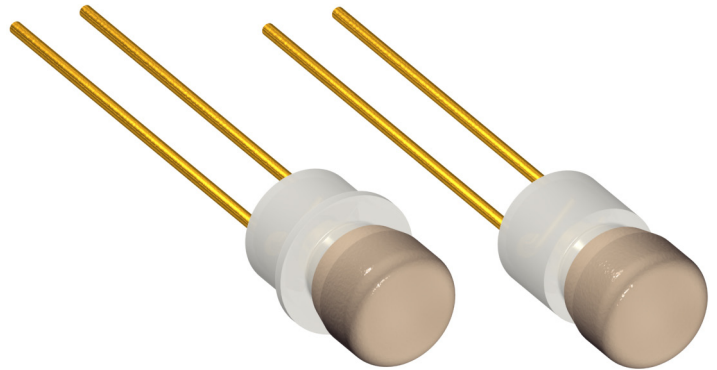


Features

- ⊕ Very small dimensions, Ø 1.9 mm [0.075"]
- ⊕ With or without flange
- ⊕ 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
02 / Oct. 02	History Revision added. Color choices for housing styles added.
03 / Feb. 06	Knob design changed to tapered shape. New layout.
MT1013.A (07/08)	No technical updates
004/JUL-20-2009	Operational temperature and humidity removed

Mechanical Specifications

Switch travel	0.25 mm
Switch activating force	Min. 0.35 N, Max. 0.70 N
Knob retention force.....	Min. 15 N
Lifetime	Min. 100,000 cycles
Bending of terminals	Min. 3 bending cycles 90° with 0.25 N load
Durability of switch button:	
- Allowed force to be applied continuously in operational direction (normal use)	Max. 5 N
- Allowed force to be applied for max. 20 cycles in operational direction	Max. 20 N
- Allowed force to be applied for max. 20 cycles in a 45° angle to switch button	Max. 5 N
- Allowed force to be applied for max. 20 cycles perpendicular to switch button.....	Max. 7 N
Durability of solder terminals.....	Min. 4 N pull strength

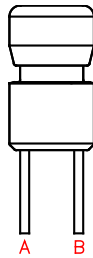
Definition of knob shear and knob pull strength forces:

From top of knob to shear force attack point: 0.75 mm

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	POM
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
Non-blooming types must be used to ensure that residuals from the curing process do not degrade the component.

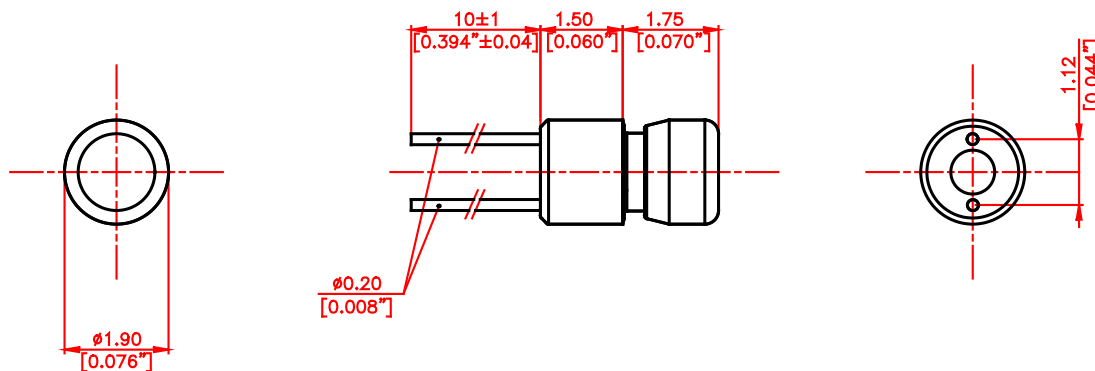
Soldering:

Soldering temperature and time..... Max. 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.

Mechanical Dimensions

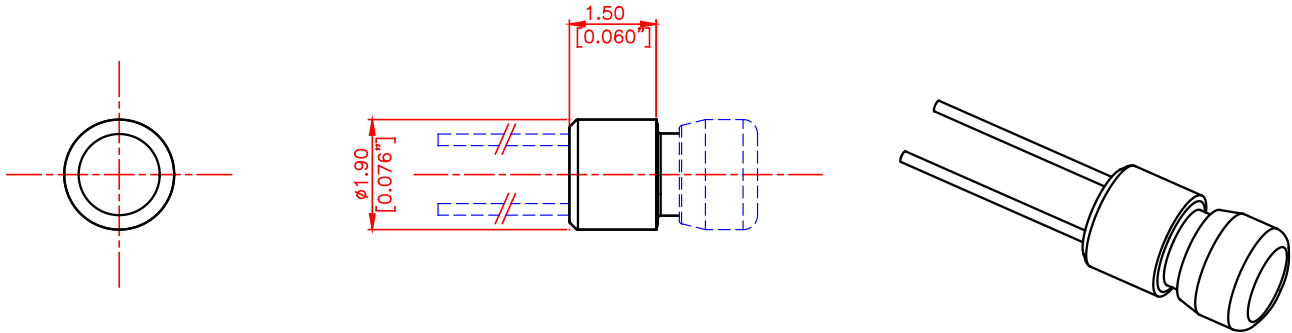


Note:

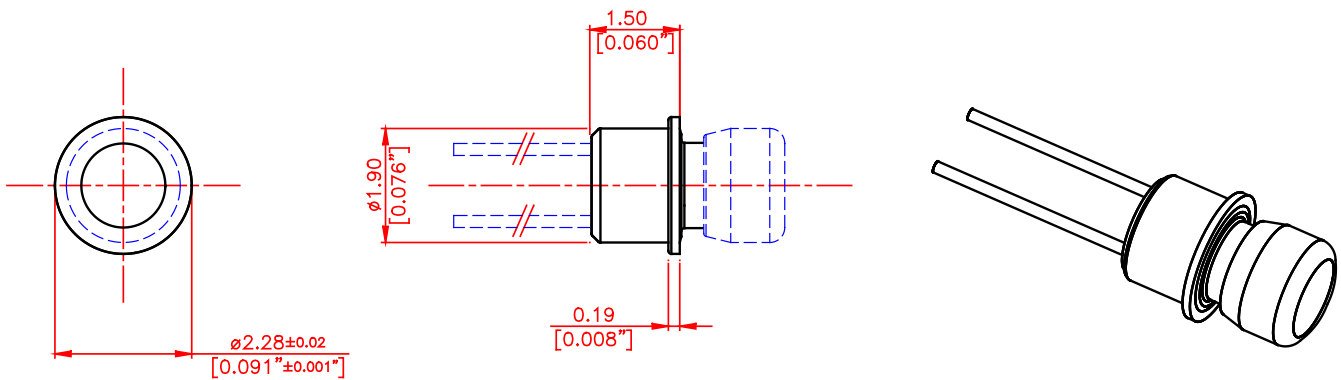
The standard measurement tolerance on the drawings is ± 0.05 mm/[0.002"]. Tolerances which differ from this value will be indicated on the drawings.

Housing Styles

No. 01

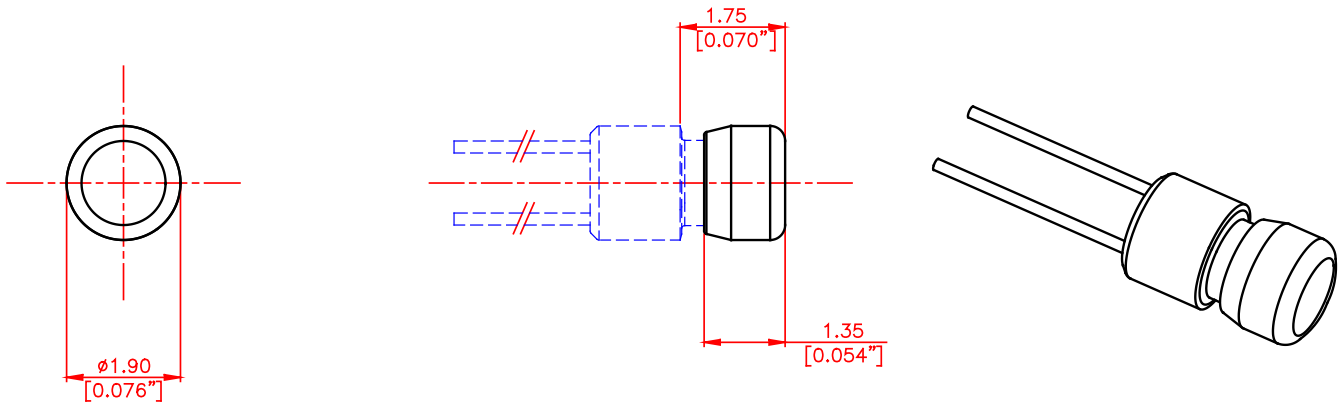


No. 02



Knob Style

No. 01

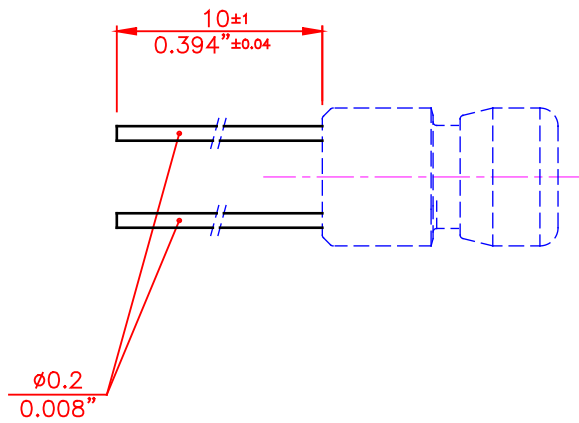


Knob Plastic Colors

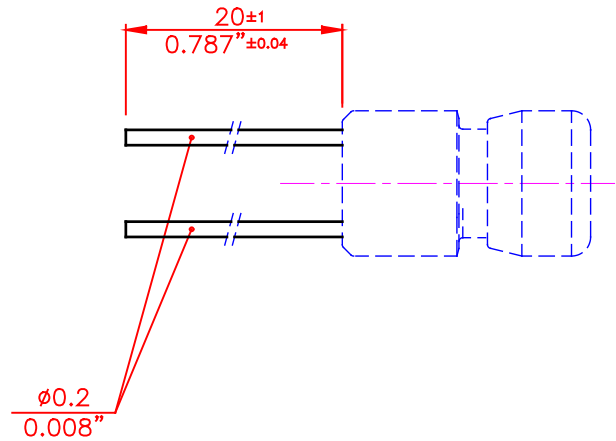
Please refer to the series 500 in the Sonion 'Plastic Color Assortment' binder for knob plastic colors.

Terminal Length

10 mm



20 mm



Product Specification Form

Name: _____

Company: _____

Customer Part No.: _____

Parameters	Look at Page	Enter your choices	Guidelines
Model	1	PB 100	
Housing Styles	5-6		Please enter no. 01 or 02
Housing Colors			Housing Style no. 01 available in color no. 100 Housing Style no. 02 available in color nos. 100 and 131
Knob Style	6	No. 01	
Knob Colors	6		Please refer to the series 500 included in the Sonion 'Plastic Color Assortment' binder
Terminal Length	7		Please enter terminal length 10 mm or 20 mm