



RF Characterization Report

LL110-10BJ-10BJ-XXXX



LL110-10SP-10SP-XXXX



Test Date: Feb 2025

Description:
110 GHz, High-Performance Microwave Cable Assembly,
1.0mm End Options



Series: LL110

Description: 110 GHz, High-Performance Microwave Cable Assembly, 1.0mm End Option

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Series: LL110

Description: 110 GHz, High-Performance Microwave Cable Assembly, 1.0mm End Option

Test Setup Information

Scope:

Provide standing wave ratio, return loss and insertion loss performance parameters for LL110 high frequency RF cable assembly with 1.0mm RF connector end option.

Instrument Setup & Test Accessories:

Network Analyzer	Keysight PNA N5227B
Averaging Factor	1
Smoothing	Off
IF Bandwidth	1 KHz
Sweep Start	10 MHz
Sweep End	110 GHz
Points	11000
Test Cables	Keysight N5293AX01 (110GHz Extenders)

Calibration Type:

A Keysight mechanical calibration is performed for N5227B using the Keysight 1.0mm MCAL 85059B.

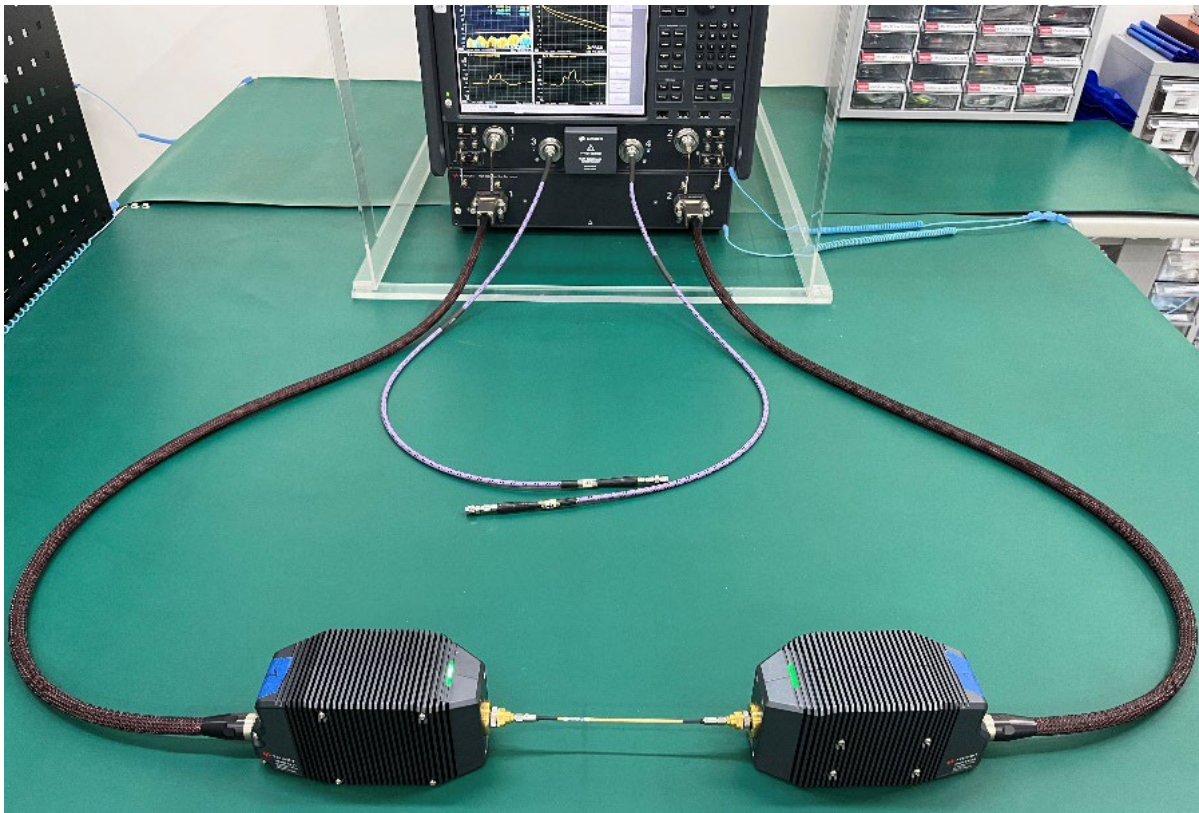
Calibration Kit	Keysight MCAL 85059B
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Adapter Use:

Keysight 1.0 mm to 1.0 mm adapter were used, but the adapters effect was removed from the measurement by MCAL.

Series: LL110**Description:** 110 GHz, High-Performance Microwave Cable Assembly, 1.0mm End Option**LL110-10XX-10XX-XXXX Test Definition**

Part Number	End 1	End 2
LL110-10BJ-10BJ-XXXX	1.00mm Bulkhead Straight Jack	1.00mm Bulkhead Straight Jack
LL110-10SP-10SP-XXXX	1.00mm Straight Plug	1.00mm Straight Plug

Cable Under Test:

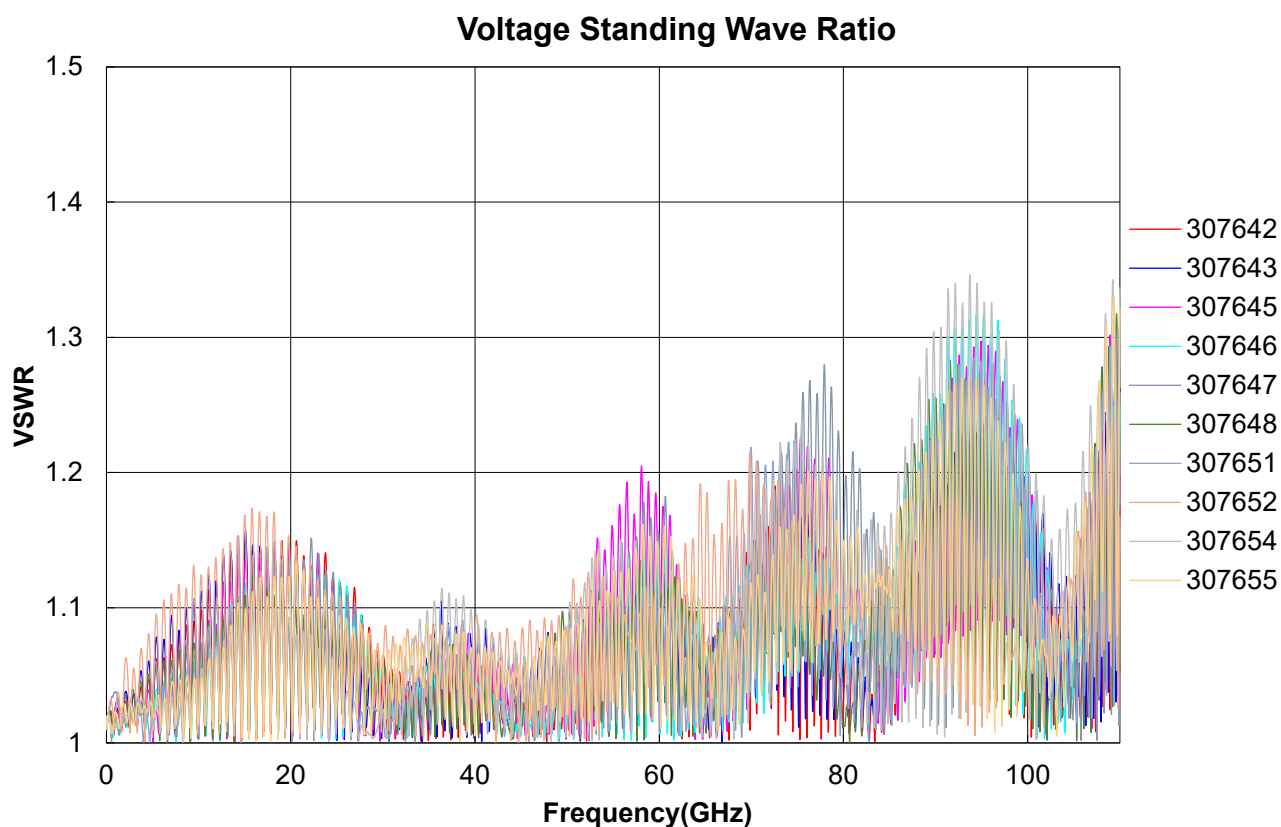
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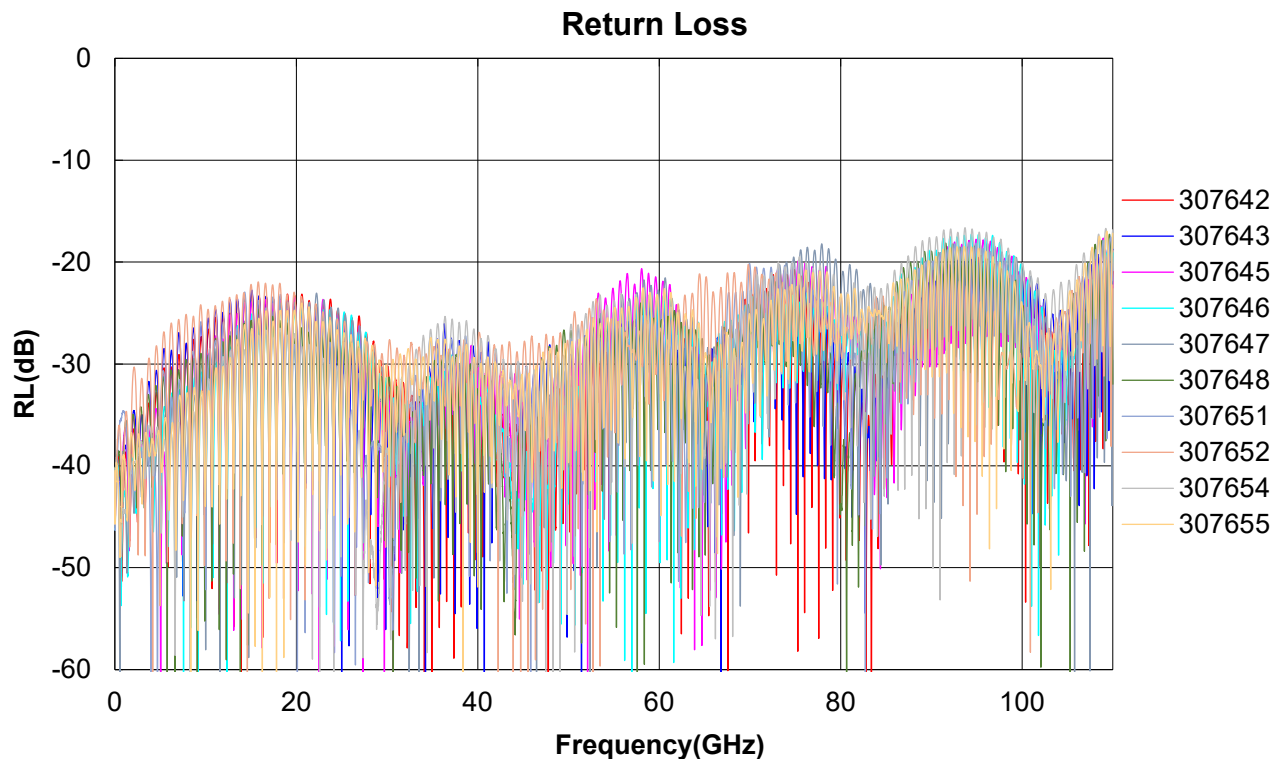
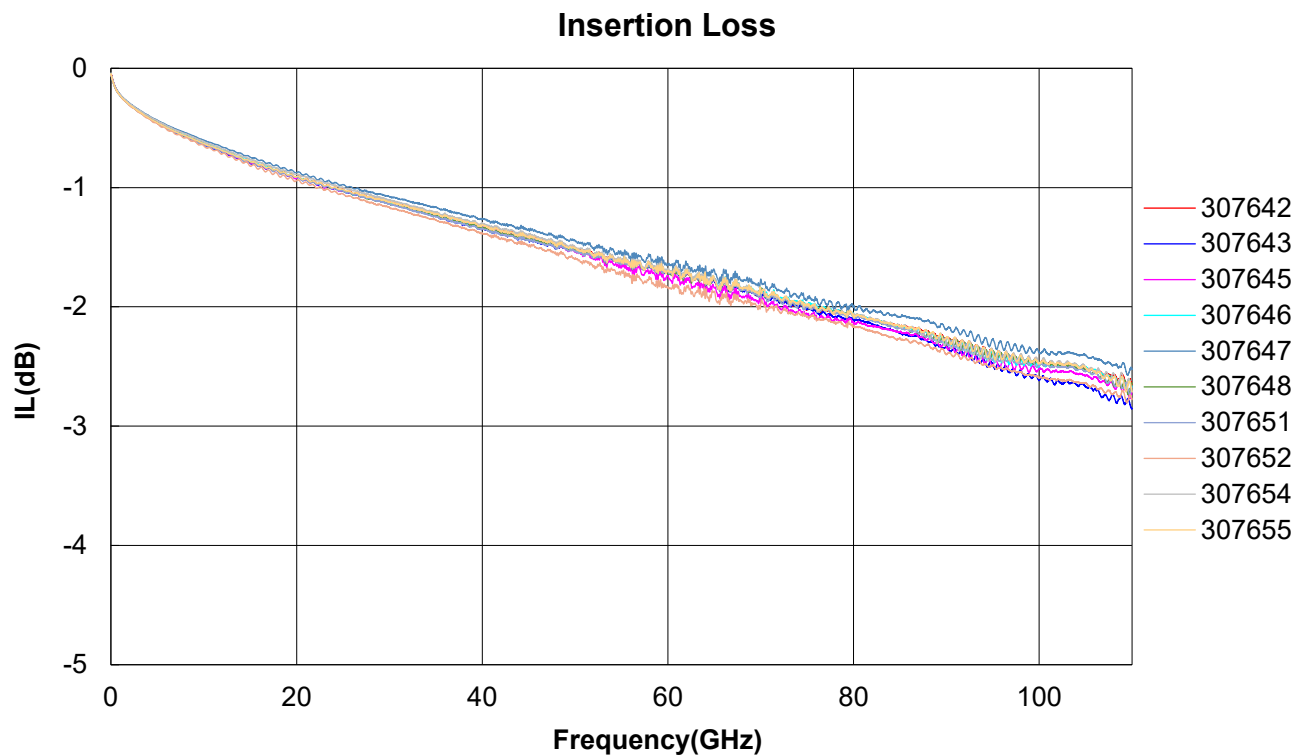
Description: 110 GHz, High-Performance Microwave Cable Assembly, 1.0mm End Option

Results: LL110-10BJ-10BJ-0152

Description: LL110 High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL (dB, max)	IL(dB, min)
307642	1.24@96.83GHz	-19.40@96.83GHz	-2.65@109.99GHz
307643	1.26@109.15GHz	-18.68@109.15GHz	-2.86@109.96GHz
307645	1.30@108.95GHz	-17.65@108.95GHz	-2.77@109.78GHz
307646	1.32@94.41GHz	-17.28@94.41GHz	-2.67@110.00GHz
307647	1.28@96.21GHz	-18.19@96.21GHz	-2.57@109.53GHz
307648	1.32@109.64GHz	-17.27@109.64GHz	-2.74@109.59GHz
307651	1.31@109.77GHz	-17.54@109.77GHz	-2.74@109.76GHz
307652	1.24@109.41GHz	-19.27@109.41GHz	-2.81@109.43GHz
307654	1.35@93.71GHz	-16.62@93.71GHz	-2.71@110.00GHz
307655	1.33@109.36GHz	-16.98@109.36GHz	-2.71@109.37GHz

VSWR



Series: LL110**Description:** 110 GHz, High-Performance Microwave Cable Assembly, 1.0mm End OptionReturn LossInsertion Loss

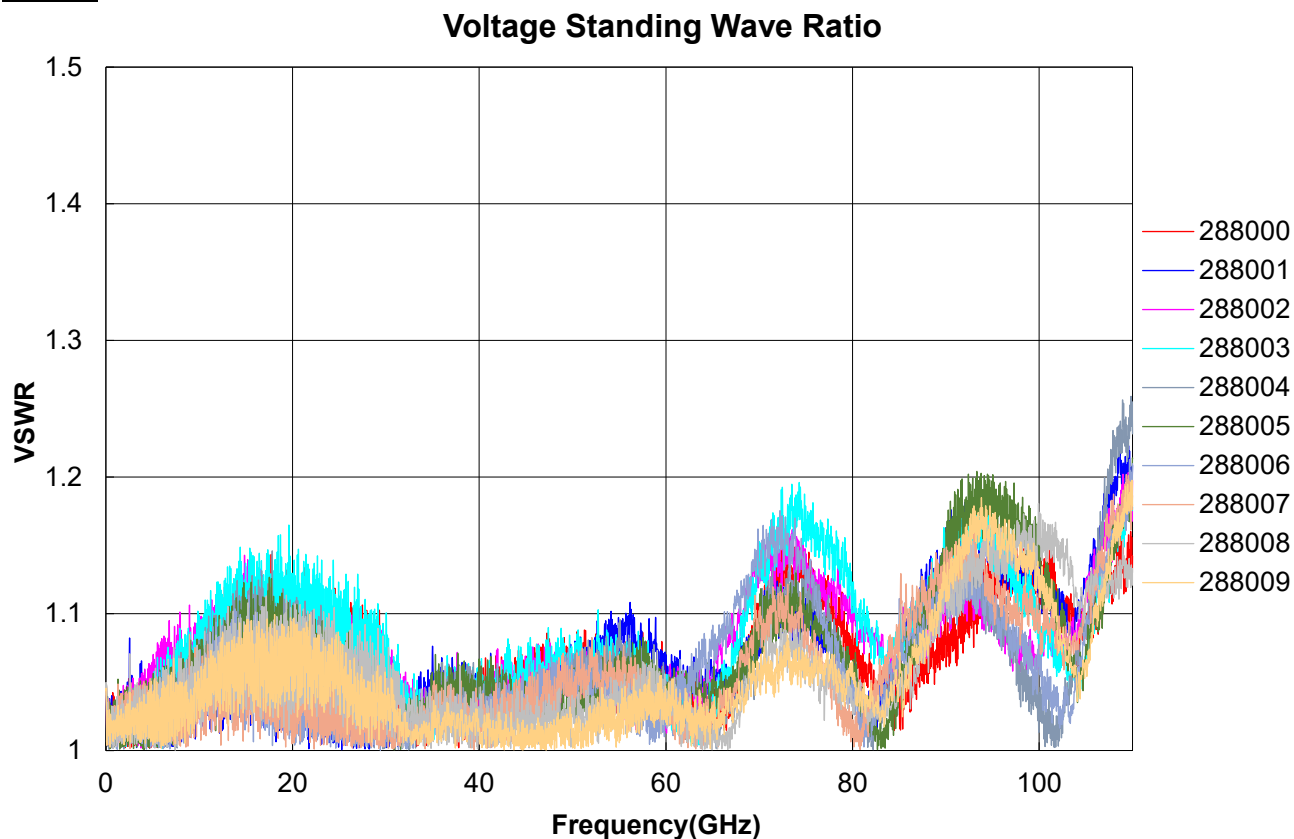
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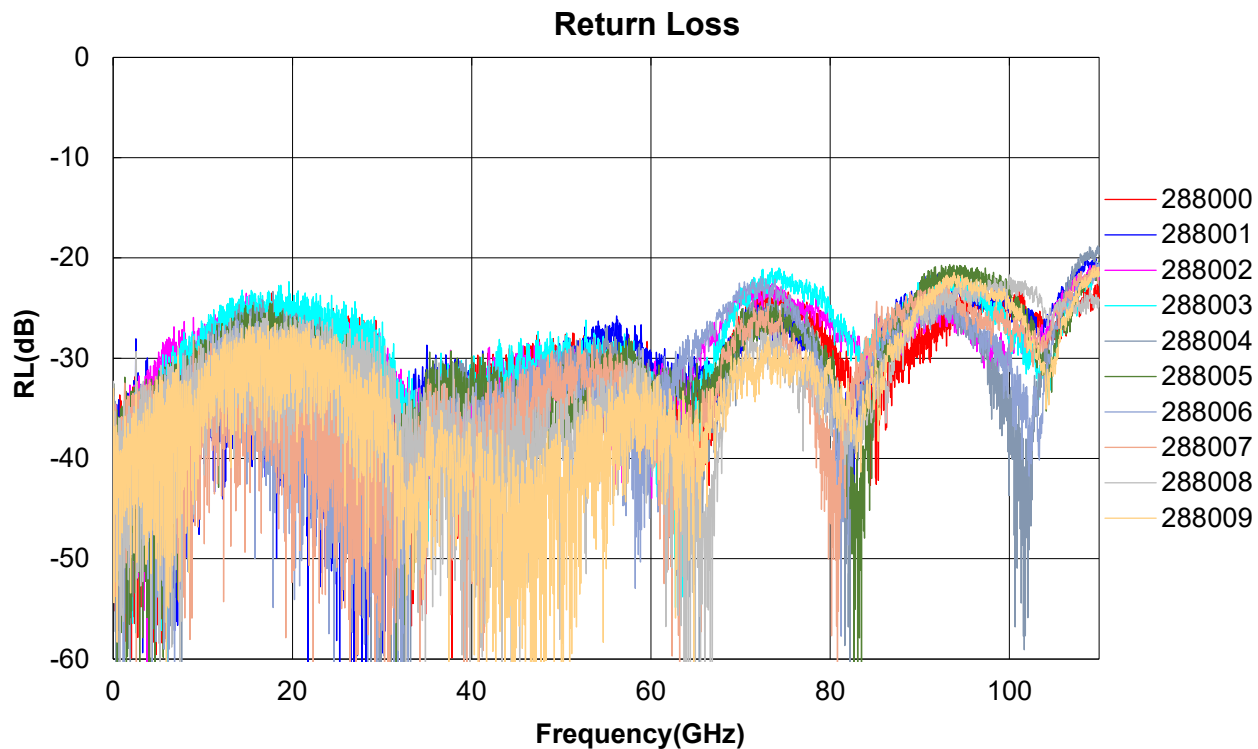
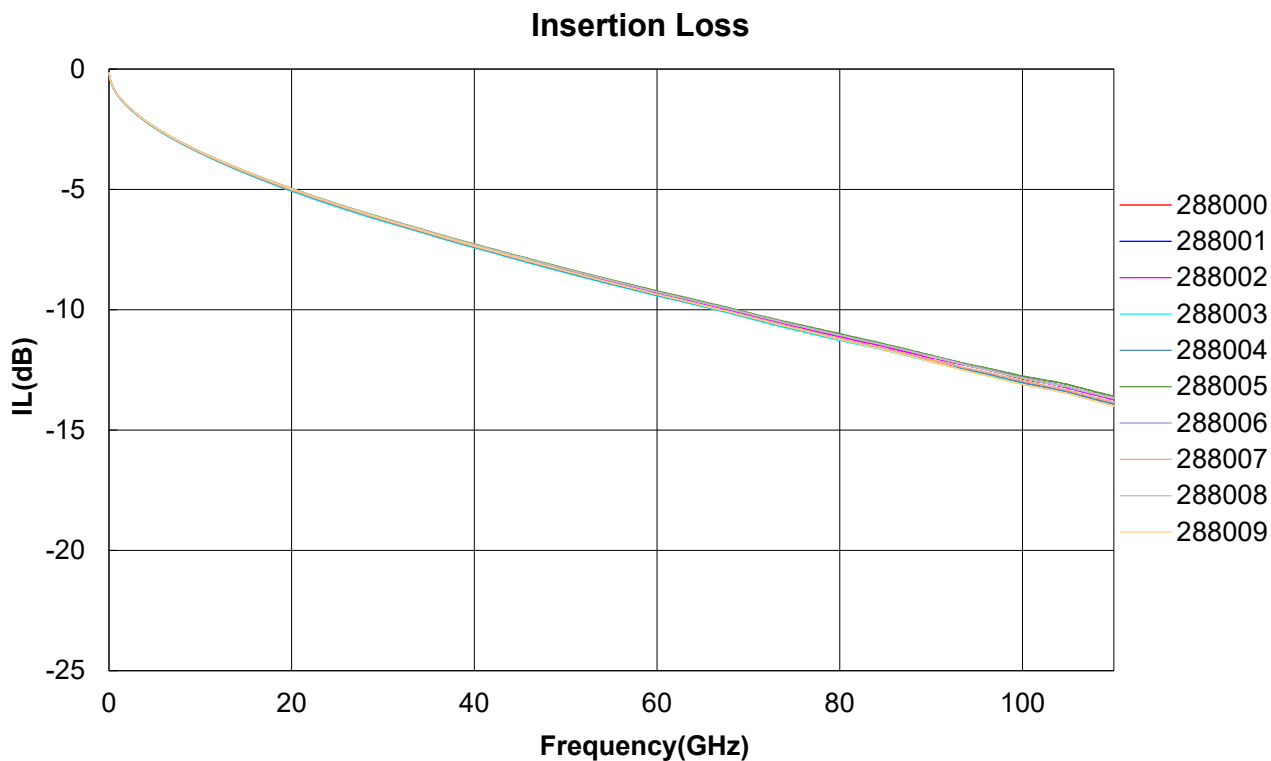
Description: 110 GHz, High-Performance Microwave Cable Assembly, 1.0mm End Option

Results: LL110-10BJ-10BJ-1000

Description: LL110 High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL (dB, max)	IL(dB, min)
288000	1.16@109.80GHz	-22.59@109.80GHz	-13.71@110.00GHz
288001	1.22@108.66GHz	-19.95@108.66GHz	-13.70@109.99GHz
288002	1.20@109.55GHz	-20.70@109.55GHz	-13.75@109.99GHz
288003	1.25@109.82GHz	-20.82@109.82GHz	-13.91@110.00GHz
288004	1.26@109.84GHz	-18.81@109.84GHz	-13.94@109.97GHz
288005	1.21@109.99GHz	-20.29@109.99GHz	-13.61@110.00GHz
288006	1.21@109.68GHz	-20.34@109.68GHz	-13.69@110.00GHz
288007	1.20@109.34GHz	-20.75@109.34GHz	-13.84@110.00GHz
288008	1.18@99.93GHz	-21.63@99.93GHz	-13.68@110.00GHz
288009	1.20@109.94GHz	-20.92@109.94GHz	-14.00@109.93GHz

VSWR



Series: LL110**Description:** 110 GHz, High-Performance Microwave Cable Assembly, 1.0mm End OptionReturn LossInsertion Loss

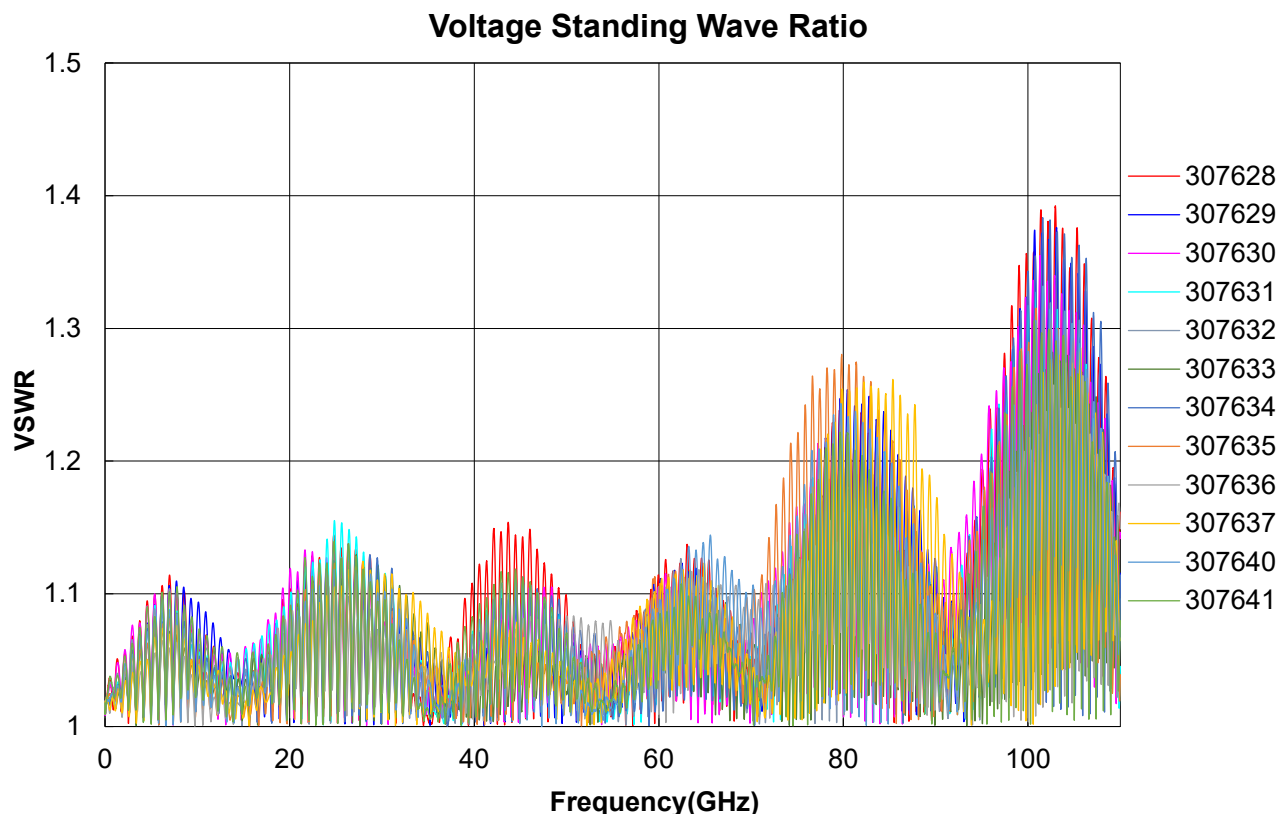
Series: LL110

Description: 110 GHz, High-Performance Microwave Cable Assembly, 1.0mm End Option

Results: LL110-10SP-10SP-0152

Description: LL110 High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL (dB, max)	IL(dB, min)
307628	1.39@102.96GHz	-15.70@102.96GHz	-2.65@105.29GHz
307629	1.38@103.10GHz	-16.01@103.10GHz	-2.58@107.77GHz
307630	1.35@101.32GHz	-16.44@101.32GHz	-2.61@108.38GHz
307631	1.33@101.59GHz	-17.03@101.59GHz	-2.55@108.66GHz
307632	1.30@100.69GHz	-17.65@100.69GHz	-2.68@110.00GHz
307633	1.28@102.64GHz	-18.16@102.64GHz	-2.56@108.20GHz
307634	1.38@102.59GHz	-15.87@102.59GHz	-2.65@106.28GHz
307635	1.32@101.65GHz	-17.18@101.65GHz	-2.52@104.01GHz
307636	1.26@105.95GHz	-18.65@105.95GHz	-2.74@109.97GHz
307637	1.29@105.69GHz	-18.07@105.69GHz	-2.52@108.02GHz
307640	1.33@101.63GHz	-16.93@101.63GHz	-2.54@107.91GHz
307641	1.31@100.67GHz	-17.54@100.67GHz	-2.67@109.38GHz

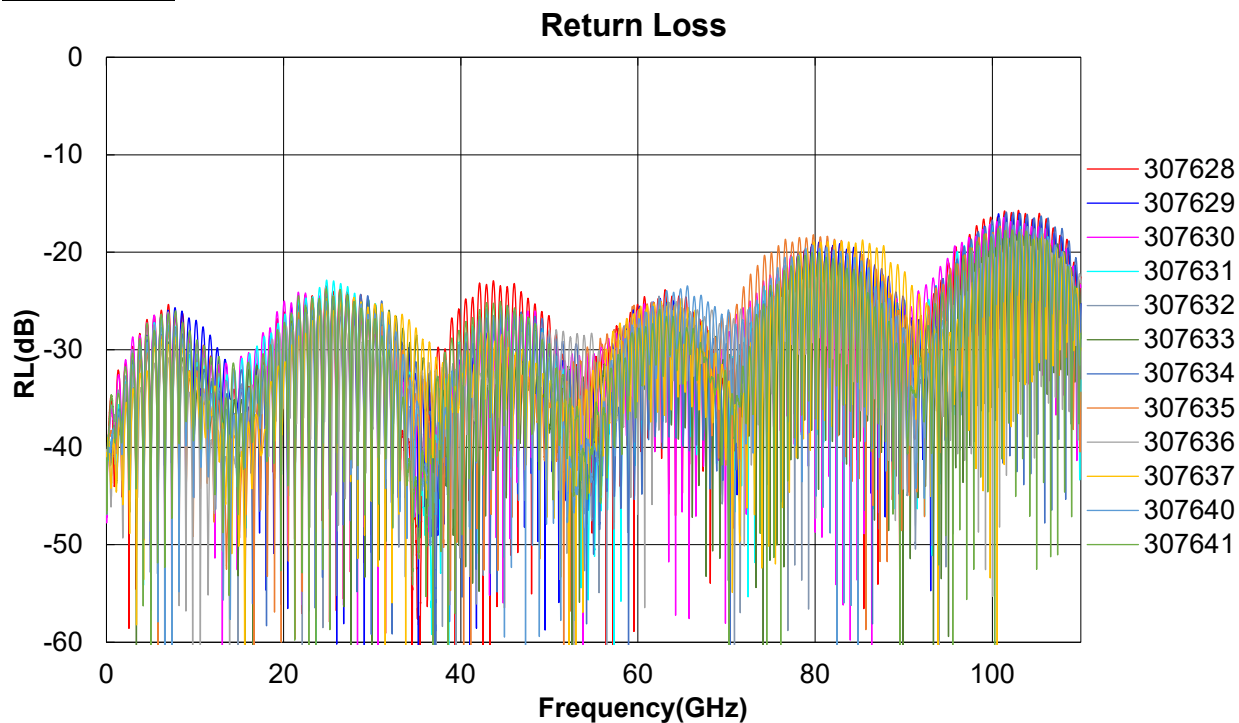
VSWR



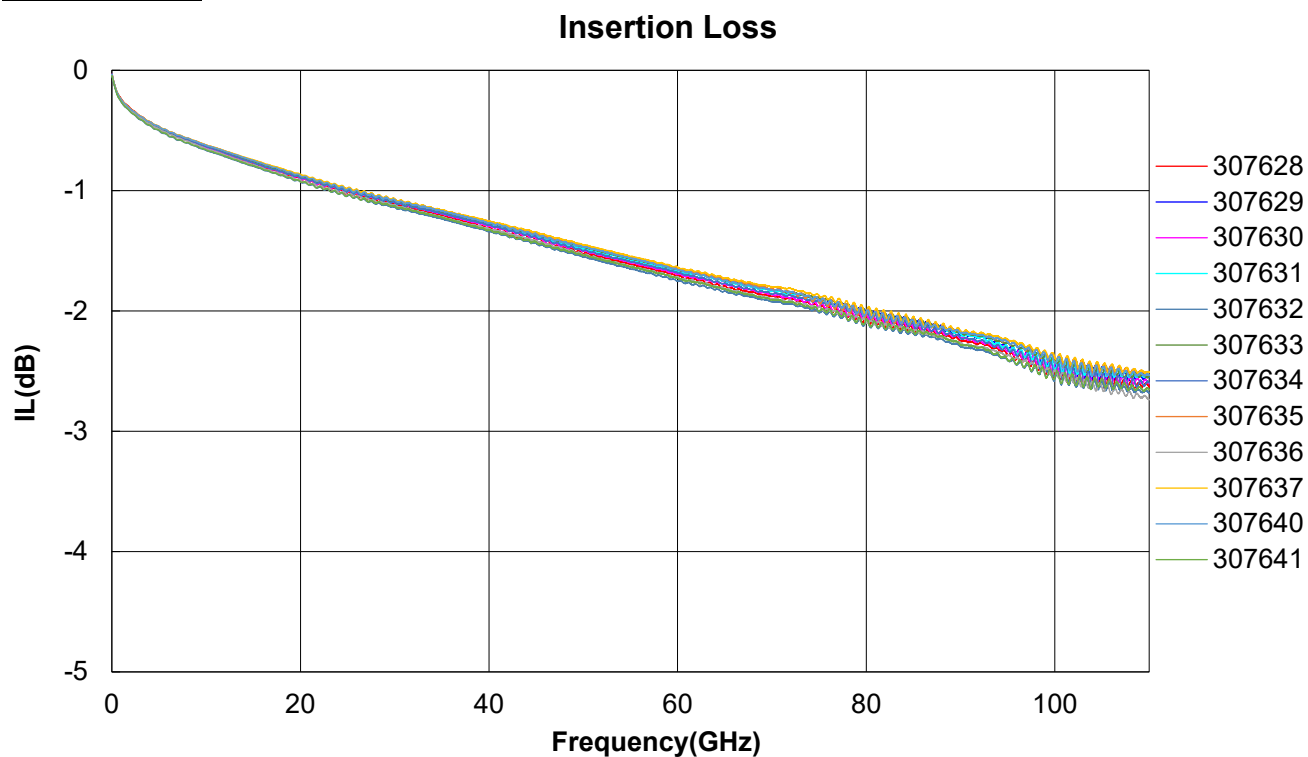
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Description: 110 GHz, High-Performance Microwave Cable Assembly, 1.0mm End Option

Return Loss



Insertion Loss



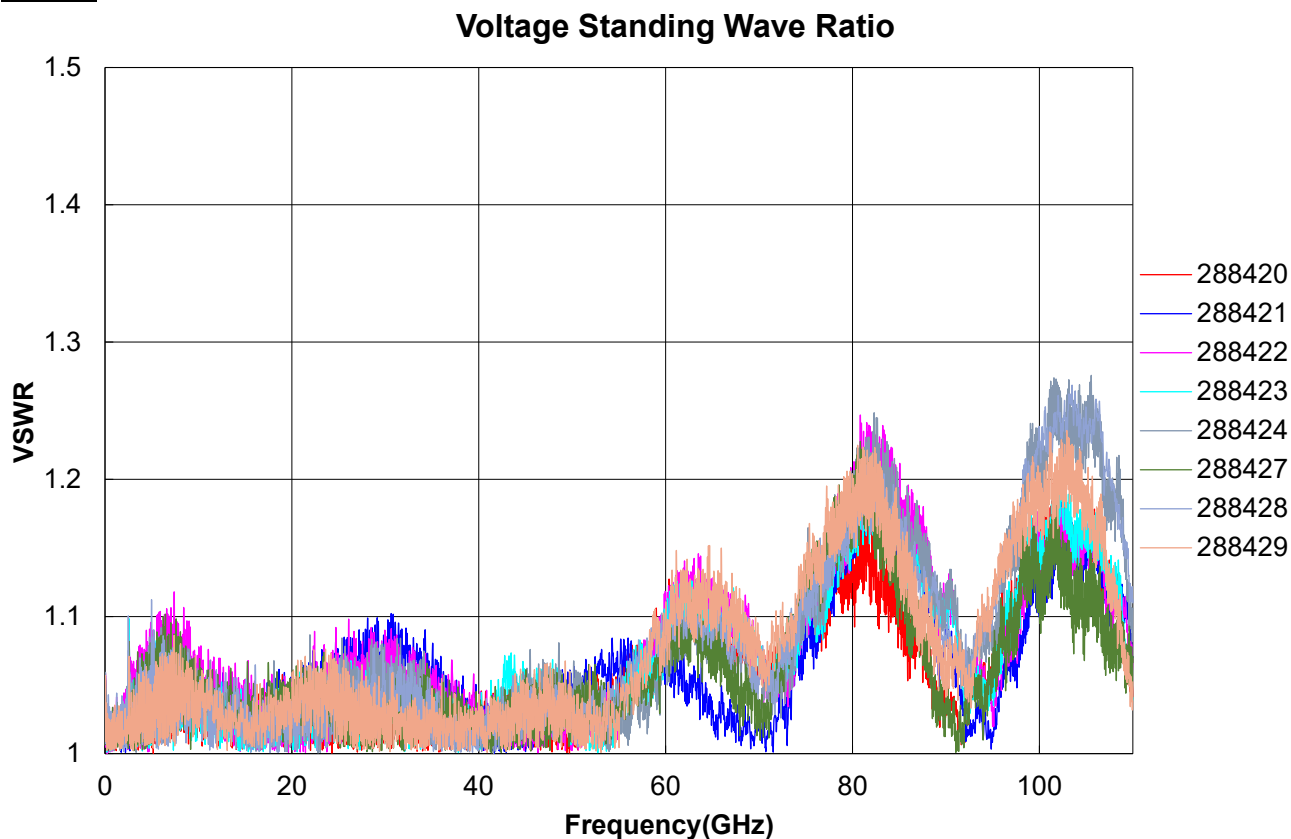
Series: LL110

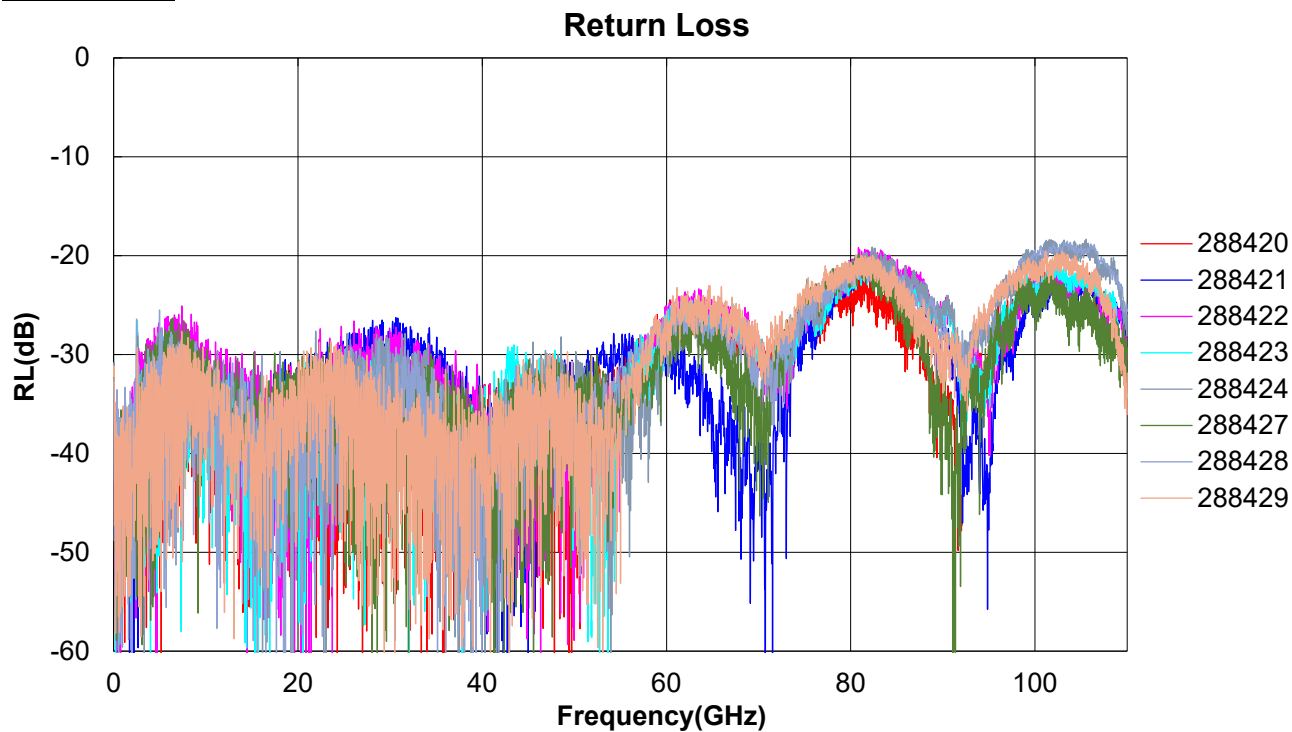
Description: 110 GHz, High-Performance Microwave Cable Assembly, 1.0mm End Option

Results: LL110-10SP-10SP-1000

Description: LL110 High Frequency RF Cable Assembly			
Sample	VSWR(max)	RL (dB, max)	IL(dB, min)
288420	1.20@102.13GHz	-20.69@102.13GHz	-13.13@110.00GHz
288421	1.21@82.39GHz	-20.30@82.39GHz	-13.19@110.00GHz
288422	1.25@80.84GHz	-19.18@80.84GHz	-12.97@109.93GHz
288423	1.21@103.32GHz	-20.59@103.32GHz	-13.33@110.00GHz
288424	1.28@105.55GHz	-18.33@105.55GHz	-13.08@109.99GHz
288427	1.23@80.84GHz	-19.81@80.84GHz	-13.25@109.97GHz
288428	1.27@103.50GHz	-18.53@103.50GHz	-13.05@110.00GHz
288429	1.24@102.93GHz	-19.55@102.93GHz	-13.03@110.00GHz

VSWR



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