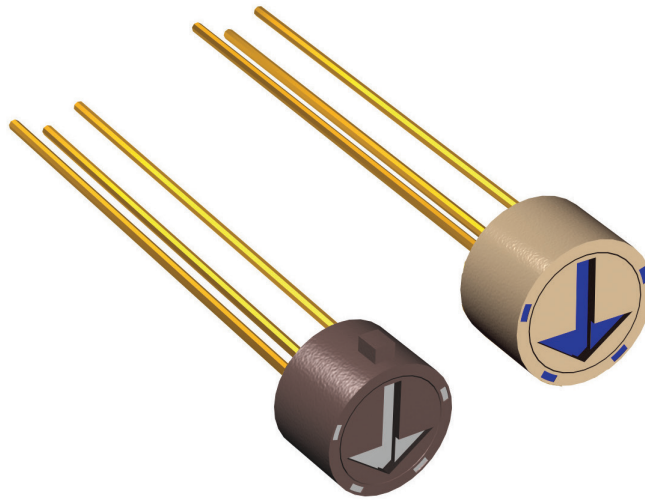


# Trimmers Model PJ 18



## Features

- PJ 18 with rotor arrow slot
- Both models with optional 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
05 / Apr. 08	History Revision added. Storage humidity added. Operational temperature and humidity removed. New data sheet design. New lay-out.
MT1030.A (07/08)	Minimum resistance value on linear tapers increased to 200 $\Omega$ .
007/JUL-14-2009	No technical updates
008/2014-01-10	Updated design and new RoHS logo directive (2011/65/EU)
009/2014-02-28	Discontinue PJ 17
010/2019-09-18	Change of storage temperature and humidity (CR3860)

## 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
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## 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	CuBe, 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

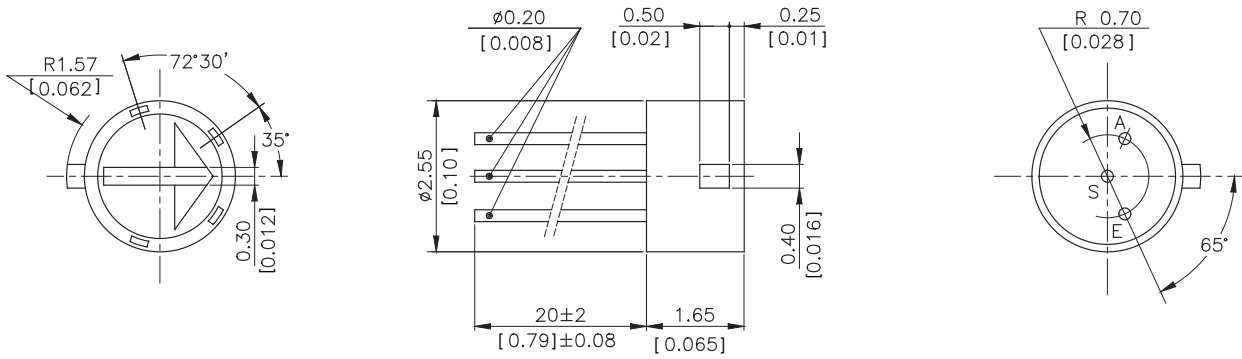
Storage temperature	25°C
Storage humidity	60% RH
Purpose is to protect from high humidity and keep at driest condition as possible	

## 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	300°C [572°F] for 3 s or 350°C [662°F] for 1 s
Soldering distance	<p>Min. 0.5 mm [0.02"] from housing</p> <p>To prevent damage to the carbon taper as a result of the soldering process, the knob must be turned either fully CW or CCW.</p> <p>Exceeding temperature, time and distance recommendations may damage the component.</p> <p>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

PJ 18

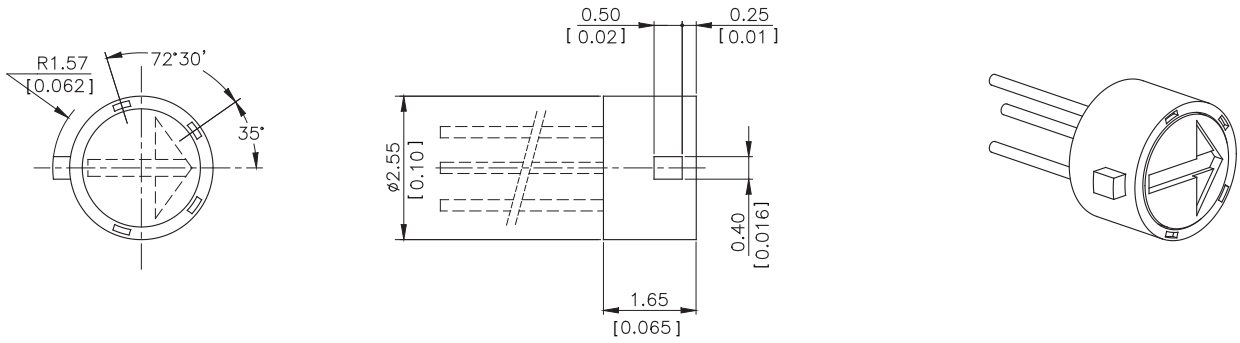


**Note:**

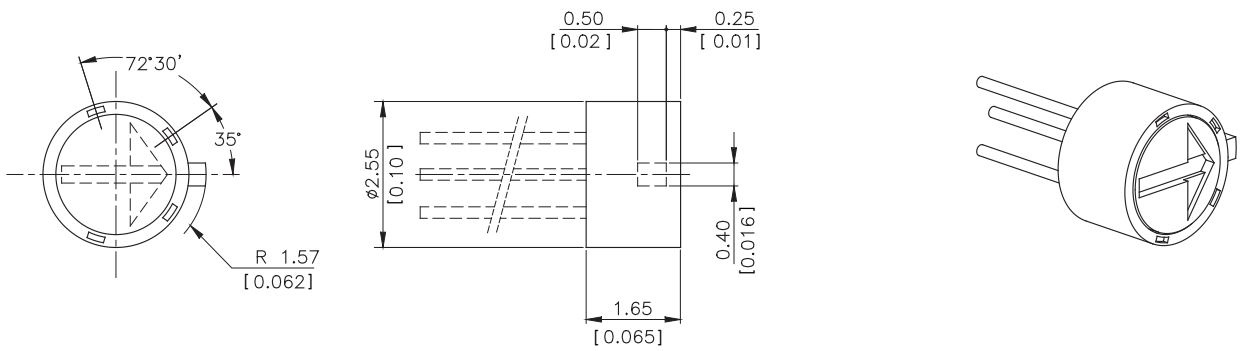
The standard measurement tolerance on the drawings is  $\pm 0.05$  mm/[0.002"]. Tolerances which differ from this value will be indicated on the drawings.

## 8. Housing Styles

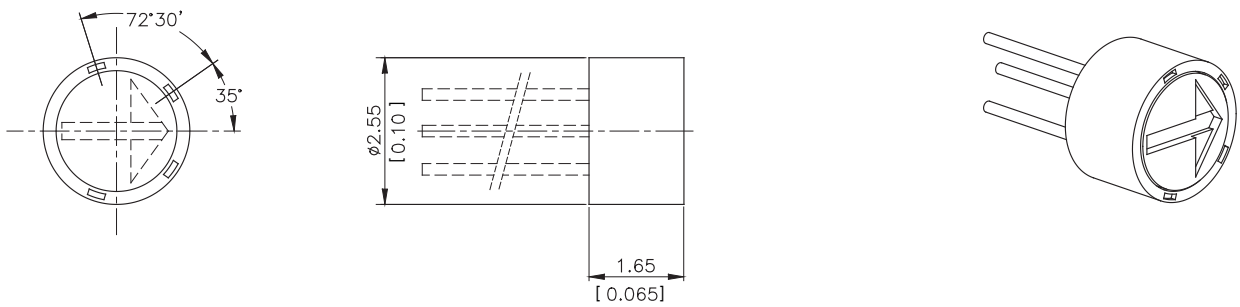
PJ 18 No. 01



PJ 18 No. 02

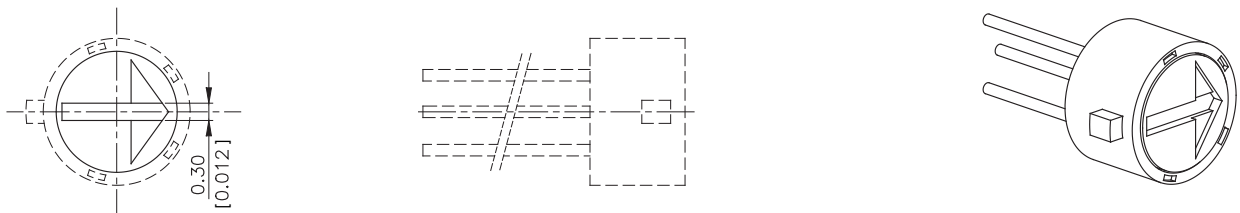


PJ 18 No. 03



## 9. Rotor Styles

PJ 18 No. 01

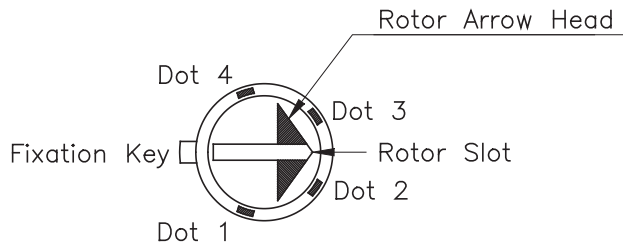


## 10. Plastic Colors

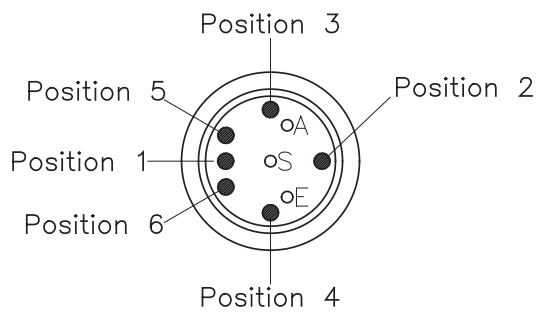
Please refer to the series 100 included in the Sonion 'Plastic Color Assortment' binder

## 11. Color Coding

Housing and Rotor Color Coding



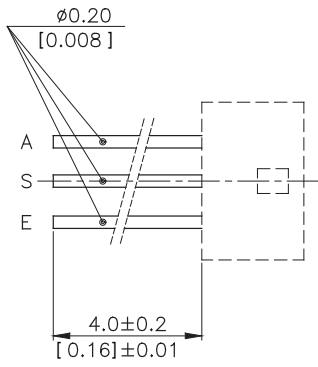
Bottom Color Coding



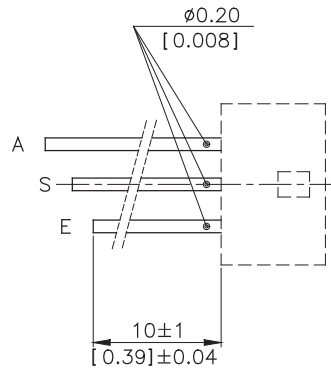


## 12. Terminal Length

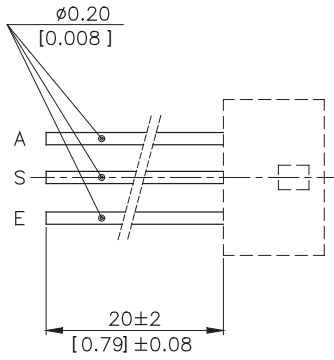
4 mm



10 mm stepped cut



20 mm



## 13. Product Specification Form

Name \_\_\_\_\_

Company \_\_\_\_\_

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

Parameters	Look at Page	Enter your choices	Guidelines
Model	21		Please enter PJ 18
Housing Styles	7		
Rotor Styles	7		
Plastic Colors	8		Please refer to the series 100 included in the Sonion 'Plastic Color Assortment' binder
Color Coding	8		Rotor Arrow Head (PJ 18)
		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			
Terminal Length	9		Please enter terminal length
Resistance Value			Please see 'Electrical Specifications' and Tapers Data Sheet
Resistance Taper			Please see 'Electrical Specifications' and Tapers Data Sheet