

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

FMWCK1003 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 FMWCK1003 are designed to work in full WR-42 band from 17.6 to 26.7GHz. FMWCK1003 is one of the many calibration kits and T&M components which are readily available in stock and for same-day shipment at Fairview Microwave.

Configuration

Waveguide Size	WR-42
Connector	2.92mm
Frequency Range	17.6 to 26.7 GHz



Features:

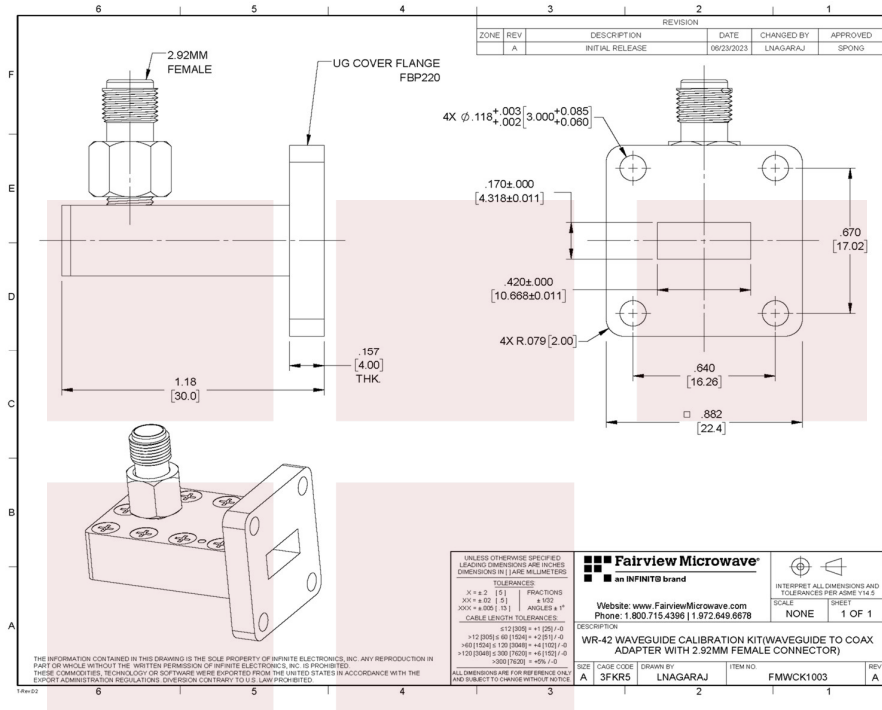
- WR-42 waveguide size
- Frequency range from 17.6 to 26.7 GHz
- Precision fabricated and manufactured
- Compatible with standard TRL & SSLT calibration techniques
- Additional waveguide test standards available upon request

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

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



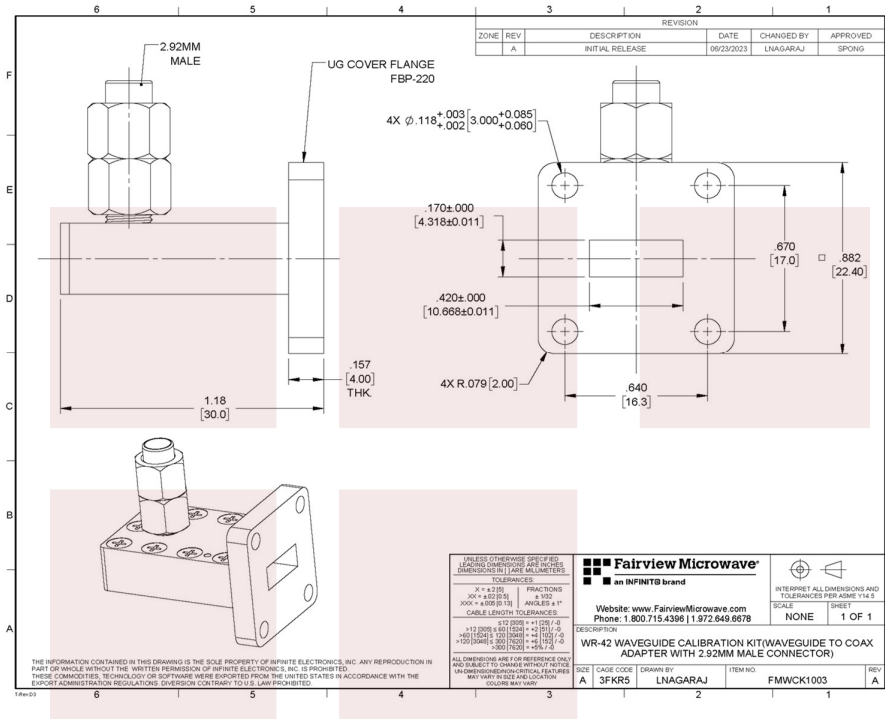
Electrical Specifications

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

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



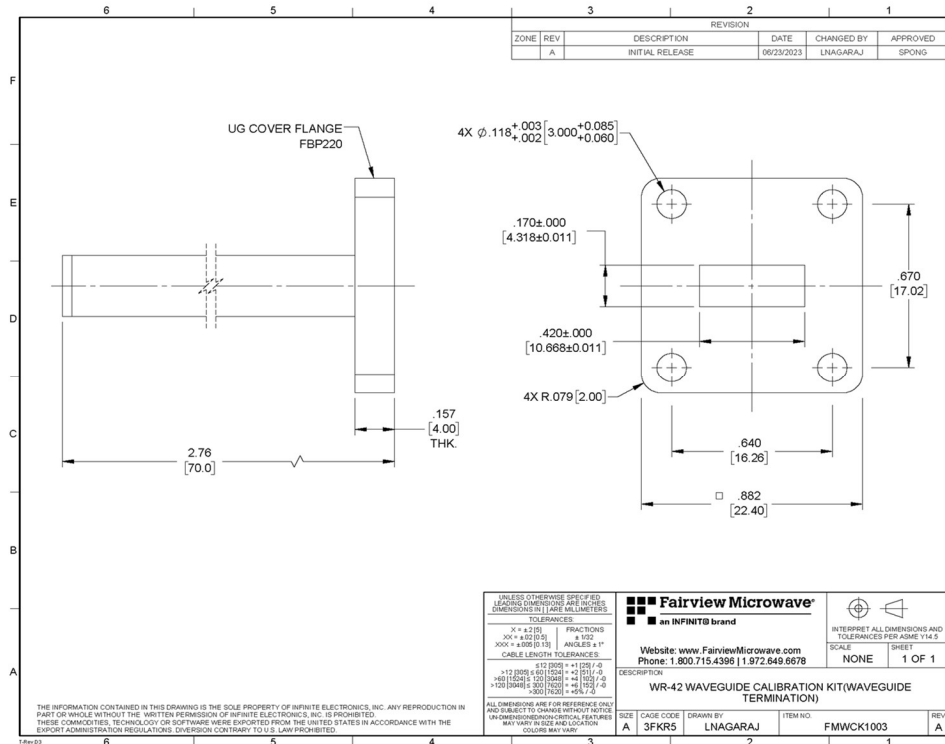
Electrical Specifications

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

WR-42 Waveguide Termination



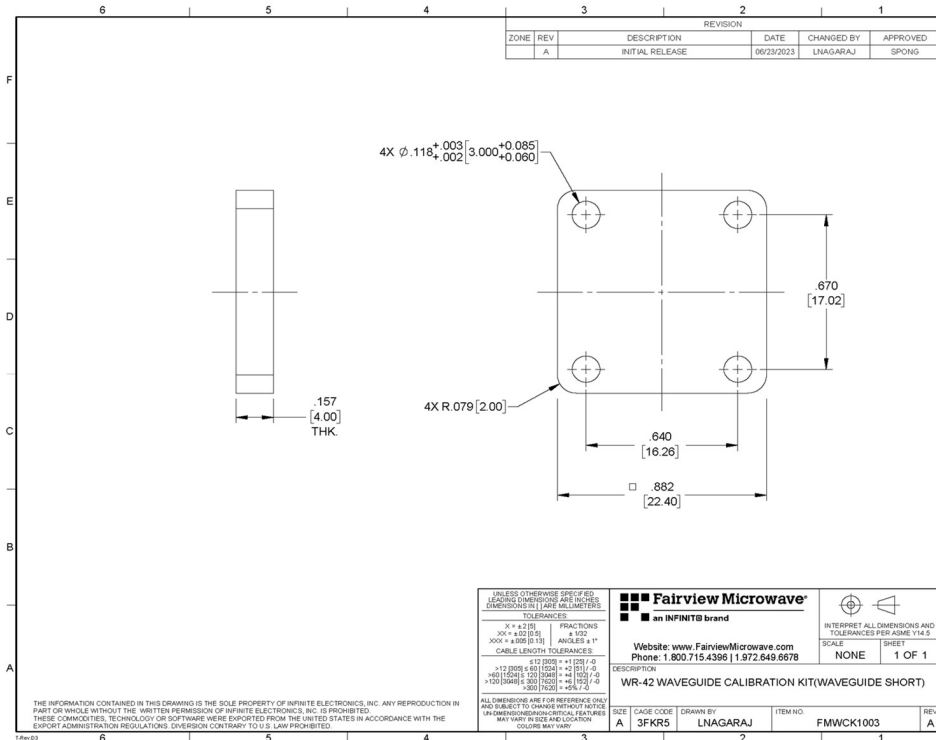
Electrical Specifications

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

WR-42 Waveguide Short



UNLESS OTHERWISE SPECIFIED LEADING DIMENSIONS ARE INCHES (DIMENSIONS IN [] ARE MILLIMETERS)

Fairview Microwave
an INFINITE brand

Website: www.FairviewMicrowave.com
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DESCRIPTION: WR-42 WAVEGUIDE CALIBRATION KIT(WAVEGUIDE SHORT)

SIZE: A CAGE CODE: 3PKR5 DRAWN BY: LNAGARAJ ITEM NO: FMWCK1003 REV: A

INTERPRET ALL DIMENSIONS AND TOLERANCES PER ASME Y14.5
SCALE: NONE SHEET: 1 OF 1

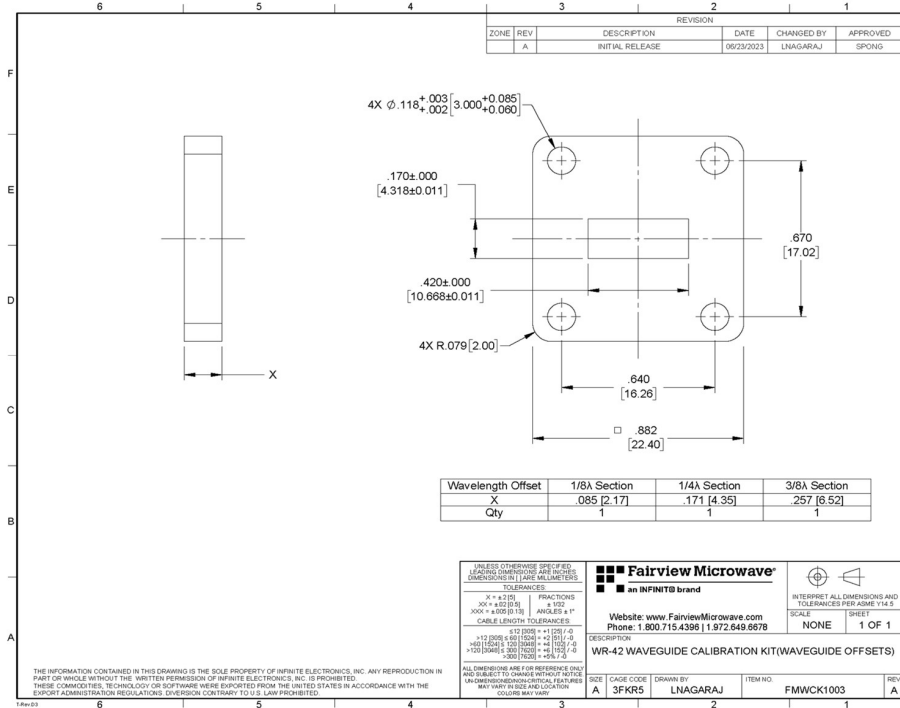
Electrical Specifications

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

WR-42 Waveguide Offsets (1/8λ Section, 1/4λ Section, 3/8λ 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

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

Plotted and Other Data

Notes:

- Values at 25 °C, sea level

Calibration Kit WR-42 Operating From 17.6 to 26.7 GHz Including Waveguide to Coax Adapter, Termination, Short, and Offsets Components 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: [Calibration Kit WR-42 Operating From 17.6 to 26.7 GHz Including Waveguide to Coax Adapter, Termination, Short, and Offsets Components FMWCK1003](#)

URL: <https://www.fairviewmicrowave.com/wr-42-adapter-short-load-offset-26.7-ghz-fmwck1003-p.aspx>

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