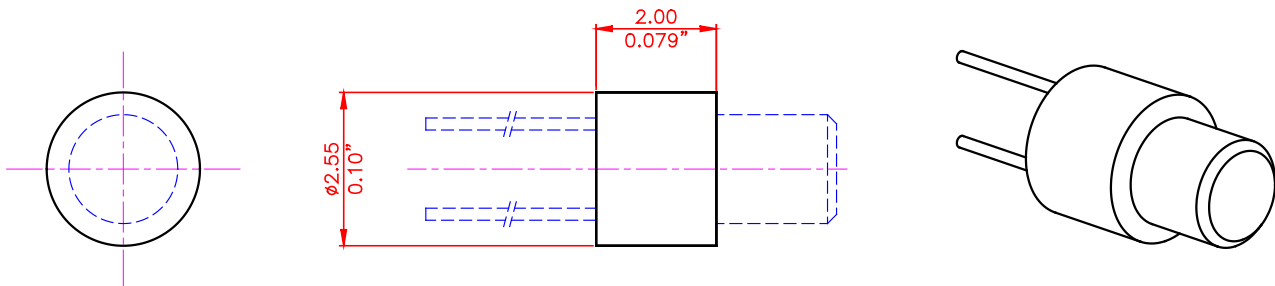
#### No. 02



No. 03



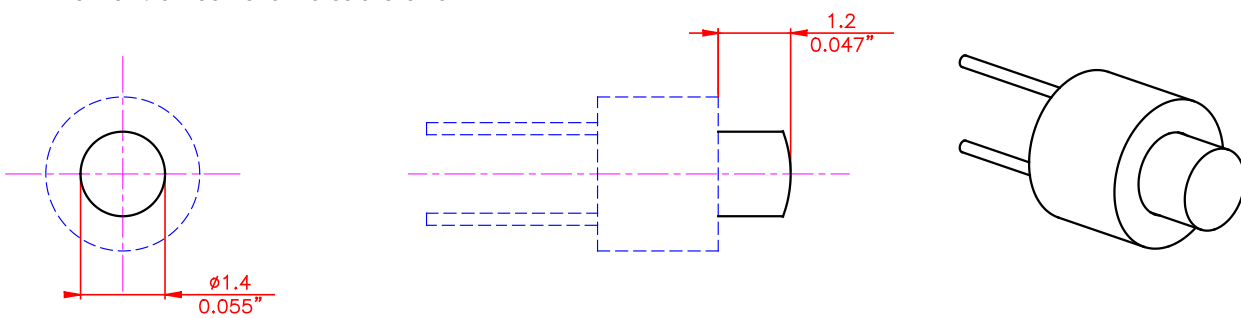
No. 07



### Knob Style

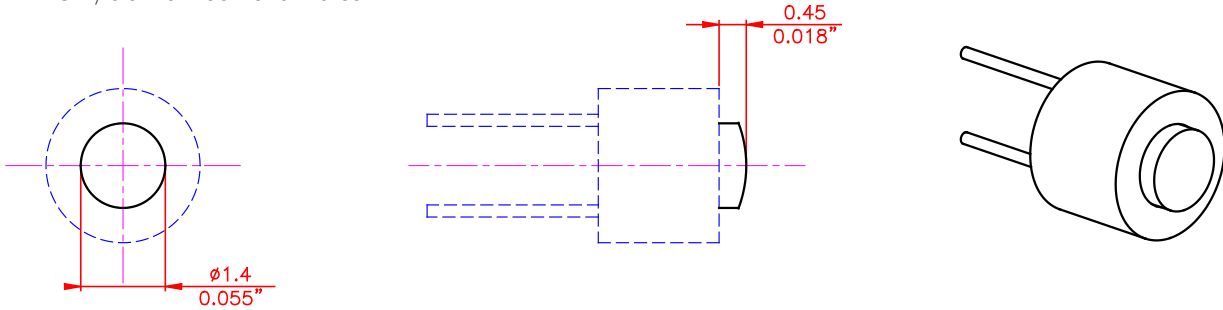
#### No. 01, knob travel 0.35 mm [0.014"]

Standard/low activation force available



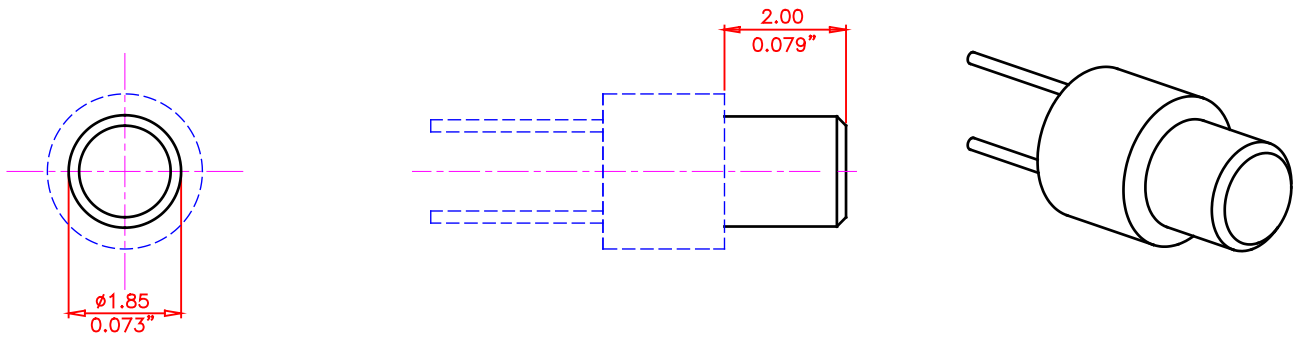
### No. 02, knob travel reduced to 0.15 mm [0.006"]

Only standard activation force



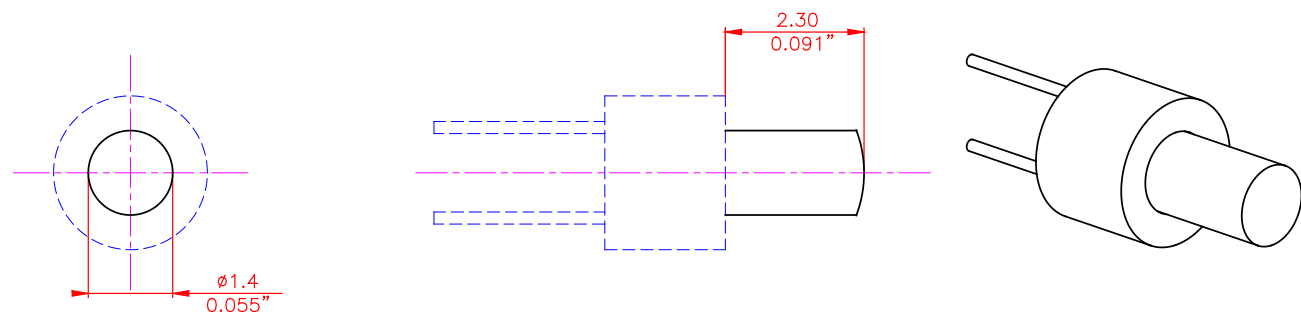
### No. 03, knob travel 0.35 mm [0.014"]

Standard/low activation force available



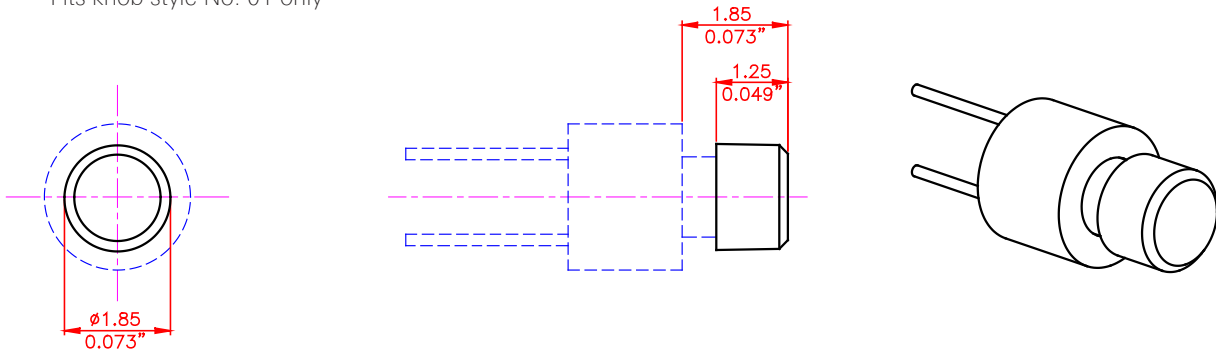
### No. 16, knob travel 0.35 mm [0.014"]

Standard/low activation force available



### Extension No. 01

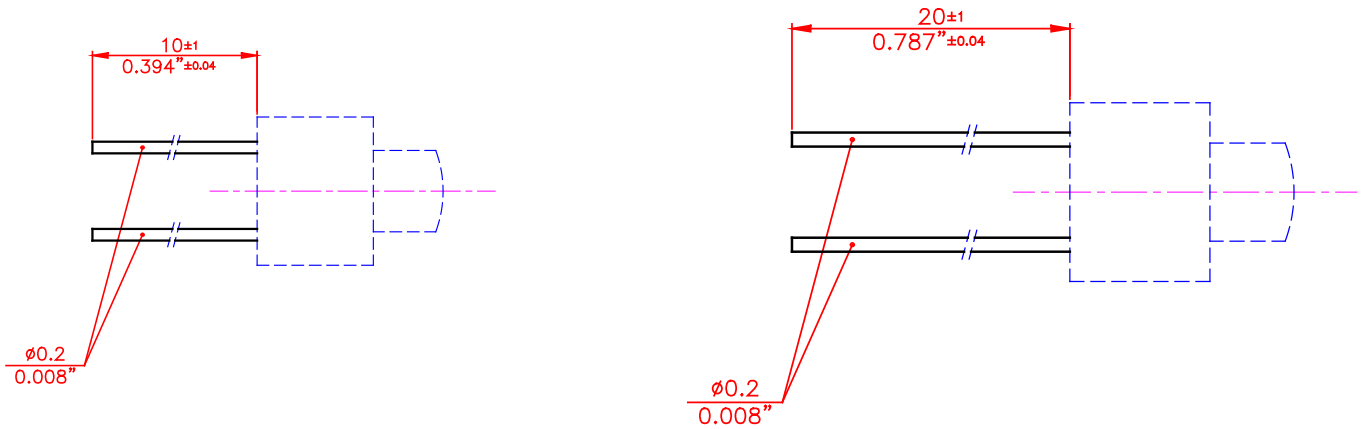
Fits knob style No. 01 only



### Lead Wires

10 mm

20 mm



### Knob Plastic Colors

Please refer to the series 100 in the Sonion 'Plastic Color Assortment' binder for knob plastic colors.

### Product Specification Form

Name: \_\_\_\_\_

Company: \_\_\_\_\_

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

Parameters	Look at Page	Enter your choices	Guidelines
Model	1	PB 95	
Housing Styles	6-7		Knob Styles nos. 01 and 02 are only available for Housing Styles nos. 01 and 02  Knob Styles no. 03 is available for Housing Styles nos. 03 and 07
Knob Styles	8-9		Housing Styles nos. 01 and 02 are only available for Knob Styles nos. 01 and 02  Housing Styles nos. 03 and 07 is available for Housing Knob no. 03
Activation Force		Standard	Nos. 01, 02 and 03 knob styles
		Low	Nos. 01 and 03 knob styles
Knob Extension	9		Fits knob style no. 01 only
Plastic Colors	9		Please refer to the series 100 included in the Sonion 'Plastic Color Assortment' binder
Terminal Length	9		Please enter lead wire length 10 mm or 20 mm