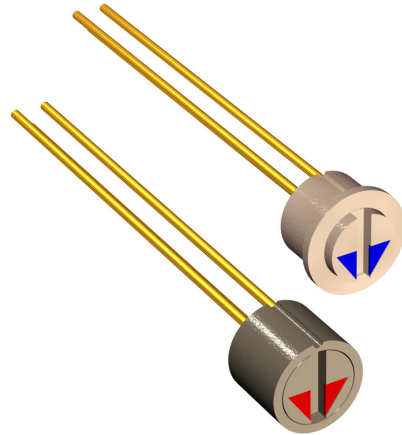


Trimmers Model PJ 62



Features

- Optional extended housing for increased robustness
- Seven position detent action trimmer
- Very small mechanical dimensions Ø 1.9 mm/[0.075"]
- With or without flange
- Optional color coding on rotor
- Accurate tapers. Linear, logarithmic and custom made
- Customer specified electrical resistance values and tolerances

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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 |
|----------------------|--|
| 05 / Sep 03 | History Revision added. Optional extended housing for increased robustness added. Materials Data changed: Solder terminals material changed to solid silver, gold flash plated. Metal parts changed to AgPd. |
| 06 / Mar 06 | Replaceable color marker added. New layout. |
| MT1034.A (07/08) | Minimum resistance value on linear tapers increased to 200 Ω. |
| 007/JUL-17-2009 | No technical updates |
| 008/JUL-13-2011 | Operational temperature and humidity removed. Storage humidity added. |
| 009/JUN-19-2012 | Replaceable color marker removed |
| 010/2014-01-10 | Updated design and new RoHS logo directive (2011/65/EU) |
| 011/2014-02-28 | Discontinue House 01, 02, 03 |
| 012/2019-09-18 | Change of storage temperature and humidity (CR3860) |

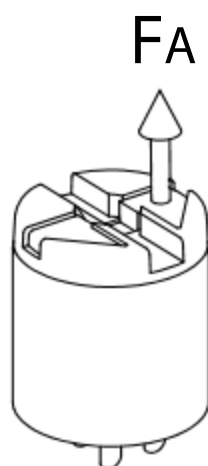
2. Mechanical Specifications

| | |
|-------------------------------|---------------------------------|
| Rotational angle, mechanical | 240° ±5° |
| Resistance curve angle | 210° |
| Angle between rotor positions | 40° |
| End stop torque | Min. 60 cNcm |
| Detent function torque | Max. 20 cNcm, typical 6-12 cNcm |

| Lifetime | |
|--------------------|-------------------|
| Resistance element | Min. 1,000 cycles |
| Detent function | Min. 25 cycles |

| | |
|----------------------|---|
| Bending of terminals | Min. 0.5 mm [0.02"] from housing Min. 3 bendings 90°, with 0.25 N load |
|----------------------|---|

| Forces | |
|--|---|
| Torque to be applied repeatedly to mechanical stop | Max. 50 cNcm, max. 10 times |
| Force to be applied axially to knob | Min. 10 N, without electrical intermittence |
| Base retention force | Min. 4 N |



3. Electrical Specifications

| Resistance value | |
|----------------------------|---|
| Linear | 200 Ω to 1M Ω |
| Logarithmic | 500 Ω to 600 k Ω |
| Double logarithmic | 2 k Ω to 500 k Ω |
| Resistance value tolerance | $\pm 20\%$ (-20% to +30% for values ≤ 1 k Ω) |
| Resistance taper | See 'Tapers Data Sheet' |
| Wiper contact resistance | Typ. better than 20 dB rel. R |
| Max. load | 1 mW |

4. Material Specifications

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

| | |
|---------------------|---------------------------|
| Solder terminals | Ag, gold flash plated |
| Other metal parts | PdAg |
| Plastic parts | PA 6.6 |
| Carbon track base | Reinforced glass epoxy |
| Resistance material | Carbon / Silver composite |

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 at driest condition as possible | |

6. Recommended Process Parameters

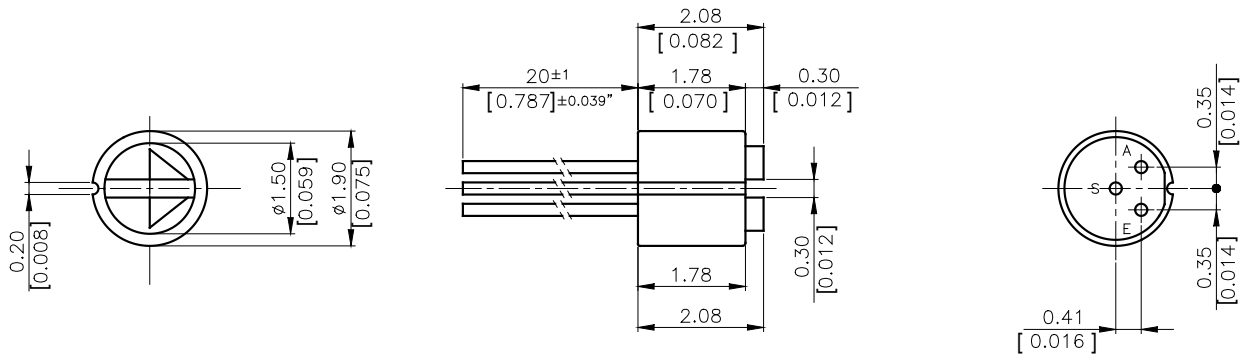
| Gluing | |
|---------------|--|
| Types of glue | <p>Cyanoacrylates (non-blooming) , i.e. Loctite 401, 408, 460 and Sicomet 50, 63, 77</p> <p>Non-blooming types must be used to ensure that residuals from the curing process do not degrade the component.</p> |

| Soldering | |
|--------------------------------|---|
| Soldering temperature and time | <p>300°C [572°F] for 3 s or 350°C [662°F] for 1 s</p> <p>To prevent damage to the carbon taper as a result of the soldering process, the rotor must be turned either fully CW or CCW during soldering</p> |
| Soldering distance | <p>Min. 0.3 mm [0.012"] from housing</p> <p>Exceeding temperature, time and distance recommendations may damage the component. Mechanical stress on soldering terminals must be avoided during soldering.</p> |

| Cleaning | |
|-------------------|---|
| Cleaning solvents | <p>Aqua wash (Alpha 2110), Benzine</p> <p>Ultrasonic cleaning must be avoided as it may remove the lubricant inside the component</p> |

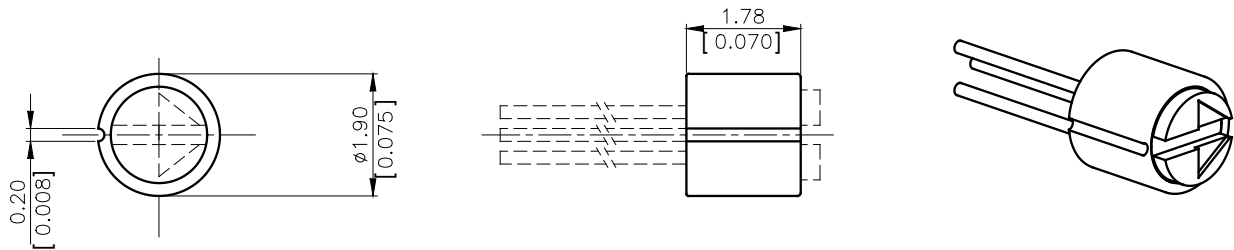
7. Mechanical Dimensions

Extended Housing Styles



8. Housing Styles

No. 12 Extended housing with thicker resistance element for increased robustness

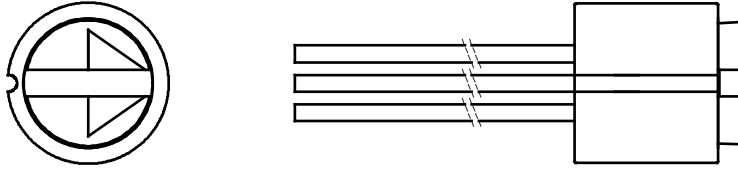


Note:

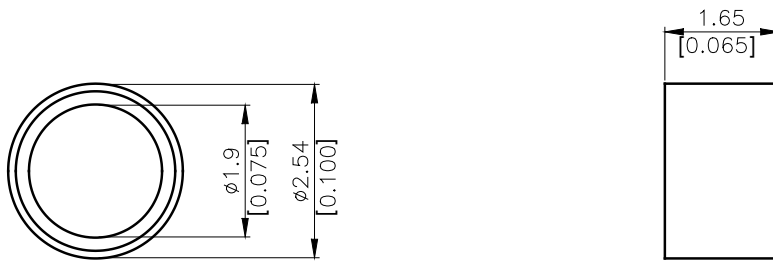
The standard measurement tolerance on the drawings is ± 0.05 mm/[0.002"]. Tolerances which differ from this value will be indicated on the drawings.

9. Rotor Style

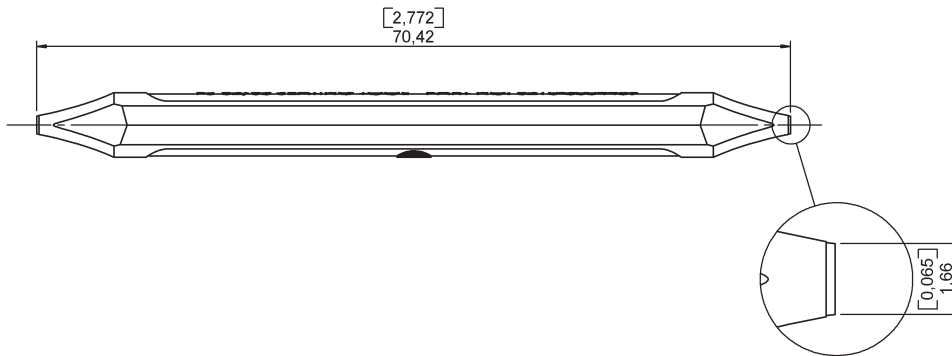
No. 01



10. Adaptor Ring



11. Seating Tool



Ordering Code No.: 6210-3004459

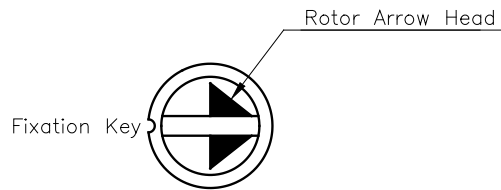
12. Plastic Colors

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

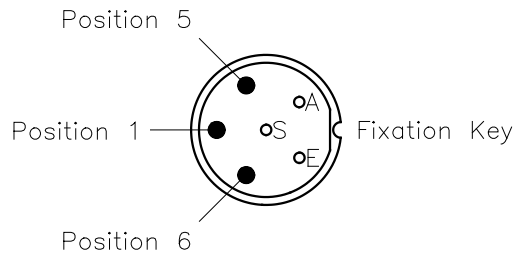
13. Color Coding

Please see colors for coding in the Sonion 'Plastic Color Assortment' binder or in the Product Overview.

Rotor Color Coding

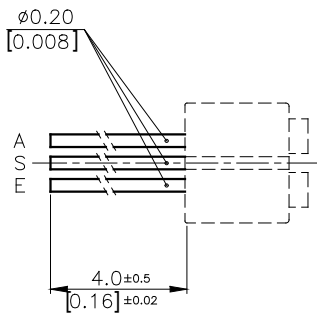


Bottom Color Coding

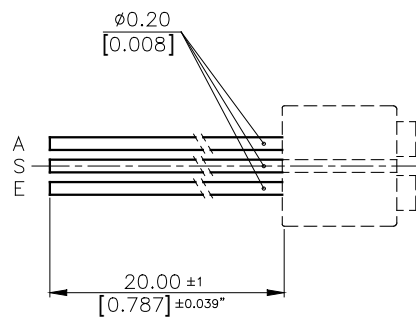


14. Terminal Length

4 mm.



20 mm.



15. Resistance Values and Tapers

Please see options under the paragraph 'Electrical Specifications' as well as the 'Tapers Data Sheet'

16. Product Specification Form

Name _____

Company _____

Customer Part No. _____

| Parameters | Look at Page | Enter your choices | Guidelines |
|--------------------|--------------|--------------------|--|
| Model | 2 | PJ 62 | |
| Housing Style | 7 | | Please enter no. 12. Choose Housing Style 12 for improved robustness |
| Rotor Style | 8 | No. 01 | |
| Adaptor Ring Style | 8 | | |
| Plastic Colors | 9 | | Please refer to the series 100 included in the Sonion 'Plastic Color Assortment' binder |
| Color Coding | 9 | | Rotor Color Coding Please enter arrow head color Please see colors for coding included in the Sonion 'Plastic Color Assortment' binder |
| | | | Rotor Color Coding Please enter position and color Please see colors for coding included in the Sonion 'Plastic Color Assortment' binder |
| Terminal length | 9 | | Please enter 4 mm: All housing styles 20 mm: Housing style no. 12 |
| Resistance Value | 9 | | Please see 'Electrical Specifications' and 'Tapers Data Sheet' |
| Resistance Taper | 9 | | Please see 'Electrical Specifications' and 'Tapers Data Sheet' |