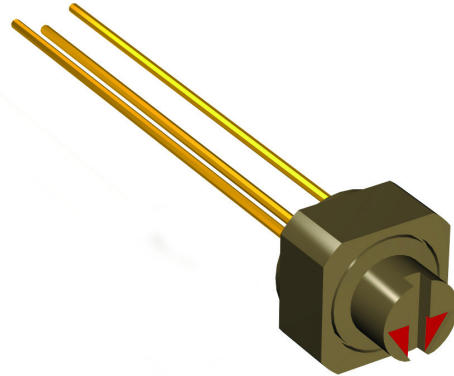


# Trimmer Model PJ 11



## Features

- PJ 11: Square housing
- Low mounting depth
- Color coding of rotor arrow head
- 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 / Nov 05	History Revision added. New layout. PJ 11: Rotor style 02 removed.
MT1028.A (07/08)	Minimum resistance value on linear tapers increased to 200 $\Omega$ .
006/JUL-14-2009	No technical updates
007/JUL-13-2011	Operational temperature and humidity removed. Storage humidity added.
008/2014-01-10	Updated design and new RoHS logo directive (2011/65/EU)
009/2014-02-28	Discontinue PJ 12
010/2017-12-14	PJ 12 text and picture deleted from the data sheet

## 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 1MΩ
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
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	CuBe2, silver plated
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

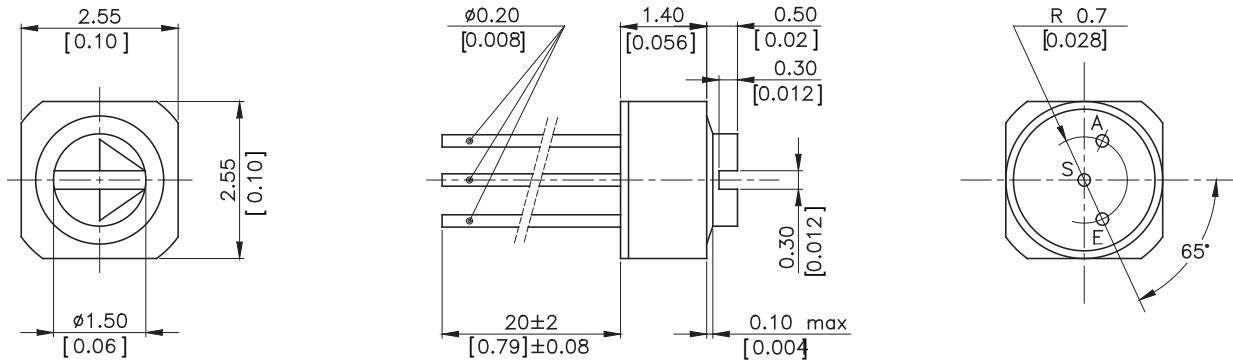
Storage temperature	-40 to + 60°
Storage humidity	10 to 95% RH

## 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 de-grade 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 knob 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.</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>

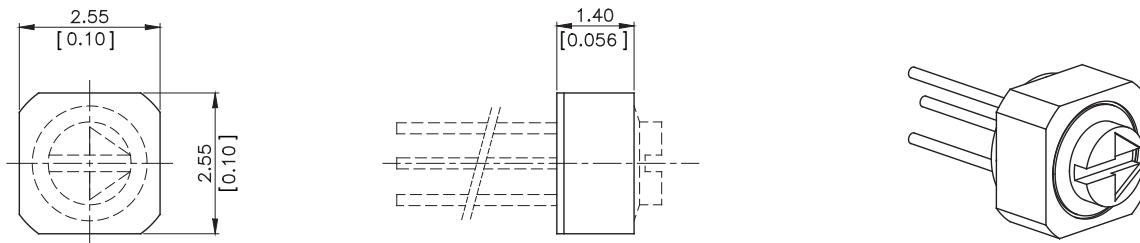
## 7. Mechanical Dimensions

PJ 11



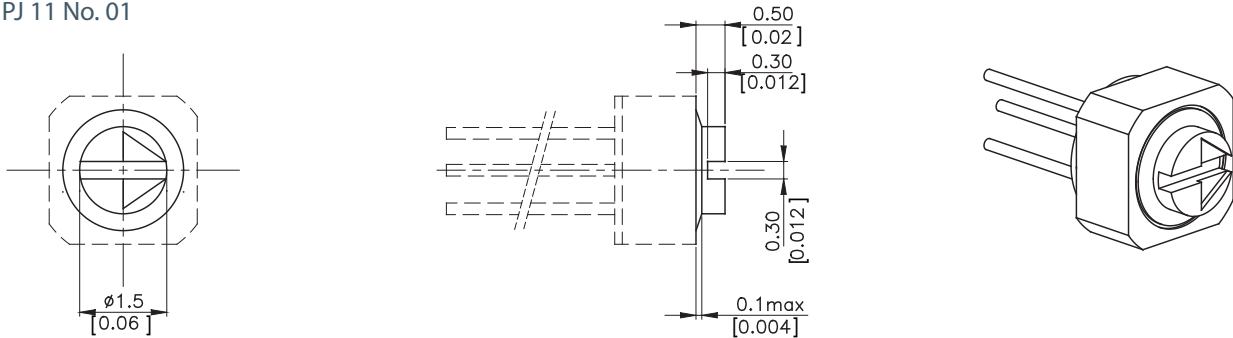
## 8. Housing Style

PJ 11 No. 01



## 9. Rotor Style

PJ 11 No. 01



### 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.

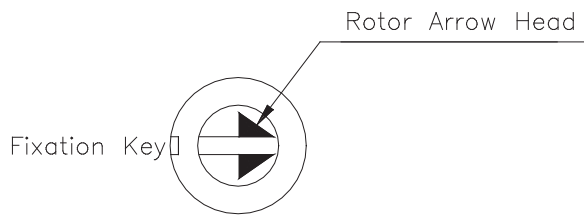
## 10. Plastic Colors

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

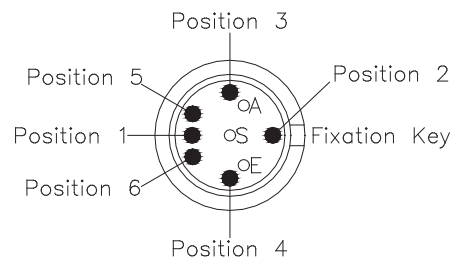
## 11. Color Coding

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

Rotor Color Coding

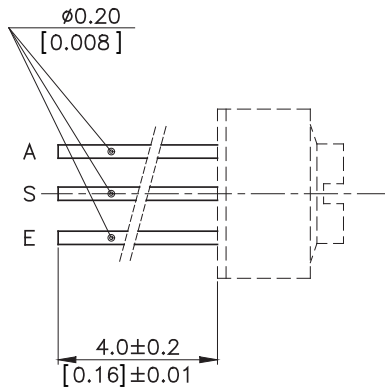


Bottom Color Coding

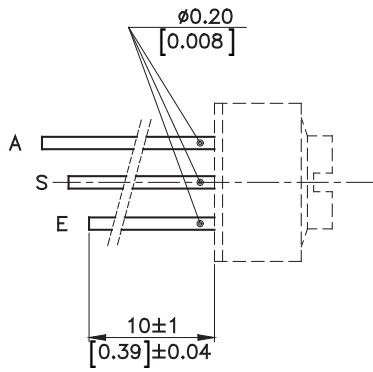


## 12. Terminal Length

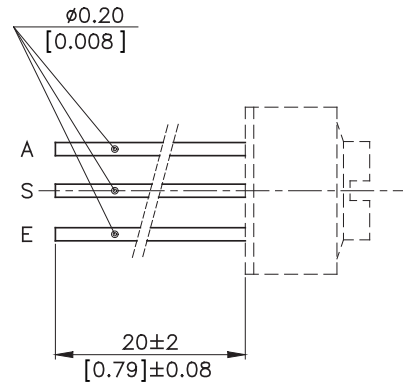
4 mm.



10 mm. stepped cut



20 mm.



## 13. Resistance Values and Tapers

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



## 14. Product Specification Form

Name \_\_\_\_\_

Company \_\_\_\_\_

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

Parameters	Look at Page	Enter your choices	Guidelines
Model	2		Please enter PJ 11
Housing Style	6		
Rotor Style	6		
Plastic Colors	7		Please refer to the series 100 included in the Sonion 'Plastic Color Assortment' binder
Color Coding	7		Rotor Color Coding Please see colors for coding included in the Sonion 'Plastic Color Assortment' binder
		1	Bottom Color Coding
		2	Please see colors for coding included in the
		3	Sonion 'Plastic Color Assortment' binder
		4	
		5	
		6	
Terminal length	8		Please enter terminal length
Resistance Value	8		Please see 'Electrical Specifications' and 'Tapers Data Sheet'
Resistance Taper	8		Please see 'Electrical Specifications' and 'Tapers Data Sheet'