

Short Open Load Thru (SOLT) Analyzer Calibration Kit with 3.5mm Male Connections in a portable 4-in-1 Design and Operating to 26.5 GHz

Short Open Load Thru (SOLT) Analyzer Calibration Kit, part number FMCK1013, from Fairview Microwave is in-stock and ships same day. This 3.5mm Male SOLT cal kit is designed to be portable, allowing for quick, effective short open load thru calibrations in the field. The calibration components are integrated into a single, compact 4-in-1 kit. This allows for easy transport and storage. The unit can be used for open short load thru (OSLT) calibrations on many different analyzers, including site analyzers, vector network analyzers and cable analyzers. Non-insertable device-under-test (DUT) can now be accommodated because of the integrated 3.5mm thru included as part of the cal kit.

Fairview's short open load thru, 4-in-1 calibration kit FMCK1013 datasheet, specifications and outline drawing are shown in the PDF below. Our extensive offering of RF, microwave and millimeter wave components allows designers to configure and customize their test set-ups and calibrations however they like. From performing OSLT calibrations, field calibrations or VNA calibrations, Fairview Microwave has the right cal kits and other test solutions to meet your needs.

Configuration

Connector		3.5mm Male Short Open Load Thru
Calibration Kit Component		4-in-1
Open		
Short		
Load		

Mechanical Specifications

Size		
Weight		2.752 lbs [1.25 Kg]
Connector		
Type		3.5mm Male Short Open Load Thru
Contact Material and Plating		Beryllium Copper, Gold
Body Material and Plating		Beryllium Copper, Gold



Features:

- Lightweight 4-in-1 Design
- Integrated Short Open Load Thru (SOLT)
- Attached Lanyard
- Gold Plated Short Open Load Thru
- In Stock and Ready to Ship

Applications:

- Site Troubleshooting
- 3.5mm Short Open Load Thru Calibration
- Network Analyzer Calibration
- Feeder Cable Test
- SOLT or OSLT Calibration
- Base Station Analyzers

Fairview Microwave  
301 Leora Ln., Suite 100  
Lewisville, TX 75056  
Tel: 1-800-715-4396 / (972) 649-6678  
Fax: (972) 649-6689  
[www.fairviewmicrowave.com](http://www.fairviewmicrowave.com)  
[sales@fairviewmicrowave.com](mailto:sales@fairviewmicrowave.com)

**OPEN**

ELECTRICAL	MIN	TYP	MAX	UNIT
FREQUENCY RANGE	DC - 26.5			GHz
IMPEDANCE	50			$\Omega$
PHASE (DC - 3 GHz)		0.65		degree
PHASE (3 - 8 GHz)		1.2		degree
PHASE (8 - 26.5 GHz)		2		degree
CAPACITANCE	$C0 \times 10^{-15} = 49.433$			F
	$C1 \times 10^{-27} = -310.13$			F/Hz
	$C2 \times 10^{-36} = 23.168$			F/Hz <sup>2</sup>
	$C3 \times 10^{-45} = -0.15966$			F/Hz <sup>3</sup>
DELAY		29.243		ps
LOSS		2.2		G $\Omega$ /s
CONNECTOR THREAD	1/4 - 36 UNS			inch
DIMENSION	0.394 ( $\varnothing$ ) x 0.976 (L) $\pm$ 0.02			inch

**SHORT**

ELECTRICAL	MIN	TYP	MAX	UNIT
FREQUENCY RANGE	DC - 26.5			GHz
IMPEDANCE	50			$\Omega$
PHASE (DC - 3 GHz)		0.65		degree
PHASE (3 - 8 GHz)		1.2		degree
PHASE (8 - 26.5 GHz)		2		degree
INDUCTANCE	$L0 \times 10^{-12} = 2.0765$			F
	$L1 \times 10^{-24} = -108.54$			F/Hz
	$L2 \times 10^{-33} = 2.1705$			F/Hz <sup>2</sup>
	$L3 \times 10^{-42} = -0.01$			F/Hz <sup>3</sup>
DELAY		31.785		ps
LOSS		2.36		G $\Omega$ /s
CONNECTOR THREAD	1/4 - 36 UNS			inch
DIMENSION	0.394 ( $\varnothing$ ) x 0.976 (L) $\pm$ 0.02			inch

**LOAD**

ELECTRICAL	MIN	TYP	MAX	UNIT
FREQUENCY RANGE	DC - 26.5			GHz
IMPEDANCE	50			$\Omega$
RETURN LOSS (DC - 3 GHz)	40	44		dB
RETURN LOSS (3 - 6 GHz)	36	40		dB
RETURN LOSS (6 - 26.5 GHz)	30	34		dB
CONNECTOR THREAD	1/4 - 36 UNS			inch
DIMENSION	0.394 ( $\emptyset$ ) x 1.45 (L) $\pm$ 0.02			inch

**THROUGH MALE TO MALE**

ELECTRICAL	MIN	TYP	MAX	UNIT
FREQUENCY RANGE	DC - 26.5			GHz
IMPEDANCE	50			$\Omega$
INSERTION LOSS (DC - 26.5 GHz)		0.1	0.2	dB
RETURN LOSS (DC - 8 GHz)	30	34		dB
RETURN LOSS (8 - 18 GHz)	28	32		dB
RETURN LOSS (18 - 26.5 GHz)	26	30		dB
CONNECTOR THREAD	1/4 - 36 UNS			inch
DIMENSION	0.354 ( $\emptyset$ ) x 1.24 (L) $\pm$ 0.02			inch

### USAGE NOTES

1. After use please replace protective covers on all connectors.  
  
We recommend using an anti-humidity case for storage.
2. Keep connectors clean.
3. Minimize touches with the connectors.
4. Do not drop the units, especially onto the connectors.
5. Do not insert male pins with a diameter greater than 0.93mm [0.0366 in]. This will damage the female connector.
6. Do not mix different connectors (2.4mm, 1.85mm, and 1.0mm) to avoid damage to the connectors.
7. When connecting female and male connectors, do not move the female connector of the standard kit. This would damage (loosen) the female connector.
8. When connecting female and male connectors, rotate the hex nut of the standard kit male connector (do not move the male connector) slowly to screw onto the female connector thread (do not move the female connector).
9. Visually check the connector threads before use.
10. Use alcohol and lint-free wipes to clean center conductor pin. Wipe the outer conductor in a circular motion.
11. For best results, use at temperatures between 18°C and 28°C.
12. The little difference of gold-plating layer between components does not affect the electrical performance.
13. Torque wrench setting should be at 8 in-lb.

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

### **Plotted and Other Data**

Notes:

- Values at 25 °C, sea level

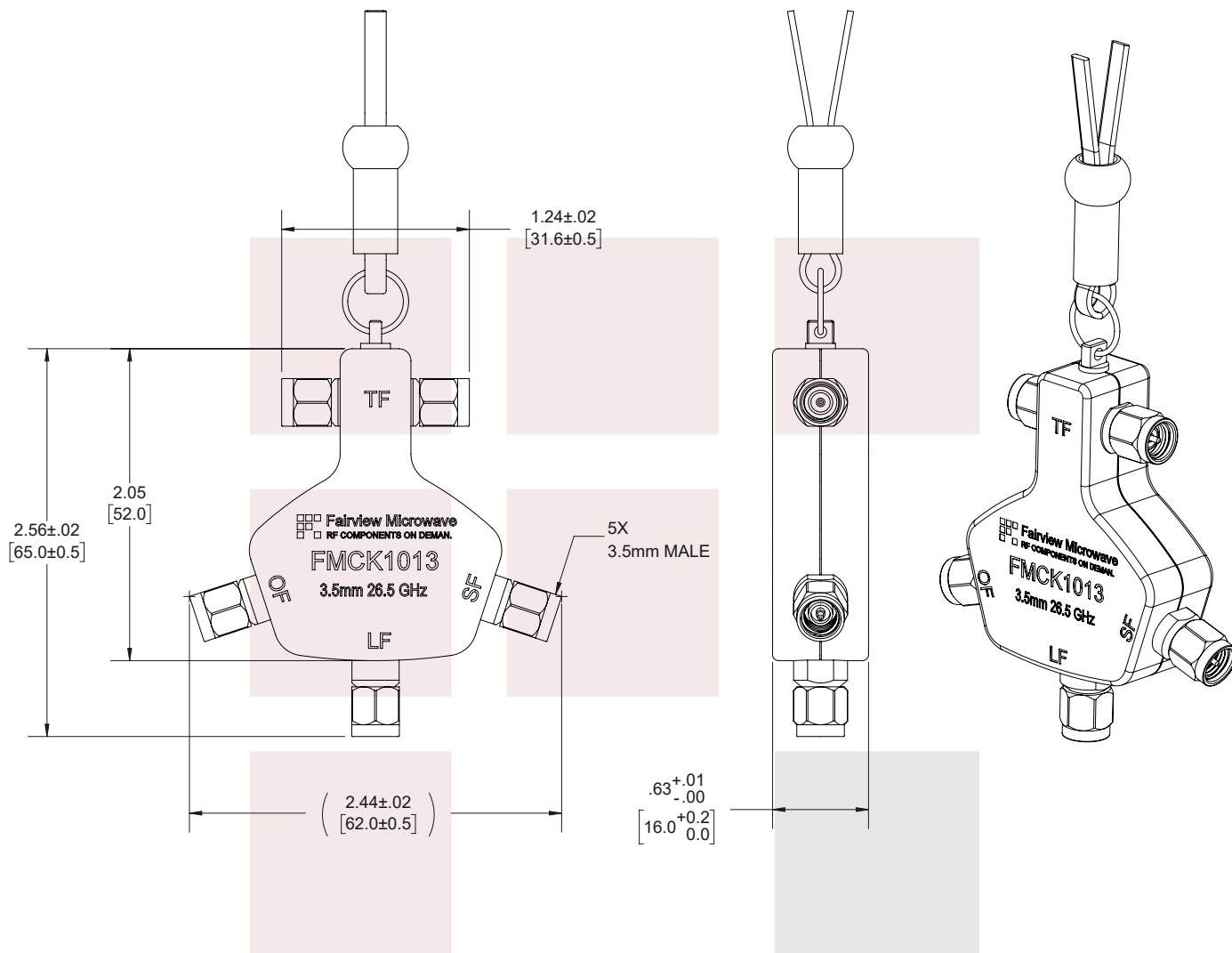
Short Open Load Thru (SOLT) Analyzer Calibration Kit with 3.5mm Male Connections in a portable 4-in-1 Design and Operating to 26.5 GHz from Fairview Microwave is in-stock and available to ship same-day. All of our RF/microwave products are available off-the-shelf from our ISO 9001:2008 certified facilities in Allen, Texas. Fairview Microwave is RF on-demand.

For additional information on this product, please click the following link: [Short Open Load Thru \(SOLT\) Analyzer Calibration Kit with 3.5mm Male Connections in a portable 4-in-1 Design and Operating to 26.5 GHz FMCK1013](#)

URL: <https://www.fairviewmicrowave.com/open-short-load-calibration-kit-type-3.5mm-male-26.5-mhz-fmck1013-p.aspx>

The information contained in this document is accurate to the best of our knowledge and representative of the part described herein. It may be necessary to make modifications to the part and/or the documentation of the part, in order to implement improvements. Fairview Microwave reserves the right to make such changes as required. Unless otherwise stated, all specifications are nominal. Fairview Microwave does not make any representation or warranty regarding the suitability of the part described herein for any particular purpose, and Fairview Microwave does not assume any liability arising out of the use of any part or documentation.





**STANDARD TOLERANCES**

.X ±0.2  
.XX ±0.01  
.XXX ±0.005

\*STANDARD TOLERANCES APPLY  
ONLY TO DIMENSIONS IN INCHES

**FAIRVIEW MICROWAVE INC.**

ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM

**NOTES:**

1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL.
2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME.
3. DIMENSIONS ARE IN INCHES [mm].

**TITLE**

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**DWG NO**

FMCK1013

**CAGE CODE**

3FKR5

CAD FILE 020718

SHEET 1 OF 1

SCALE N/A

SIZE A

7361