



## WR-42 Calibration Kit Including Waveguide to Coax Adapter, Termination, Short, and Offsets Components Operating From 17.6 to 26.7 GHz

### TECHNICAL DATA SHEET

**PEWCK1003**

PEWCK1003 is a precision WR-42 calibration kit assembled to support standard TRL (Thru-Reflect-Line) and SSLT(Short-Short-Load-Thru) calibrations on industry standard vector network analyzers(VNA). The WR-42 calibration kit comes with two fixed flush waveguide shorts, 1/8 wavelength, 1/4 wavelength and 3/8 wavelength waveguide offsets, one matched waveguide fixed termination and two precision WR-42 waveguide-to-coax adapters. Additional WR-42 precision waveguide straight sections are available for purchase separately. Precision waveguide components in PEWCK1003 are designed to work in full WR-42 band from 17.6 to 26.7GHz. PEWCK1003 is one of the many calibration kits and T&M components which are readily available in stock and for same-day shipment at Pasternack.

#### Features

- WR-42 waveguide size
- Frequency range from 17.6 to 26.7 GHz
- Precision fabricated and manufactured
- Compatible with standard TRL & SSLT calibration techniques
- Additional waveguide test standards available upon request

#### Configuration

Waveguide Size  
Connector  
Frequency Range

WR-42  
2.92mm  
17.6 to 26.7 GHz

#### WR-42 Calibration Kit Components

Components	Frequency (GHz)	Quantity
WR-42 Waveguide to Coax Adapter with 2.92mm Female Connector	17.6 to 26.7 GHz	1
WR-42 Waveguide to Coax Adapter with 2.92mm Male Connector	17.6 to 26.7 GHz	1
WR-42 Waveguide Termination	17.6 to 26.7 GHz	1
WR-42 Waveguide Short	17.6 to 26.7 GHz	2
WR-42 Waveguide Offsets (1/8λ Section, 1/4λ Section, 3/8λ Section)	17.6 to 26.7 GHz	3

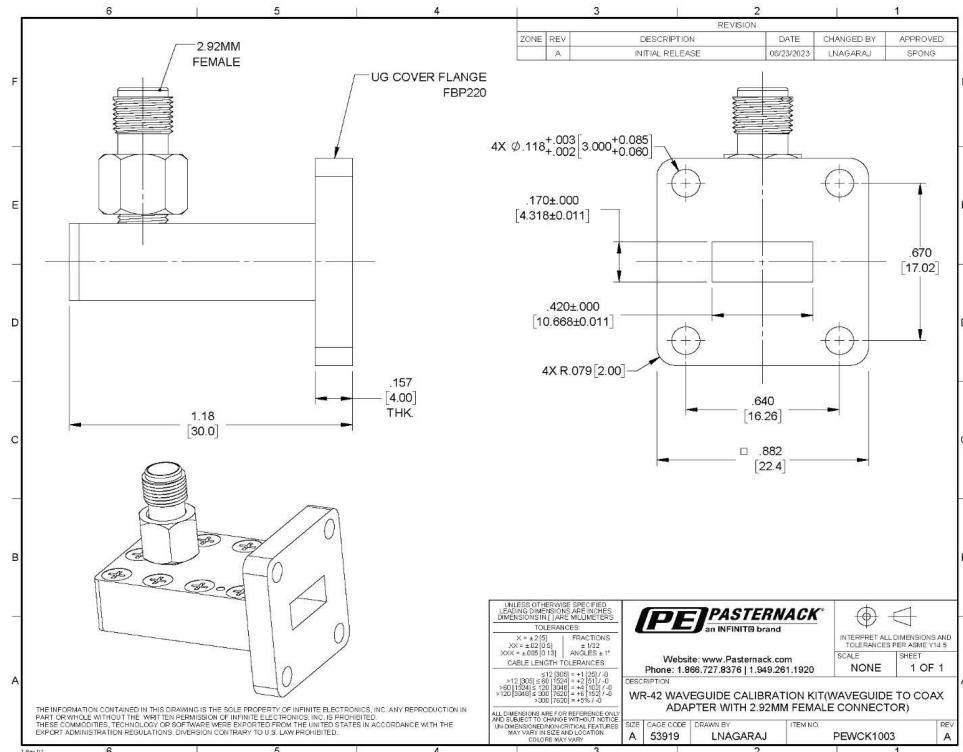
Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-42 Calibration Kit Including Waveguide to Coax Adapter, Termination, Short, and Offsets Components Operating From 17.6 to 26.7 GHz PEWCK1003](#)



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### WR-42 Waveguide to Coax Adapter with 2.92mm Female Connector



Electrical Specifications				
Description	Minimum	Typical	Maximum	Units
Frequency Range	17.6		26.7	GHz
VSWR			1.2:1	
Insertion Loss			0.3	dB

### Mechanical Specifications

Item	Description	Units
Waveguide Size	WR-42	
Flange Type	UG Square Cover	
RF Connector Type and Gender	2.92mm Female	
Body	Right Angle	
Body Material and Plating	Copper, Silver plated	
Housing	Black Paint	
Dimensions	1.18 [30 mm] L, 1.18 [30 mm] H, 0.882 [22.4 mm] W	inches

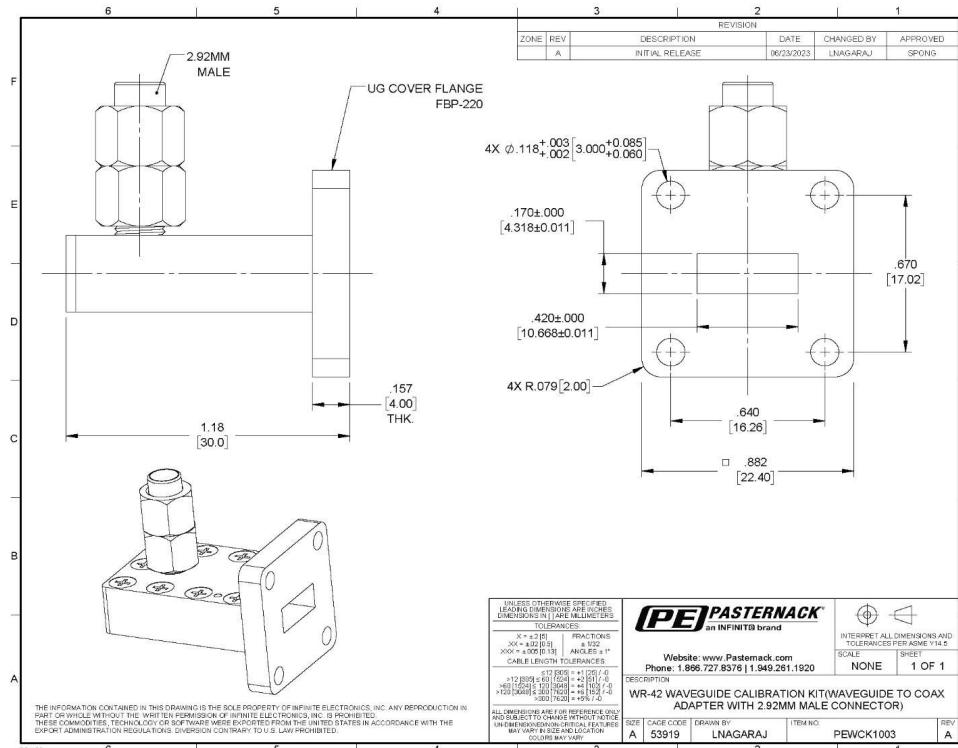
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## TECHNICAL DATA SHEET

**PEWCK1003**

### WR-42 Waveguide to Coax Adapter with 2.92mm Male Connector



### Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	17.6		26.7	GHz
VSWR			1.2:1	
Insertion Loss			0.3	dB

### Mechanical Specifications

Item	Description	Units
Waveguide Size	WR-42	
Flange Type	UG Square Cover	
RF Connector Type and Gender	2.92mm Male	
Body	Right Angle	
Body Material and Plating	Copper, Silver plated	
Housing	Black Paint	
Dimensions	1.18 [30 mm] L, 1.26 [32 mm] H, 0.882 [22.4 mm] W	inches

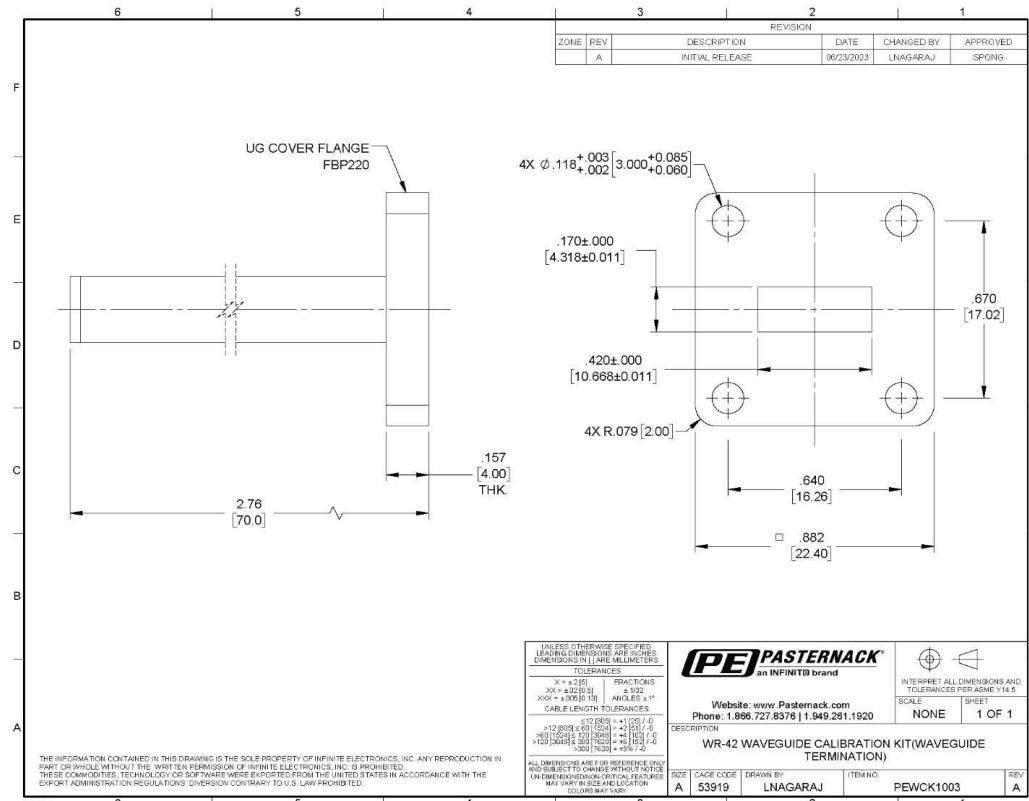
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## TECHNICAL DATA SHEET

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## WR-42 Waveguide Termination



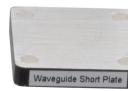
## Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	17.6		26.7	GHz
VSWR			1.03:1	

## Mechanical Specifications

Item	Description	Units
Waveguide Size	WR-42	
Flange Type	UG Square Cover	
Body Material and Plating	Copper, Silver plated	
Housing	Black Paint	
Dimensions	2.76 [70 mm] L, 0.882 [22.4 mm] H, 0.882 [22.4 mm] W	inches

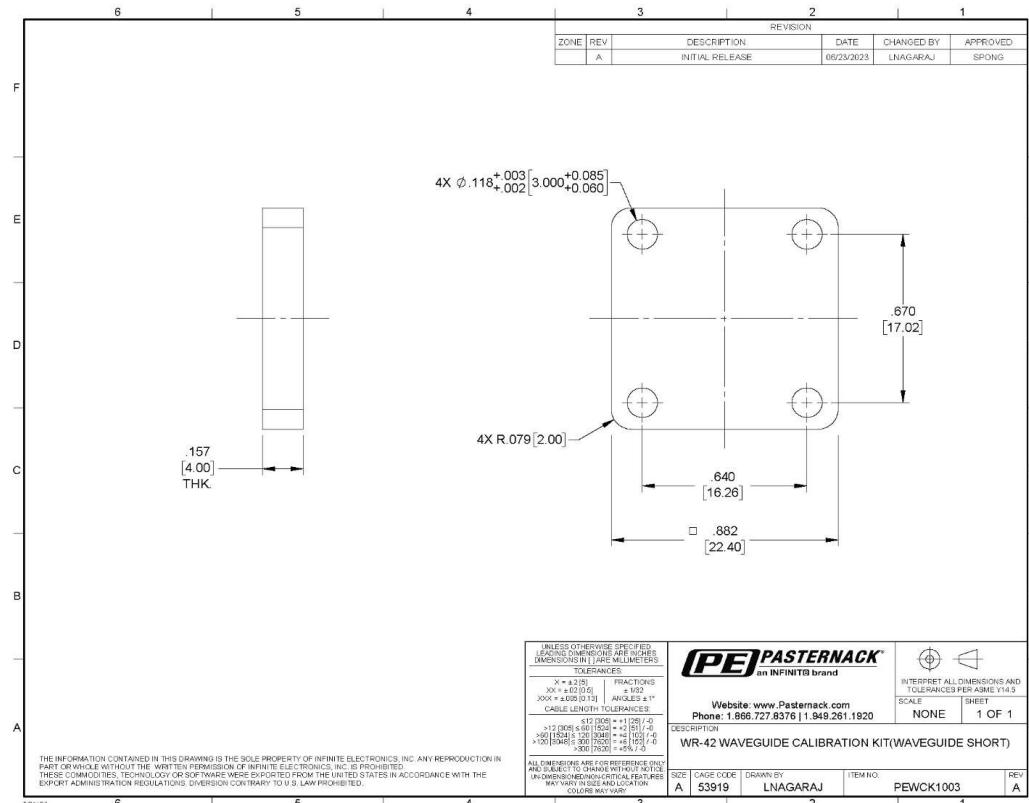
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## TECHNICAL DATA SHEET

**PEWCK1003**

## WR-42 Waveguide Short



## Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	17.6		26.7	GHz
VSWR	60:1			

## Mechanical Specifications

Item	Description	Units
Waveguide Size	WR-42	
Flange Type	UG Square Cover	
Body Material and Plating	Copper, Silver plated	
Housing	Black Paint	
Dimensions	0.157 [4 mm] L, 0.882 [22.4 mm] H, 0.882 [22.4 mm] W	inches

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: [WR-42 Calibration Kit Including Waveguide to Coax Adapter, Termination, Short, and Offsets Components Operating From 17.6 to 26.7 GHz PEWCK1003](#)

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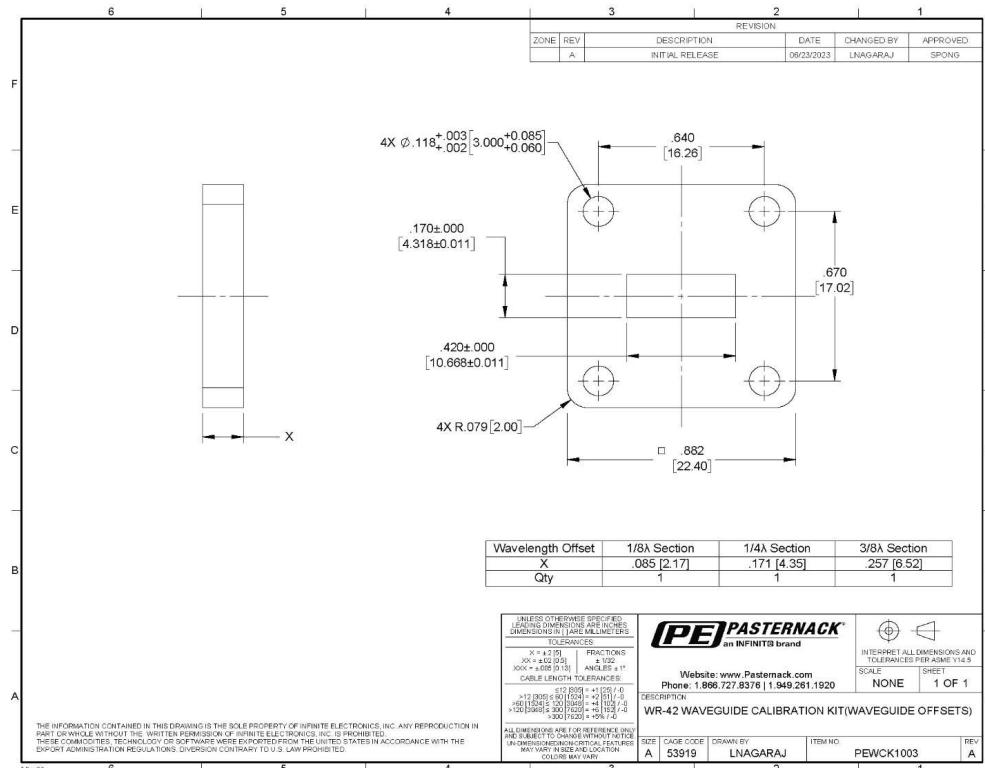
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## TECHNICAL DATA SHEET

**PEWCK1003**

## WR-42 Waveguide Offsets (1/8 $\lambda$ Section, 1/4 $\lambda$ Section, 3/8 $\lambda$ Section)



## Electrical Specifications

Description	Minimum	Typical	Maximum	Units
Frequency Range	17.6		26.7	GHz

## Mechanical Specifications

Item	Description			Units
Waveguide Size	WR-42			
Flange Type	UG Square Cover			
Wavelength Offset	1/8λ Section, 1/4λ Section, 3/8λ Section			
Body Material and Plating	Copper, Silver plated			
Housing	Black Paint			
Length	1/8λ Section	1/4λ Section	3/8λ Section	
	0.85 [2.17 mm]	0.171 [4.35 mm]	0.257 [6.52 mm]	inches
Dimensions (H, W)	0.882 [22.4 mm] H, 0.882 [22.4 mm] W			inches

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**Compliance Certifications** (see [product page](#) for current document)

### Plotted and Other Data

Notes:

- Values at 25 °C, sea level

WR-42 Calibration Kit Including Waveguide to Coax Adapter, Termination, Short, and Offsets Components Operating From 17.6 to 26.7 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Lewisville, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [WR-42 Calibration Kit Including Waveguide to Coax Adapter, Termination, Short, and Offsets Components Operating From 17.6 to 26.7 GHz PEWCK1003](#)

URL: <https://www.pasternack.com/wr-42-adapter-short-load-offset-26.7-ghz-pewck1003-p.aspx-p.aspx>

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