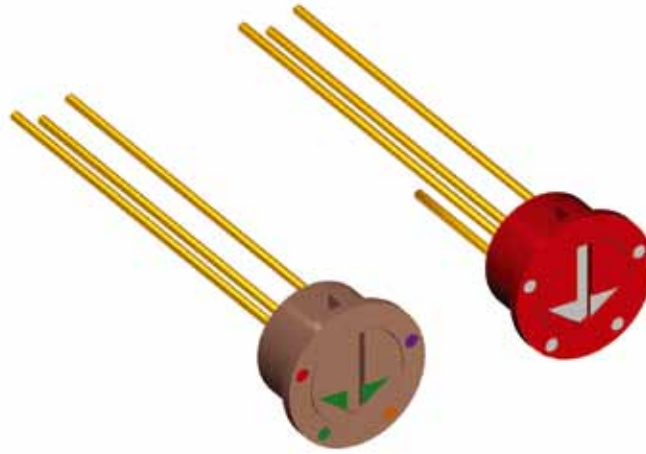


# Trimmer Model PJ 16



## Features

- PJ 16 with arrow slot
- Both models with fixation key
- Optional color dot coding
- Different plastic colors available
- Accurate tapers. Linear, logarithmic, double 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
<b>06 / Feb. 03</b>	History Revision added. Rotor Style PJ 16 no. 02 is updated.
<b>07 / Apr. 08</b>	Terminal gold plating added. Storage humidity added. Operational temperature and humidity removed. New data sheet design. New lay-out.
<b>MT1029.A (07/08)</b>	Minimum resistance value on linear tapers increased to 200 $\Omega$ .
<b>008/JUL-14-2009</b>	No technical updates
<b>009/2014-01-10</b>	Updated design and new RoHS logo directive (2011/65/EU)
<b>010/2014-02-28</b>	Discontinue PJ15

## 2. Mechanical Specifications

Rotational angle, mechanical	220° ±3°
Resistance curve angle	190°
End stop torque	Min. 100 cNcm
Rotational torque	Max. 10 cNcm, typical 4-8 cNcm
Lifetime	Min. 5,000 cycles

## 3. Electrical Specifications

Resistance value	
Linear	200 Ω to 1 MΩ
Logarithmic	500 Ω to 600 kΩ
Double logarithmic	2 kΩ to 500 kΩ
Resistance value tolerance	±20% (-20% to +30% for values ≤ 1 kΩ)
Resistance taper	See 'Tapers Data Sheet'
Wiper contact resistance	Typ. better than 20 dB rel. R
Potentiometer max. load	1 mW

## 4. Material Specifications

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

Terminals	AgCu3, gold flash plated
Other metal parts	CuBe2, silver plated
Housing	PA 6.6, glass reinforced
Carbon track base	Glass epoxy composite
Resistance material	Carbon/silver composite

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

## 5. Environmental Conditions

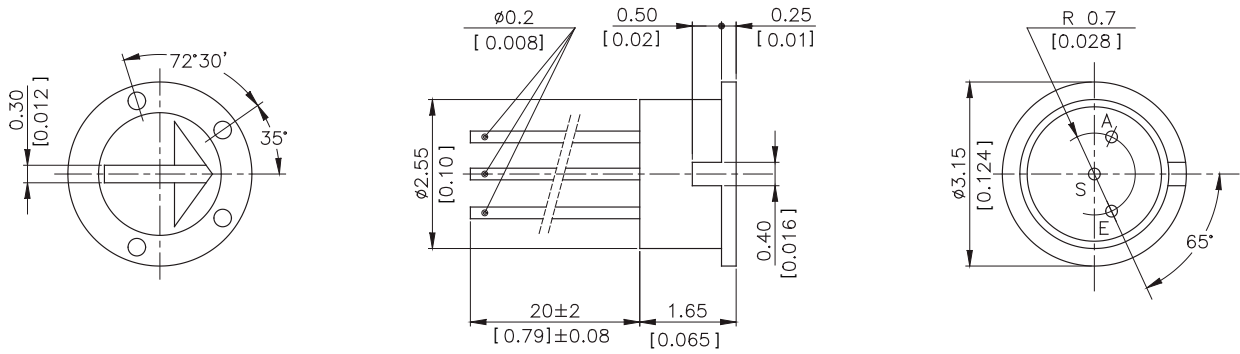
Storage temperature	-40 to + 60°C
Storage humidity	10 to 95% RH

## 6. Recommended Process Parameters

Gluing	
<b>Types of glue</b>	<p>Cyanoacrylates (non-blooming) , i.e. Loctite 401, 408, 460 and Sicomet 50, 63, 77</p> <p><b>Non-blooming types must be used to ensure that residuals from the curing process do not degrade the component.</b></p>
Soldering	
<b>Soldering temperature and time</b>	300°C [572°F] for 3 s or 350°C [662°F] for 1 s
<b>Soldering distance</b>	<p>Min. 0.5 mm [0.02"] from housing</p> <p><b>To prevent damage to the carbon taper as a result of the soldering process, the knob must be turned either fully CW or CCW.</b></p> <p><b>Exceeding temperature, time and distance recommendations may damage the component.</b></p> <p><b>Mechanical stress on soldering terminals must be avoided during soldering.</b></p>
Cleaning	
<b>Cleaning solvents</b>	<p>Aqua wash (Alpha 2110), Benzine</p> <p><b>Ultrasonic cleaning must be avoided as it may remove the lubricant inside the component.</b></p>

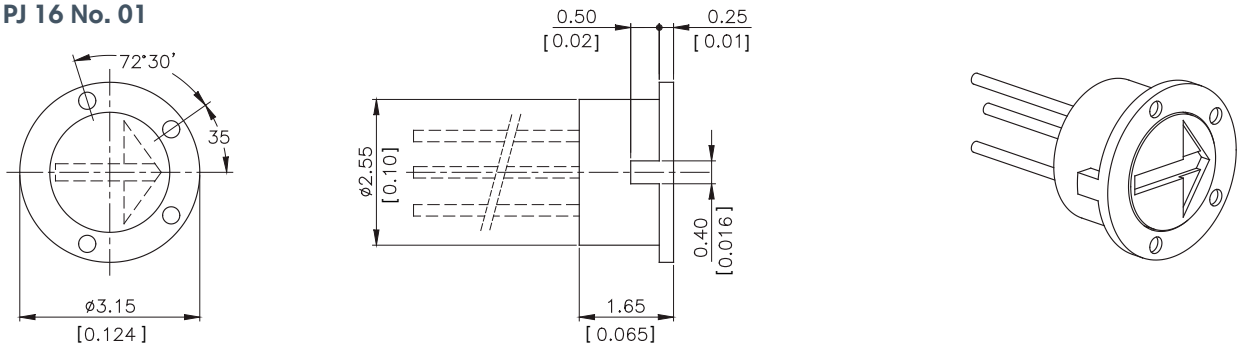
## 7. Mechanical Dimensions

### PJ 16



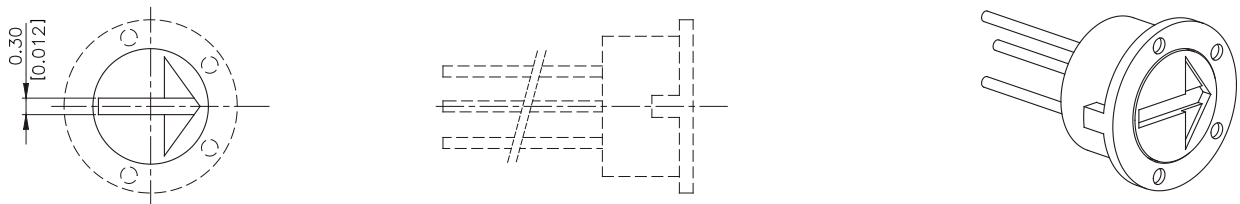
## 8. Housing Styles

### PJ 16 No. 01

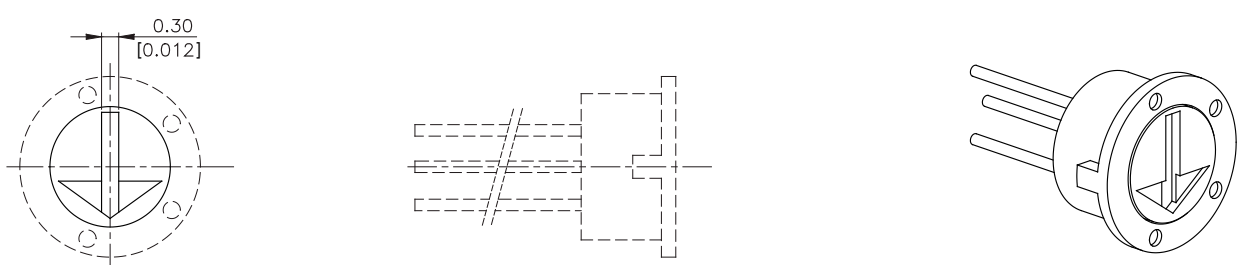


## 9. Rotor Styles

### PJ 16 No. 01



### PJ 16 No. 02



### Note:

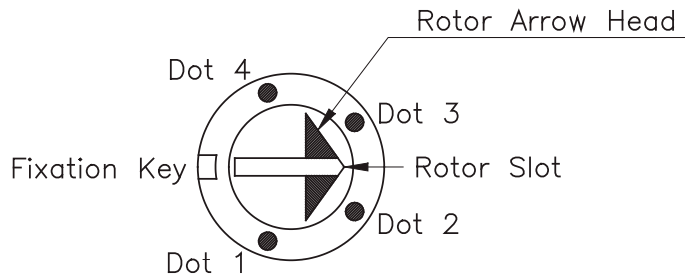
The standard measurement tolerance on the drawings is  $\pm 0.05$  mm/[0.002"]. Tolerances which differ from this value will be indicated on the drawings.

## 10. Plastic Colors

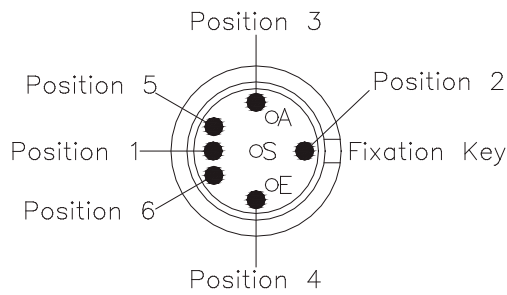
Please refer to the series 100 included in the Sonion 'Plastic Color Assortment' binder

## 11. Color Coding

### Housing and Rotor Color Coding



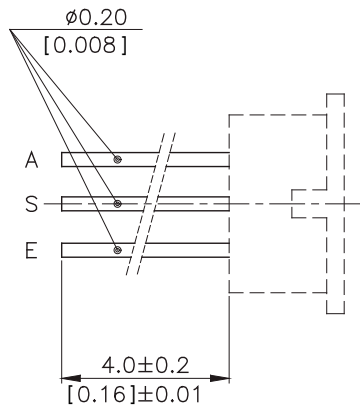
### Bottom Color Coding



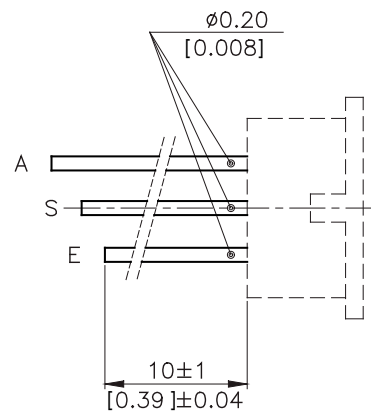
Please refer to colors for coding included in the Sonion 'Plastic Color Assortment' binder

## 12. Terminal Length

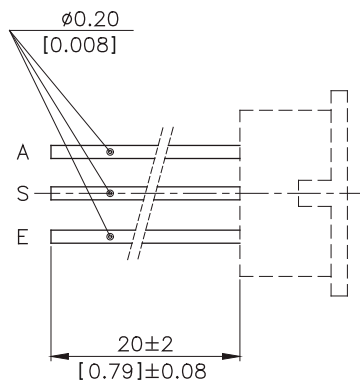
4 mm



10 mm stepped cut



20 mm





### 13. Product Specification Form

**Name** \_\_\_\_\_

**Company** \_\_\_\_\_

**Customer Part No.** \_\_\_\_\_

Parameters	Look at Page	Enter your choices	Guidelines
<b>Model</b>	2		Please enter PJ 16
<b>Housing Styles</b>	6		
<b>Rotor Styles</b>	6		
<b>Plastic Colors</b>	7		Please refer to the series 100 included in the Sonion 'Plastic Color Assortment' binder
<b>Color Coding</b>	7		Rotor Arrow Head (PJ 16)
		Dot 1	Housing Color Coding
		Dot 2	Please refer to colors for coding included in the Sonion 'Plastic Color Assortment' binder
		Dot 3	
		Dot 4	
1	Bottom Color Coding		
2	Please refer to colors for coding included in the Sonion 'Plastic Color Assortment' binder		
3			
4			
5			
6			
<b>Terminal Length</b>	8		Please enter terminal length
<b>Resistance Value</b>			Please see 'Electrical Specifications' and Tapers Data Sheet
<b>Resistance Taper</b>			Please see 'Electrical Specifications' and Tapers Data Sheet