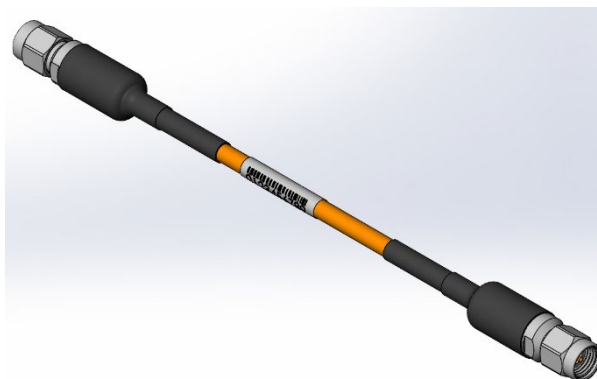




RF Characterization Report

LL043-92SP-92SP-XXXX



LL043-92BJ-92BJ-XXXX



Test Date: Nov 2024

Description:

**43.5 GHz Nitrowave™ High-Performance Microwave Cable Assembly,
2.92mm End Options**

Series: LL043**Description:** 50 Ohm, High-Performance Microwave Cable Assembly, 2.92mm End Options

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Series: LL043

Description: 50 Ohm, High-Performance Microwave Cable Assembly, 2.92mm End Options

Test Setup Information

Scope:

Provide standing wave ratio, return loss and insertion loss performance parameters for LL043 high frequency RF cable assembly with 2.92mm connector end options.

Instrument Setup & Test Accessories:

Network Analyzer	Keysight PNA N5227B
Averaging Factor	1
Smoothing	Off
IF Bandwidth	1 KHz
Sweep Start	10 MHz
Sweep End	43.5 GHz
Points	4350
Test Cables	Junkosha MWX251(DC to 50 GHz)

Calibration Type:

A Keysight mechanical calibration is performed for N5227B using the Keysight 85056D kit.

Calibration Kit	Keysight 85056D
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Adapter Use:

The 2.4mm to 2.92mm adapters were used for the measurements of LL043-92SP-92SP-0152 and LL043-92BJ-92BJ-XXXX, 1.85mm to 2.92mm adapters were used for the measurements of LL043-92SP-92SP-1000. The adapter effects were removed from the measurement using AFR.

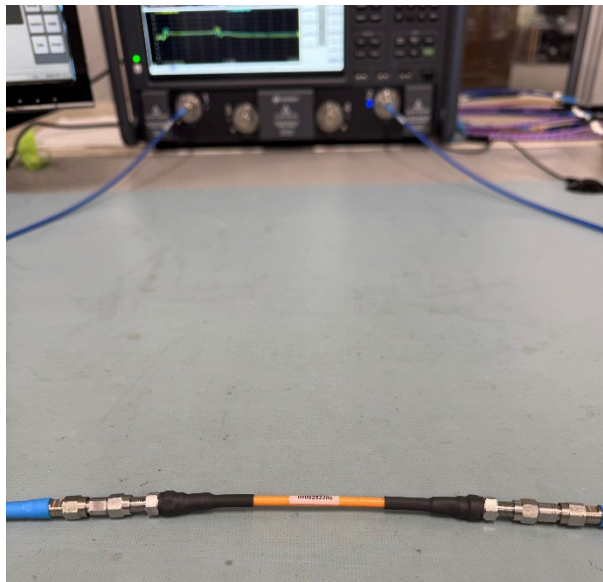
Series: LL043

Description: 50 Ohm, High-Performance Microwave Cable Assembly, 2.92mm End Options

LL043-92XX-92XX-XXXX Test Definition

Part Number	End 1	End 2
LL043-92SP-92SP-XXXX	2.92mm Plug	2.92mm Plug
LL043-92BJ-92BJ-XXXX	2.92mm Bulkhead Jack	2.92mm Bulkhead Jack

Cable Under Test:



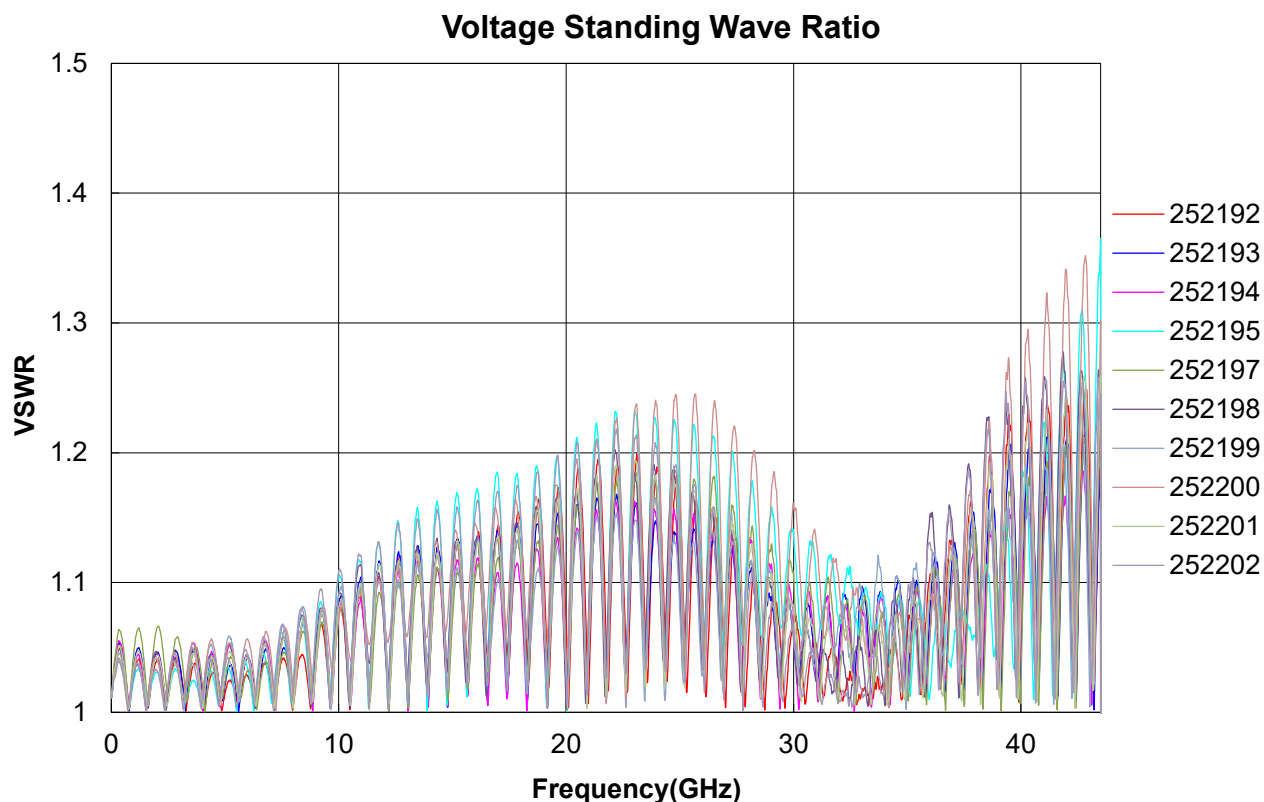
Series: LL043

Description: 50 Ohm, High-Performance Microwave Cable Assembly, 2.92mm End Options

Results: LL043-92SP-92SP-0152

Description: LL043 High Frequency RF Cable Assembly			
Sample	VSWR (max)	RL (dB, max)	IL(dB, min)
252192	1.25 @ 42.88 GHz	-19.13 @ 42.88 GHz	-0.61 @ 42.75 GHz
252193	1.22 @ 42.84 GHz	-20.22 @ 42.84 GHz	-0.66 @ 43.50 GHz
252194	1.21 @ 43.50 GHz	-20.39 @ 43.50 GHz	-0.58 @ 43.46 GHz
252195	1.36 @ 43.50 GHz	-16.23 @ 43.50 GHz	-0.60 @ 43.44 GHz
252197	1.22 @ 43.50 GHz	-19.96 @ 43.50 GHz	-0.54 @ 43.50 GHz
252198	1.28 @ 41.85 GHz	-18.28 @ 41.85 GHz	-0.65 @ 43.44 GHz
252199	1.26 @ 43.40 GHz	-18.84 @ 43.40 GHz	-0.58 @ 43.40 GHz
252200	1.35 @ 42.83 GHz	-16.50 @ 42.83 GHz	-0.68 @ 42.77 GHz
252201	1.26 @ 43.50 GHz	-18.81 @ 43.50 GHz	-0.64 @ 43.49 GHz
252202	1.26 @ 41.11 GHz	-18.90 @ 41.11 GHz	-0.66 @ 42.67 GHz

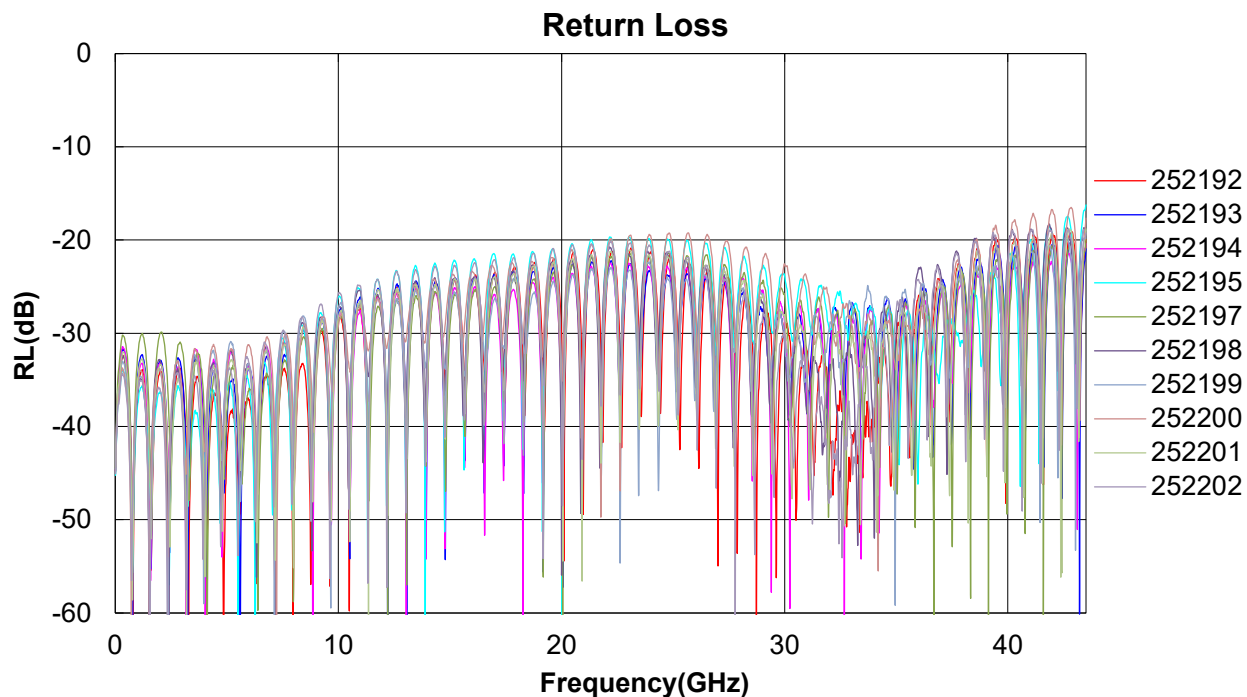
VSWR



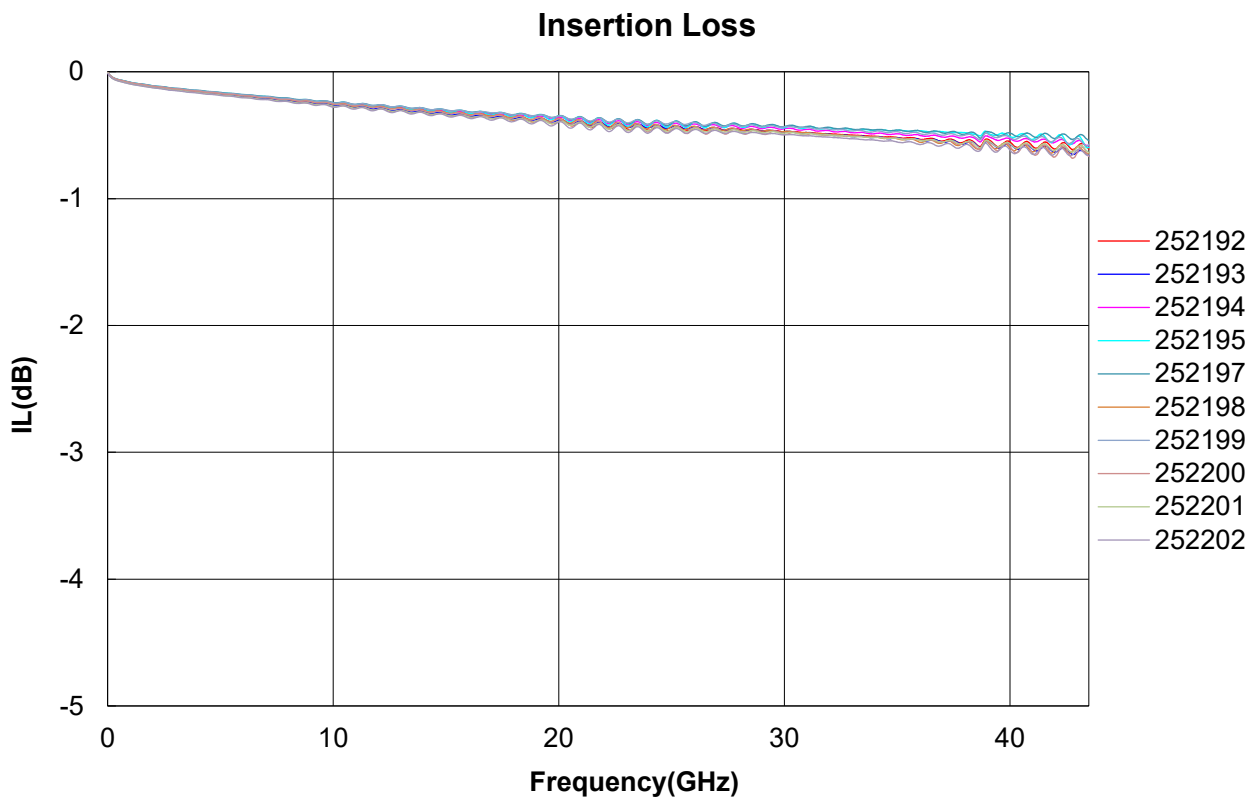
Series: LL043

Description: 50 Ohm, High-Performance Microwave Cable Assembly, 2.92mm End Options

Return Loss



Insertion Loss



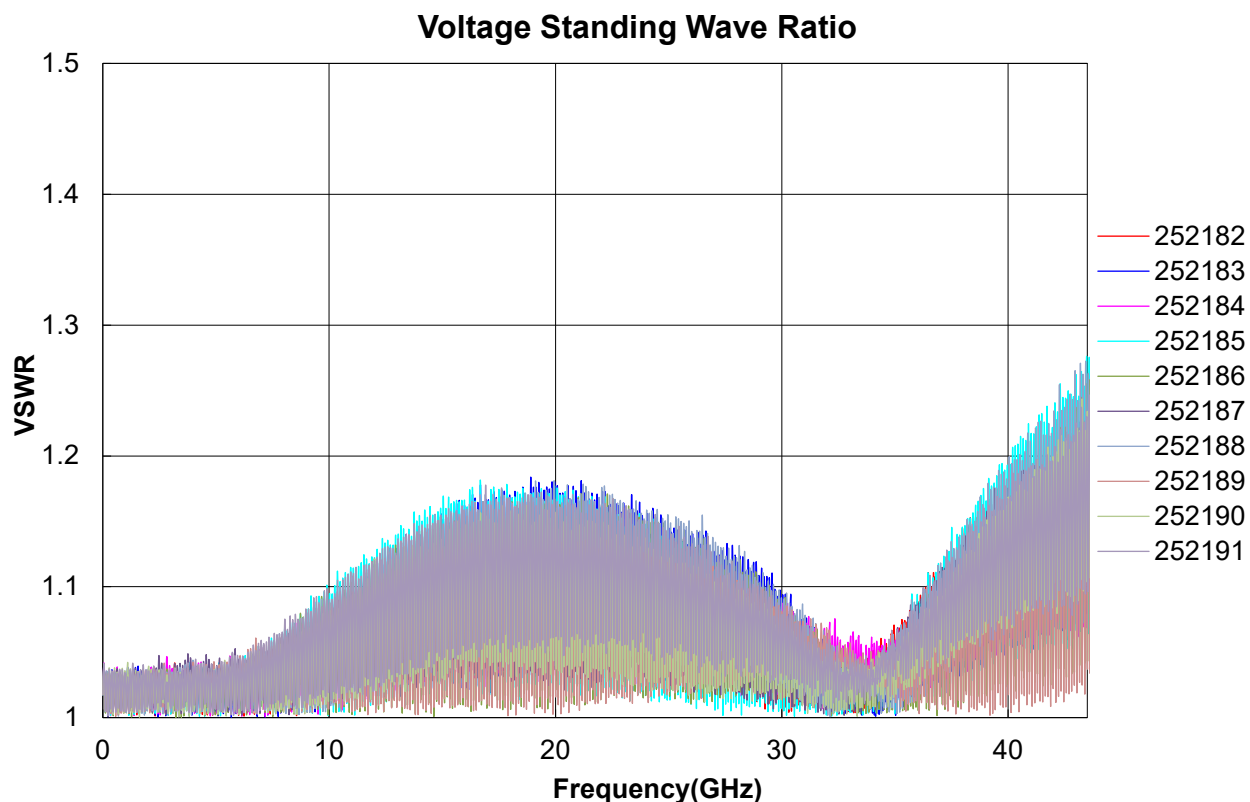
Series: LL043

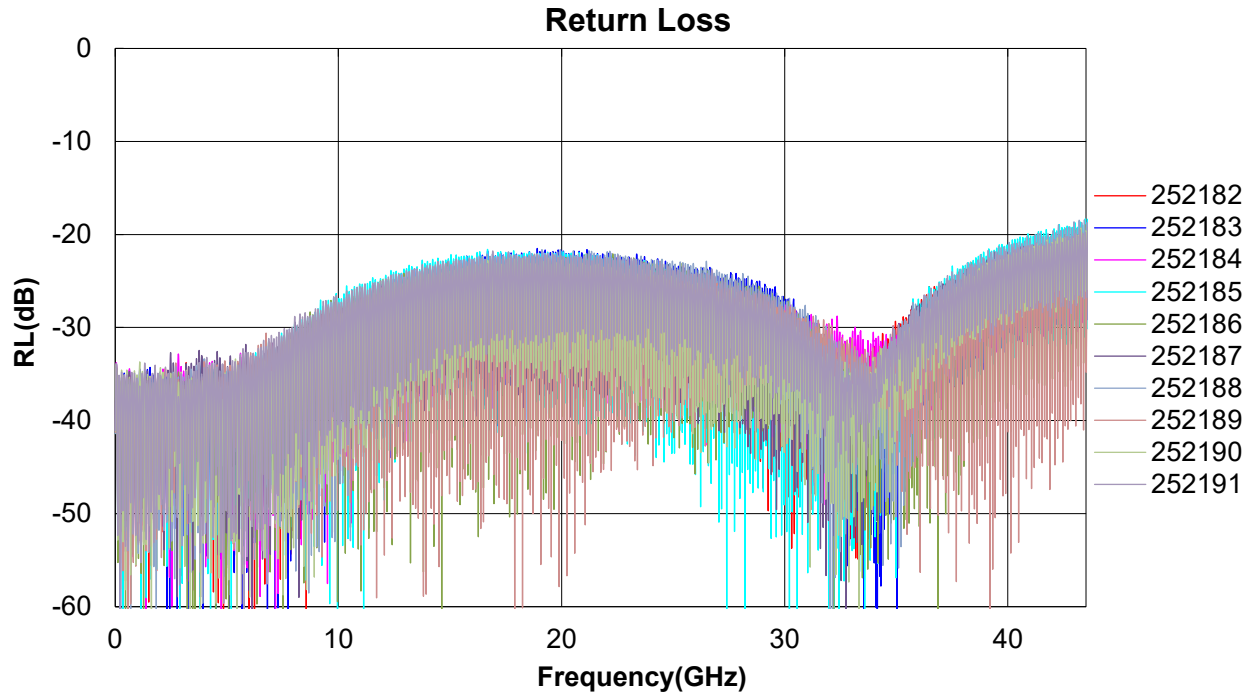
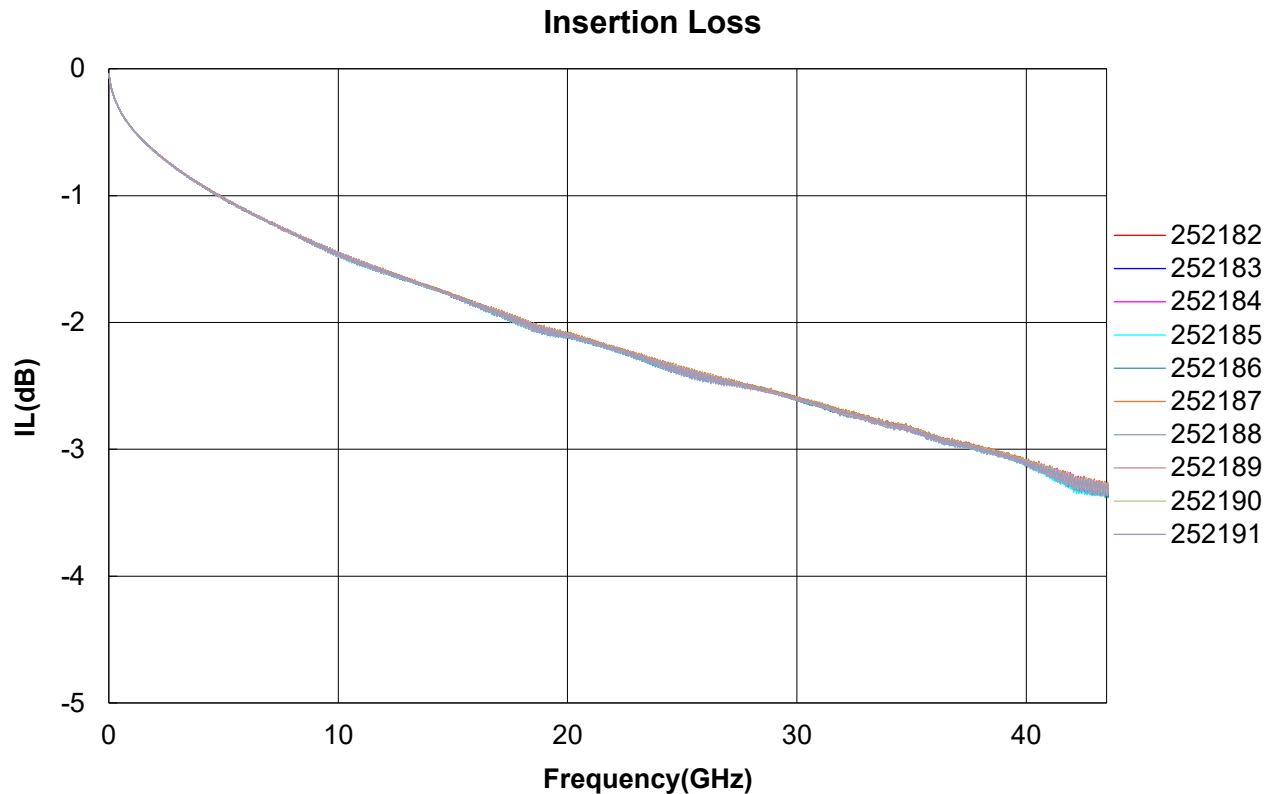
Description: 50 Ohm, High-Performance Microwave Cable Assembly, 2.92mm End Options

Results: LL043-92SP-92SP-1000

Description: LL043 High Frequency RF Cable Assembly			
Sample	VSWR (max)	RL (dB, max)	IL(dB, min)
252182	1.24 @ 43.46 GHz	-19.33 @ 43.46 GHz	-3.35 @ 43.44 GHz
252183	1.24 @ 43.48 GHz	-19.32 @ 43.48 GHz	-3.35 @ 43.48 GHz
252184	1.16 @ 43.49 GHz	-22.43 @ 43.49 GHz	-3.31 @ 43.48 GHz
252185	1.28 @ 43.47 GHz	-18.32 @ 43.47 GHz	-3.38 @ 43.45 GHz
252186	1.26 @ 43.45 GHz	-18.93 @ 43.45 GHz	-3.38 @ 43.44 GHz
252187	1.23 @ 43.50 GHz	-19.88 @ 43.50 GHz	-3.32 @ 43.48 GHz
252188	1.27 @ 43.43 GHz	-18.43 @ 43.43 GHz	-3.37 @ 43.40 GHz
252189	1.20 @ 43.45 GHz	-20.78 @ 43.45 GHz	-3.34 @ 43.43 GHz
252190	1.24 @ 43.27 GHz	-19.29 @ 43.27 GHz	-3.33 @ 43.48 GHz
252191	1.24 @ 43.24 GHz	-19.49 @ 43.24 GHz	-3.34 @ 43.34 GHz

VSWR



Series: LL043**Description:** 50 Ohm, High-Performance Microwave Cable Assembly, 2.92mm End Options**Return Loss****Insertion Loss**

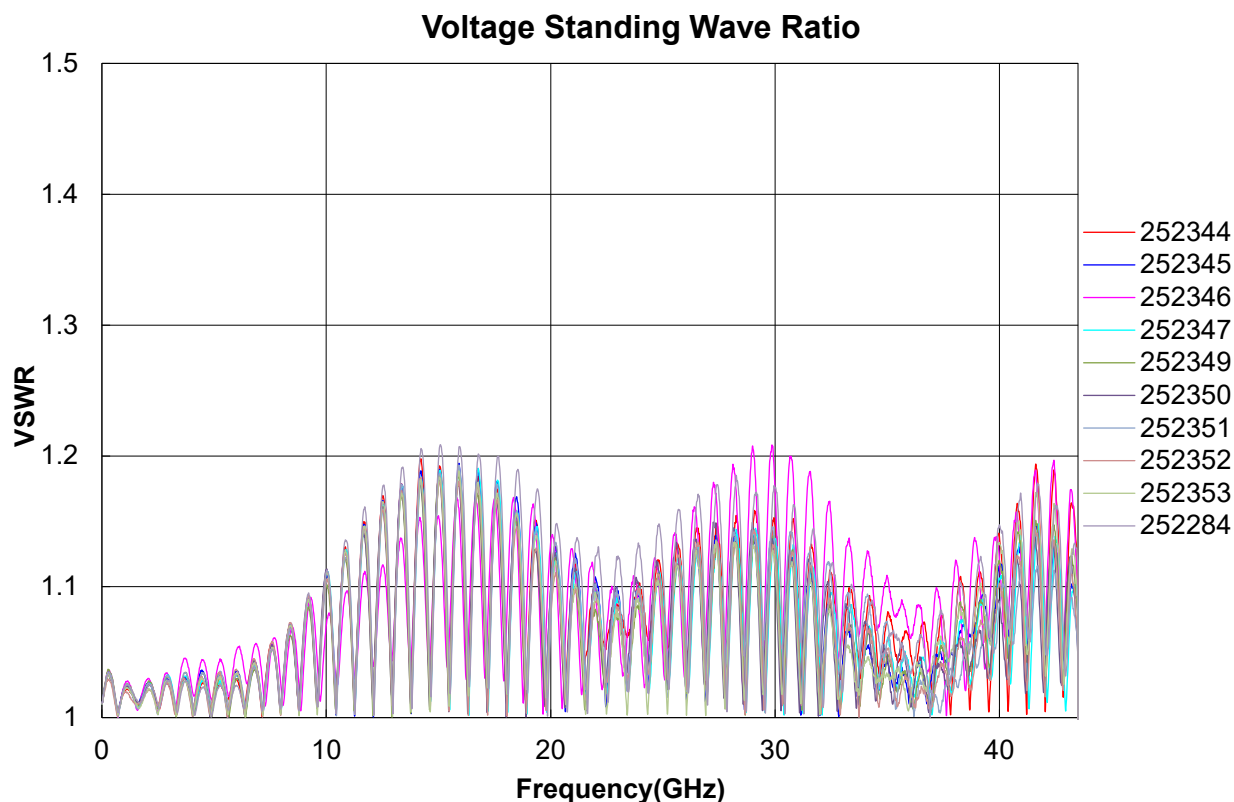
Series: LL043

Description: 50 Ohm, High-Performance Microwave Cable Assembly, 2.92mm End Options

Results: LL043-92BJ-92BJ-0152

Description: LL043 High Frequency RF Cable Assembly			
Sample	VSWR (max)	RL (dB, max)	IL(dB, min)
252344	1.20 @ 14.22 GHz	-22.91 @ 14.22 GHz	-0.47 @ 41.52 GHz
252345	1.19 @ 15.91 GHz	-21.05 @ 15.91 GHz	-0.47 @ 41.67 GHz
252346	1.21 @ 29.86 GHz	-20.50 @ 29.86 GHz	-0.56 @ 42.34 GHz
252347	1.19 @ 16.77 GHz	-21.22 @ 16.77 GHz	-0.57 @ 41.68 GHz
252349	1.19 @ 15.04 GHz	-21.42 @ 15.04 GHz	-0.51 @ 42.34 GHz
252350	1.18 @ 16.72 GHz	-21.56 @ 16.72 GHz	-0.49 @ 42.34 GHz
252351	1.19 @ 15.91 GHz	-21.11 @ 15.91 GHz	-0.57 @ 42.29 GHz
252352	1.18 @ 14.21 GHz	-21.50 @ 14.21 GHz	-0.60 @ 41.60 GHz
252353	1.19 @ 15.91 GHz	-21.29 @ 15.91 GHz	-0.50 @ 41.60 GHz
252284	1.21 @ 15.08 GHz	-20.50 @ 15.08 GHz	-0.66 @ 43.50 GHz

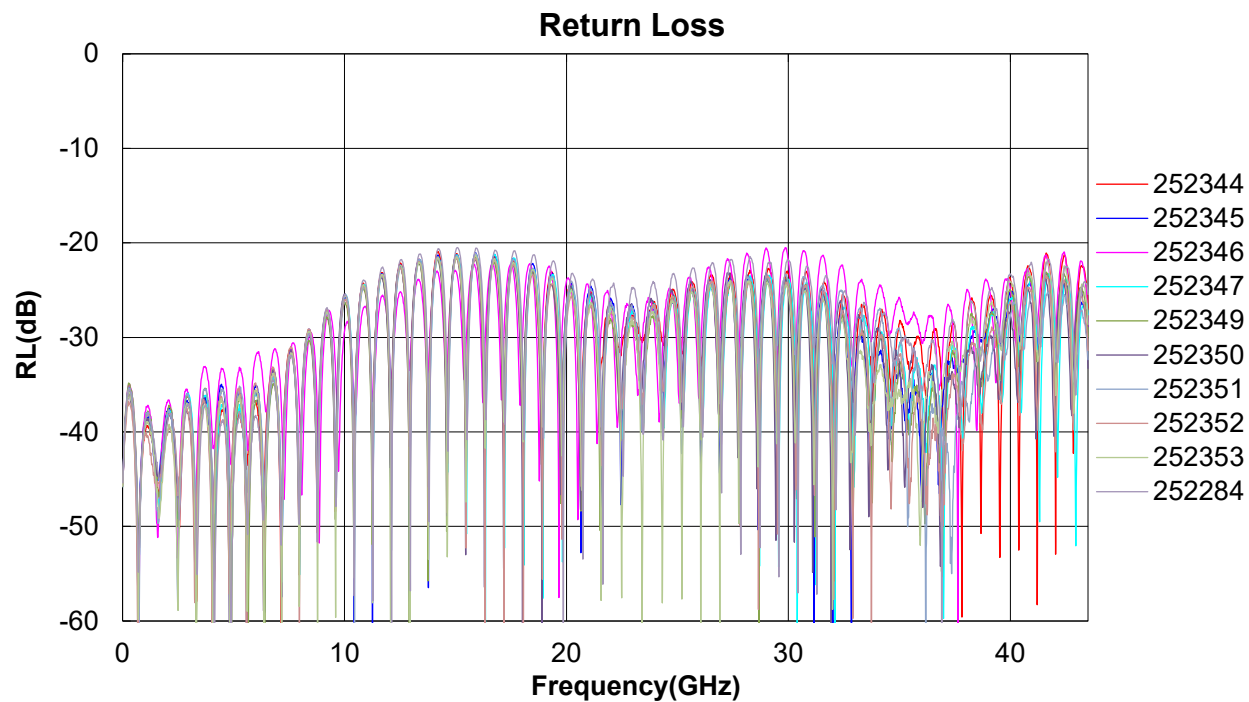
VSWR



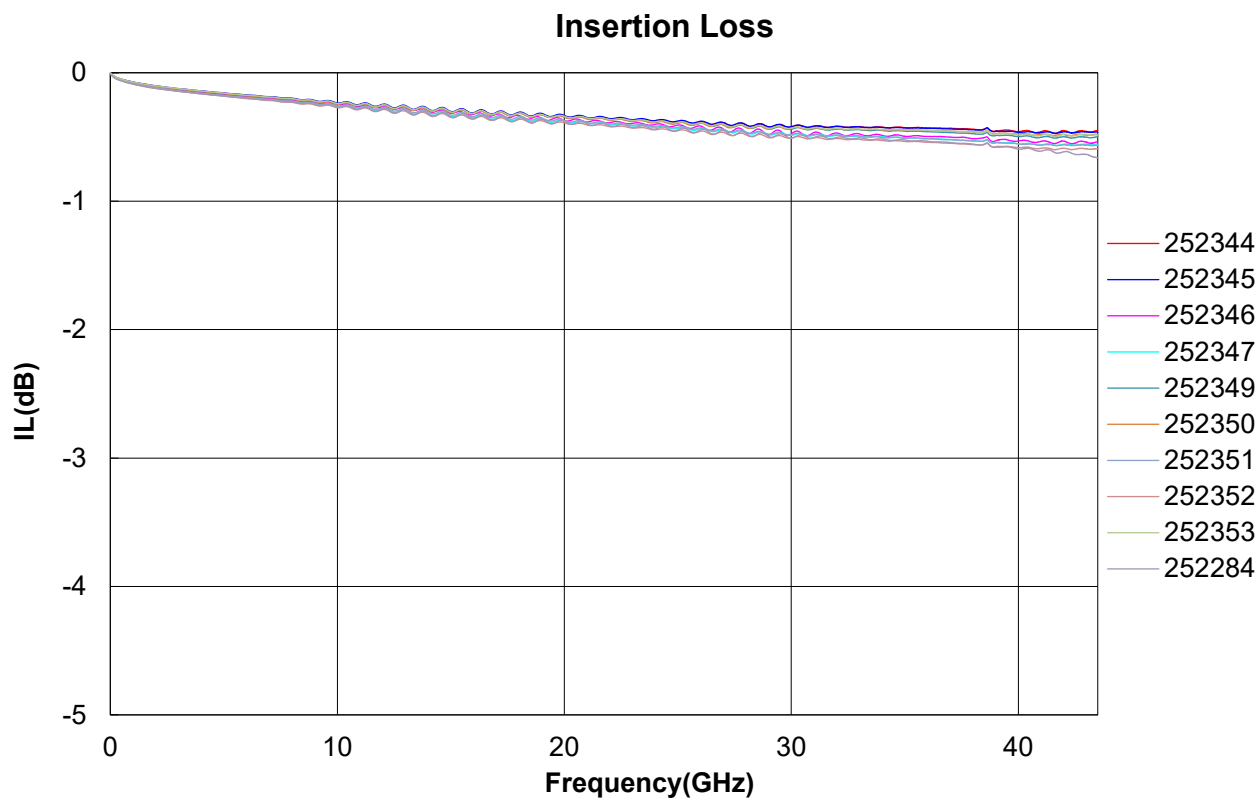
Series: LL043

Description: 50 Ohm, High-Performance Microwave Cable Assembly, 2.92mm End Options

Return Loss



Insertion Loss



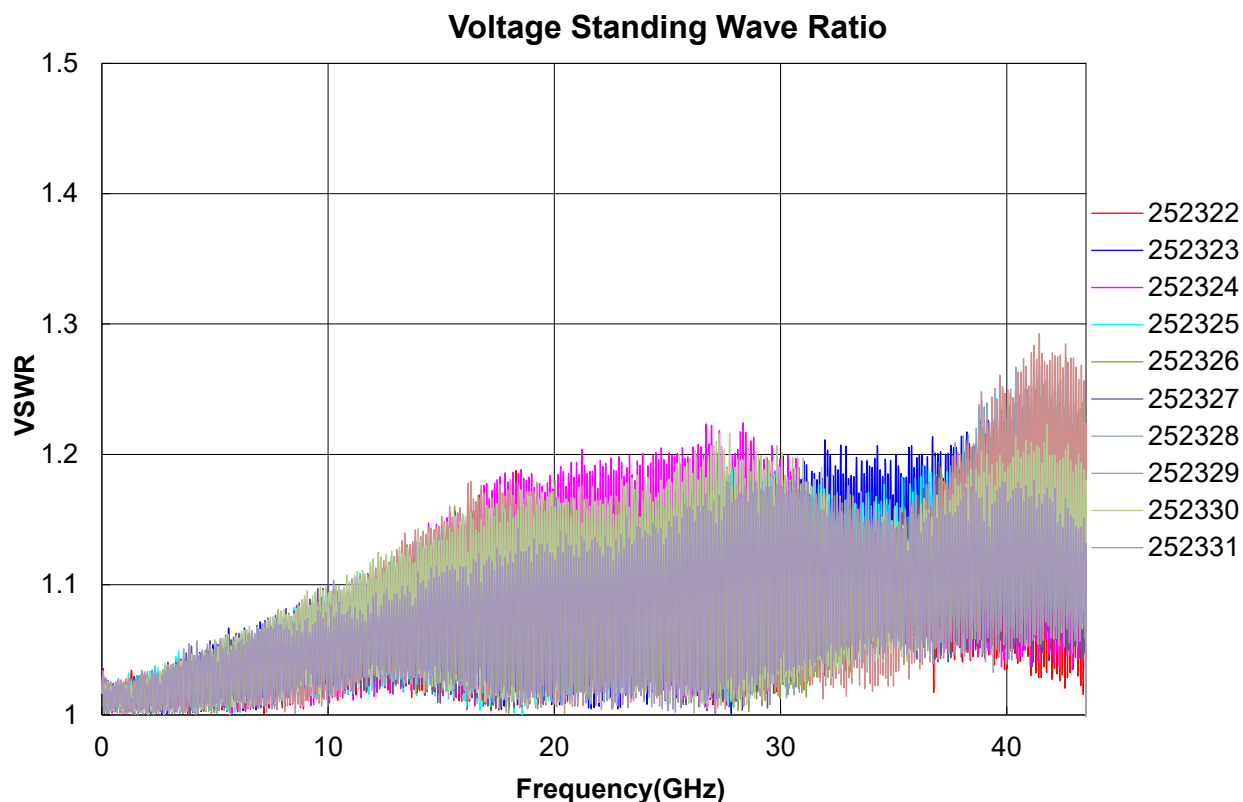
Series: LL043

Description: 50 Ohm, High-Performance Microwave Cable Assembly, 2.92mm End Options

Results: LL043-92BJ-92BJ-1000

Description: LL043 High Frequency RF Cable Assembly			
Sample	VSWR (max)	RL (dB, max)	IL(dB, min)
252322	1.20 @ 40.77 GHz	-20.98 @ 40.77 GHz	-3.00 @ 43.44 GHz
252323	1.23 @ 41.71 GHz	-19.63 @ 41.71 GHz	-3.03 @ 43.45 GHz
252324	1.23 @ 42.61 GHz	-19.83 @ 42.61 GHz	-2.94 @ 43.43 GHz
252325	1.24 @ 39.56 GHz	-19.31 @ 39.56 GHz	-2.93 @ 43.50 GHz
252326	1.25 @ 41.63 GHz	-18.98 @ 41.63 GHz	-3.02 @ 43.37 GHz
252327	1.25 @ 41.31 GHz	-19.09 @ 41.31 GHz	-3.00 @ 43.40 GHz
252328	1.28 @ 41.21 GHz	-18.28 @ 41.21 GHz	-3.01 @ 43.43 GHz
252329	1.29 @ 41.43 GHz	-17.88 @ 41.43 GHz	-2.98 @ 43.30 GHz
252330	1.22 @ 41.78 GHz	-19.97 @ 41.78 GHz	-3.06 @ 43.50 GHz
252331	1.18 @ 30.99 GHz	-21.59 @ 30.99 GHz	-2.98 @ 43.41 GHz

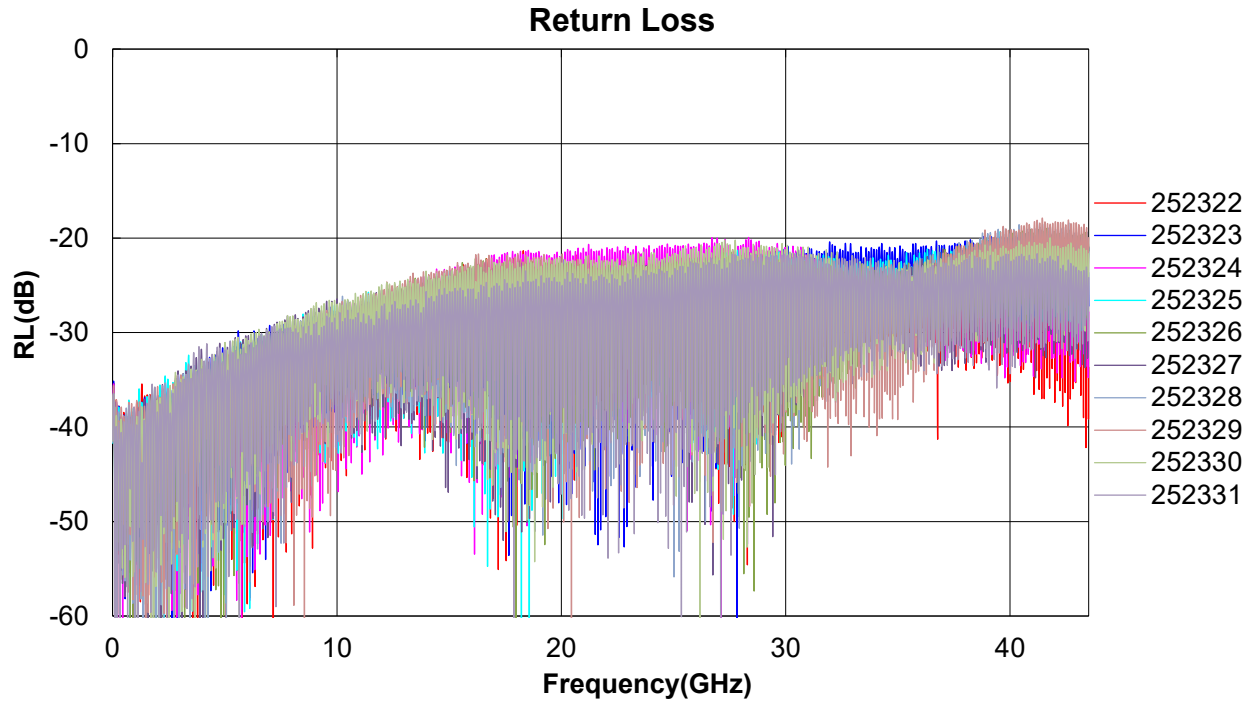
VSWR



Series: LL043

Description: 50 Ohm, High-Performance Microwave Cable Assembly, 2.92mm End Options

Return Loss



Insertion Loss

