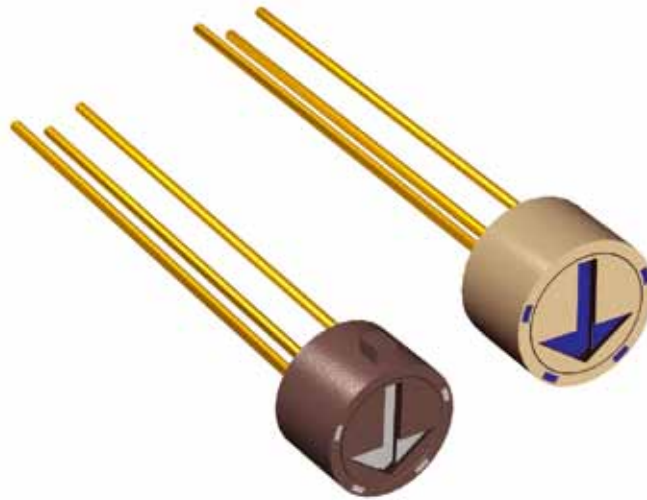


Trimmers Model PJ 18



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 Ω .
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

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	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

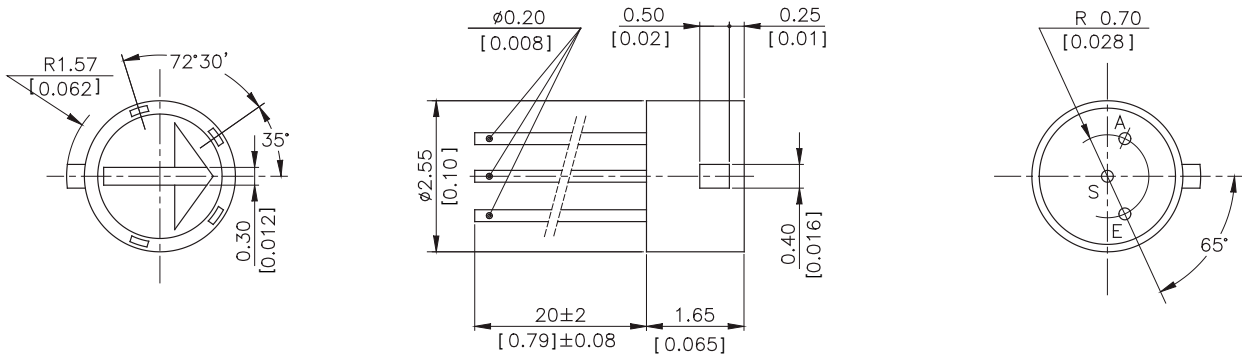
Storage temperature	-40 to + 60°C
Storage humidity	10 to 95% RH

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

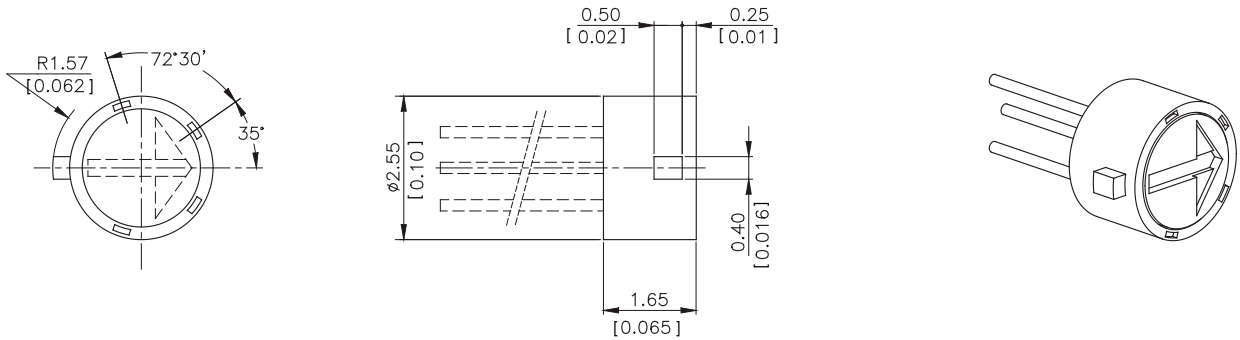


Note:

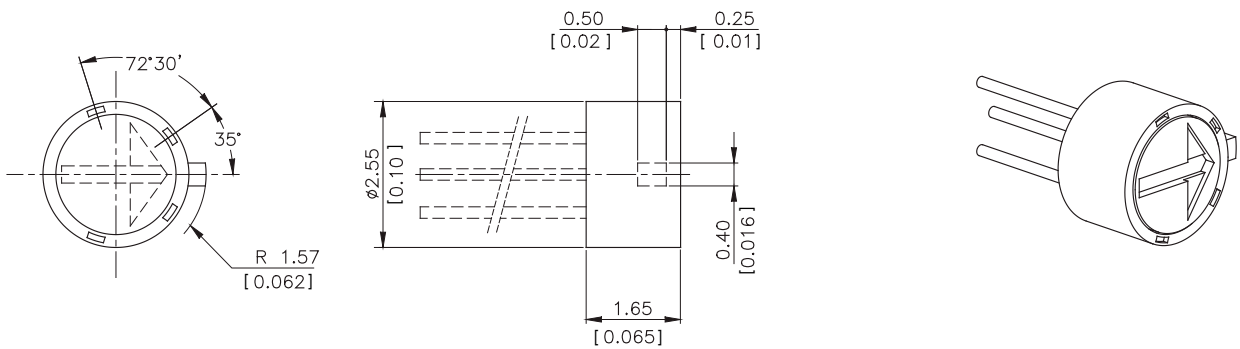
The standard measurement tolerance on the drawings is ± 0.05 mm/[0.002"]. Tolerances which differ from this value will be indicated on the drawings.

8. Housing Styles

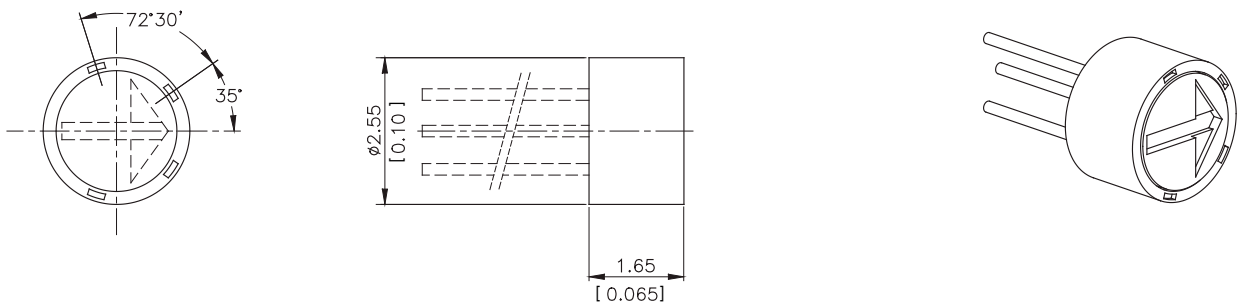
PJ 18 No. 01



PJ 18 No. 02

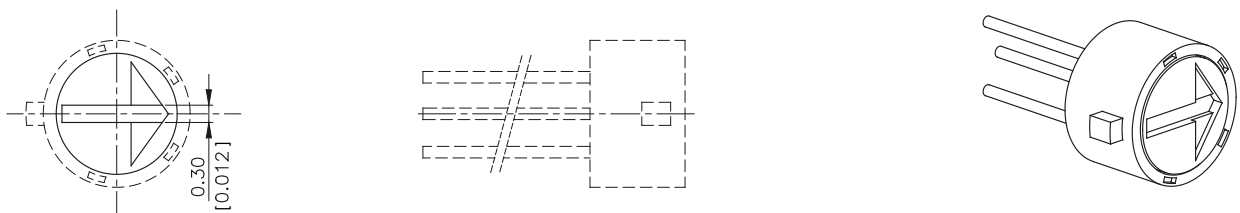


PJ 18 No. 03



9. Rotor Styles

PJ 18 No. 01

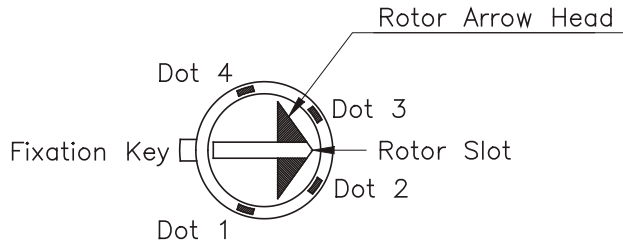


10. Plastic Colors

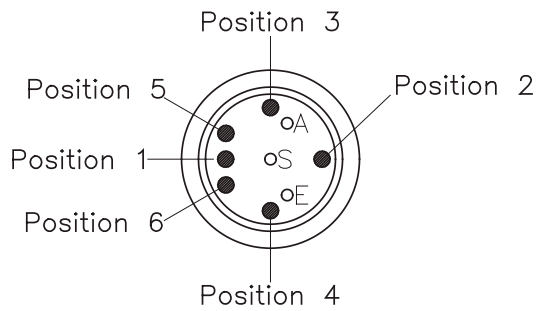
Please refer to the series 100 included in the Sonion 'Plastic Color Assortment' binder

11. Color Coding

Housing and Rotor Color Coding

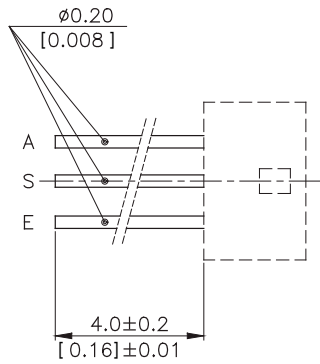


Bottom Color Coding

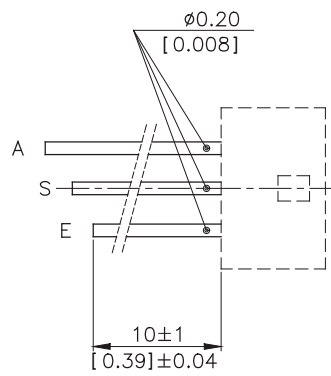


12.Terminal Length

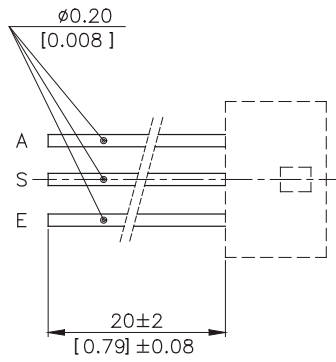
4 mm



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