

## Calibration Kit WR-22 Operating From 33 to 50 GHz Including Waveguide to Coax Adapter, Termination, Short, and Offsets Components

FMWCK1006 is a precision WR-22 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-22 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-22 waveguide-to-coax adapters. Additional WR-22 precision waveguide straight sections are available for purchase separately. Precision waveguide components in FMWCK1006 are designed to work in full WR-22 band from 33 to 50 GHz. FMWCK1006 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-22
Connector	2.4mm
Frequency Range	33 to 50 GHz



### Features:

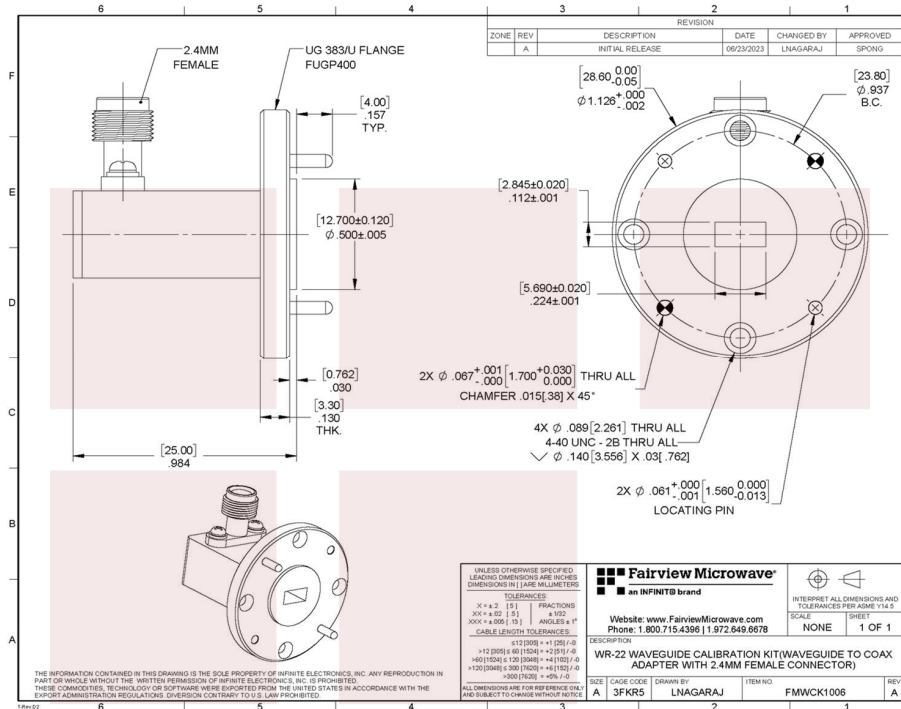
- WR-22 waveguide size
- Frequency range from 33 to 50 GHz
- Precision fabricated and manufactured
- Compatible with standard TRL & SSLT calibration techniques
- Additional waveguide test standards available upon request

### WR-22 Calibration Kit Components

Components	Frequency (GHz)	Quantity
WR-22 Waveguide to Coax Adapter with 2.4mm Female Connector	33 to 50 GHz	1
WR-22 Waveguide to Coax Adapter with 2.4mm Male Connector	33 to 50 GHz	1
WR-22 Waveguide Termination	33 to 50 GHz	1
WR-22 Waveguide Short	33 to 50 GHz	2
WR-22 Waveguide Offsets (1/8λ Section, 1/4λ Section, 3/8λ Section)	33 to 50 GHz	3

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**WR-22 Waveguide to Coax Adapter with  
2.4mm Female Connector**



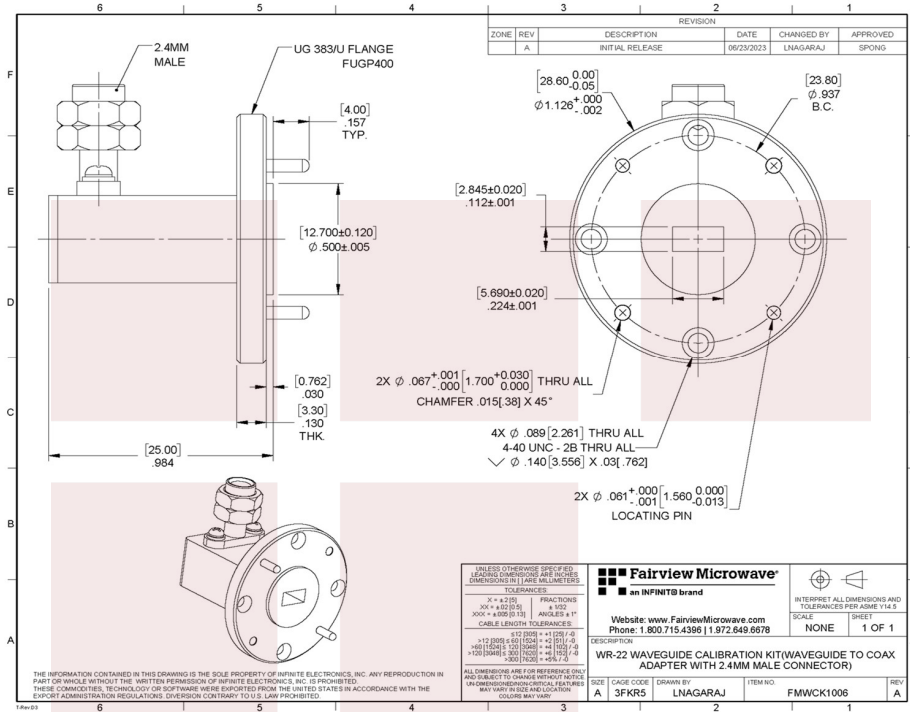
**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	33		50	GHz
VSWR			1.25:1	
Insertion Loss			0.35	dB

**Mechanical Specifications**

Item	Description	Units
Waveguide Size	WR-22	
Flange Type	UG-383/U	
RF Connector Type and Gender	2.4mm Female	
Body	Right Angle	
Body Material and Plating	Copper, Gold plated	
Dimensions	0.984 [25 mm] L, 1.04 [26.5 mm] H, 1.13 [28.6 mm] W	inches

**WR-22 Waveguide to Coax Adapter with  
2.4mm Male Connector**



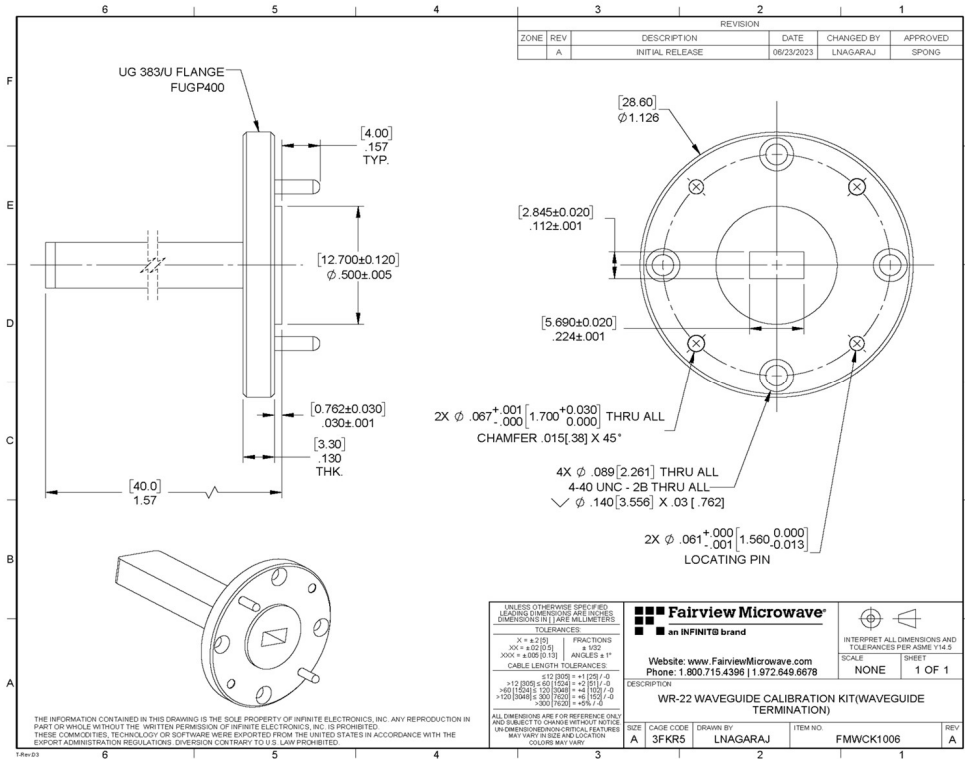
**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	33		50	GHz
VSWR			1.25:1	
Insertion Loss			0.35	dB

**Mechanical Specifications**

Item	Description	Units
Waveguide Size	WR-22	
Flange Type	UG-383/U	
RF Connector Type and Gender	2.4mm Male	
Body	Right Angle	
Body Material and Plating	Copper, Gold plated	
Dimensions	0.984 [25 mm] L, 1.25 [31.65 mm] H, 1.13 [28.6 mm] W	inches

**WR-22 Waveguide Termination**



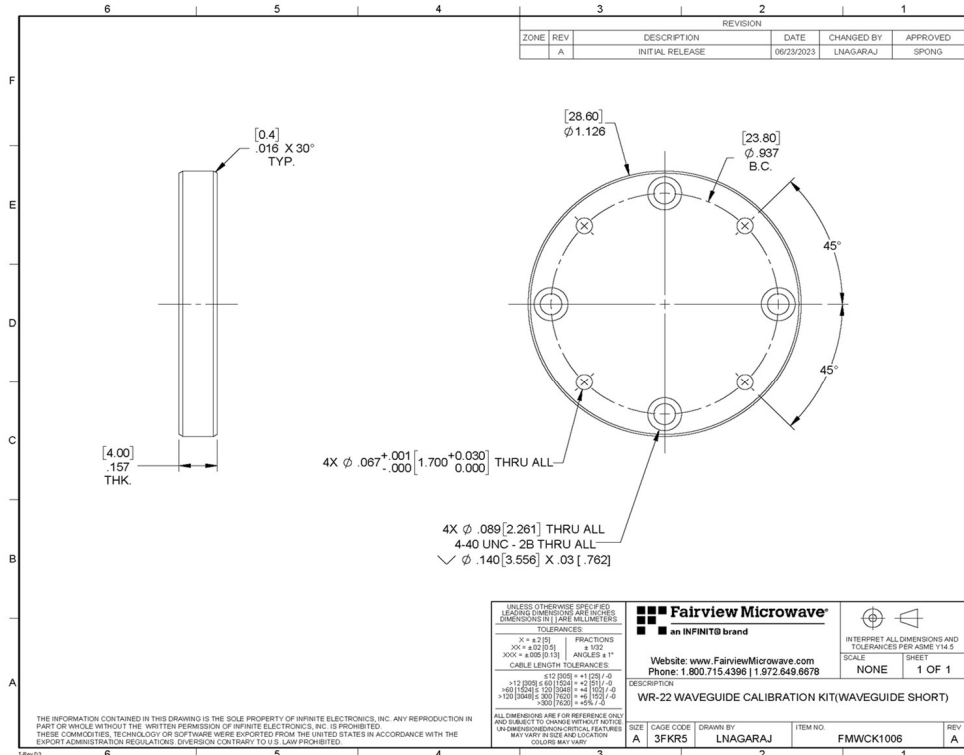
**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	33		50	GHz
VSWR			1.15:1	

**Mechanical Specifications**

Item	Description	Units
Waveguide Size	WR-22	
Flange Type	UG-383/U	
Body Material and Plating	Copper, Gold plated	
Dimensions	1.57 [40 mm] L, 1.13 [28.6 mm] H, 1.13 [28.6 mm] W	inches

**WR-22 Waveguide Short**



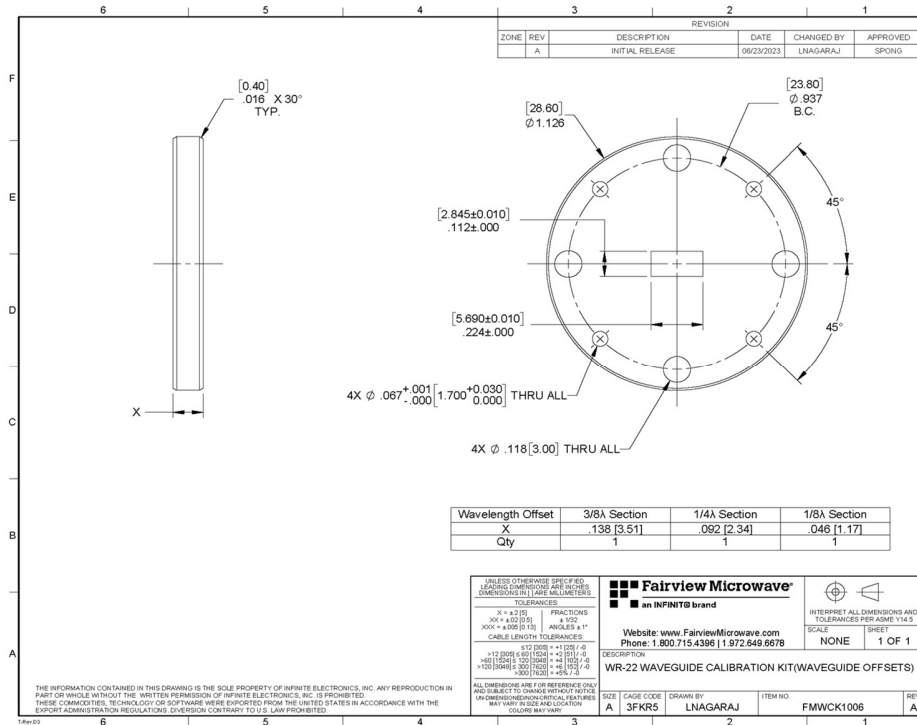
**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	33		50	GHz
VSWR	60:1			

**Mechanical Specifications**

Item	Description	Units
Waveguide Size	WR-22	
Flange Type	UG-383/U	
Body Material and Plating	Copper, Gold plated	
Dimensions	0.157 [4 mm] L, 1.13 [28.6 mm] H, 1.13 [28.6 mm] W	inches

**WR-22 Waveguide Offsets (1/8λ Section, 1/4λ Section, 3/8λ Section)**



**Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	33		50	GHz

**Mechanical Specifications**

Item	Description			Units
Waveguide Size	WR-22			
Flange Type	UG-383/U			
Wavelength Offset	1/8λ Section, 1/4λ Section, 3/8λ Section			
Body Material and Plating	Copper, Gold plated			
Length	1/8λ Section	1/4λ Section	3/8λ Section	
	0.046 [1.17 mm]	0.92 [2.34 mm]	0.138 [3.51 mm]	inches
Dimensions (H, W)	1.13 [28.6 mm] H, 1.13 [28.6 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-22 Operating From 33 to 50 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-22 Operating From 33 to 50 GHz Including Waveguide to Coax Adapter, Termination, Short, and Offsets Components FMWCK1006](#)

URL: <https://www.fairviewmicrowave.com/wr-22-adapter-short-load-offset-50-ghz-fmwck1006-p.aspx>

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