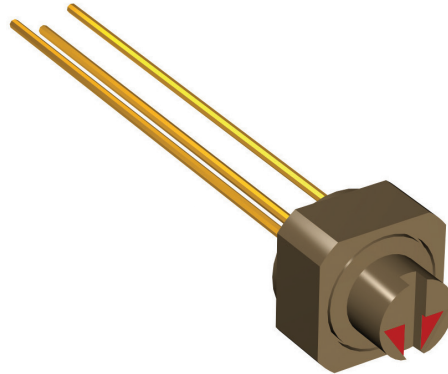


Trimmer Model PJ 11



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 Ω .
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
011/2019-09-18	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

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

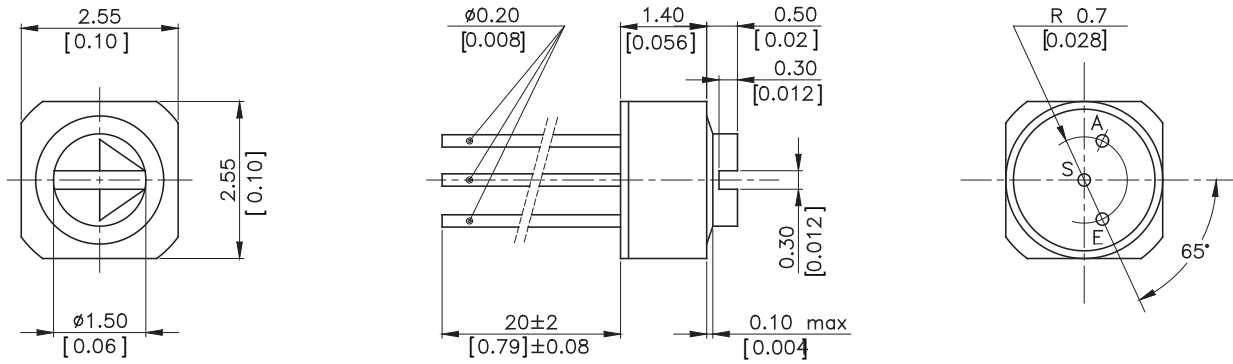
Storage temperature	25°C
Storage humidity	60% RH
Purpose is to protect from high humidity and keep at driest condition as possible	

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 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>

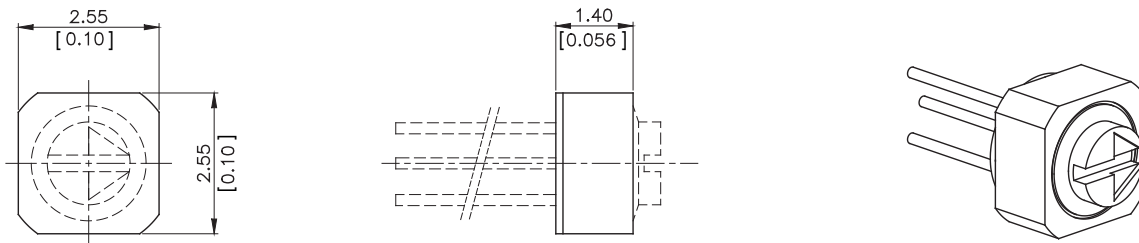
7. Mechanical Dimensions

PJ 11



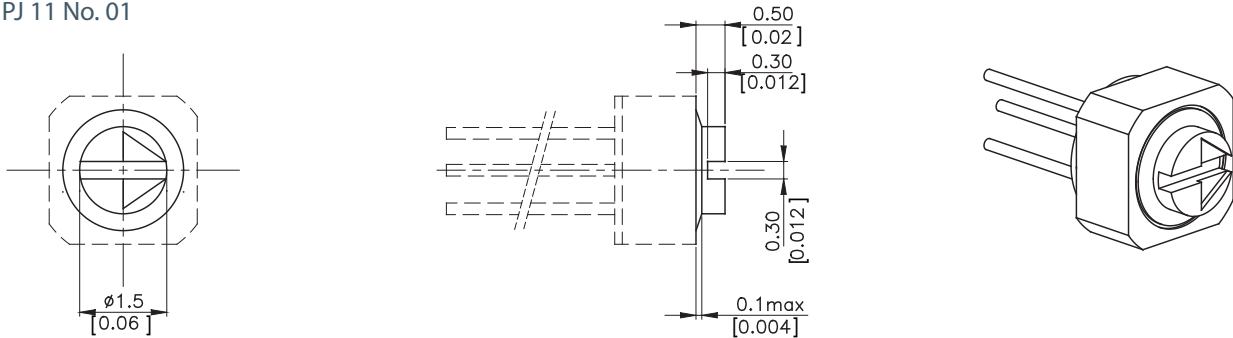
8. Housing Styles

PJ 11 No. 01



9. Rotor Style

PJ 11 No. 01



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.

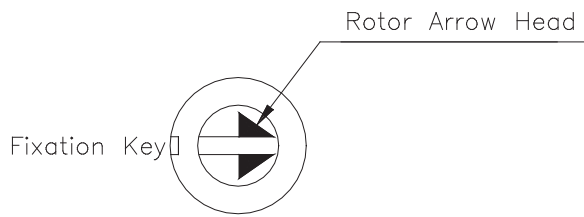
10. Plastic Colors

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

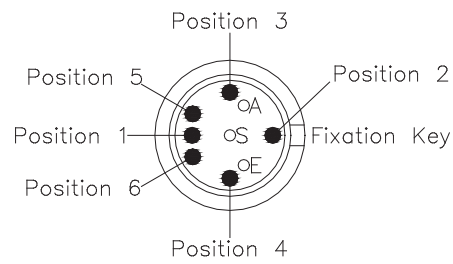
11. Color Coding

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

Rotor Color Coding

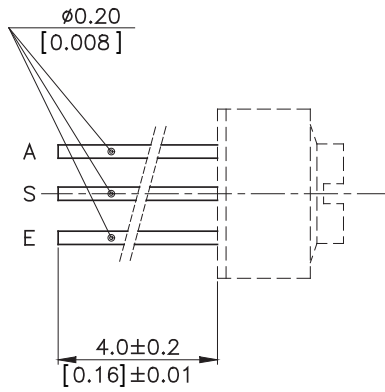


Bottom Color Coding

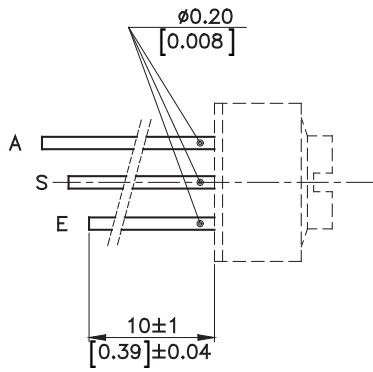


12. Terminal Length

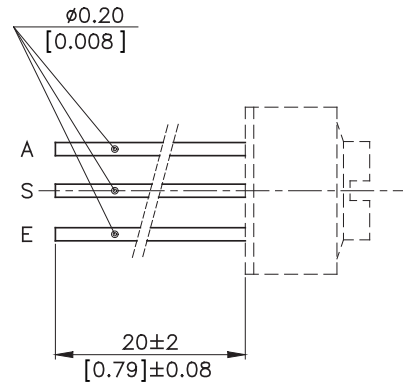
4 mm.



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'