



Summary Data For PIQ-2G18G-360-16-CD-1

Customer: _____

Tested By: K. Mansfield

SO No: _____

Temperature: +25°C

Model No: PIQ-2G18G-360-16-CD-1

Date 12/27/2017

Serial No: PL21868/1748

Drawing No: 27327882

Rev: 1

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range	2.0 GHz to 18.0 GHz	2.0 GHz to 18.0 GHz	
2	Phase Range	360°	360°	
3	Dynamic Range	16 dB	16 dB	
4	Insertion Loss	16 dB MAX	15.6 dB	
5	VSWR	2.2:1 MAX	1.99:1	
6	Attenuation vs. Frequency	±3.5 dB TYP.	±1.66 dB @ 0 dB Attenuation ±2.51 dB @ 8 dB Attenuation ±7.04 dB @ 16 dB Attenuation	
7	Phase vs. Frequency (Flatness)	±20.0° TYP.	±14.95° @ 0 dB Attenuation ±19.45° @ 8 dB Attenuation ±38.06° @ 16 dB Attenuation	
8	Control Logic	2 x 12 BITS (I and Q) TTL compatible.	Verified	
9	Control Slopes	Linear	Verified	
10	Switching Speed	500 nSec MAX.	416nSec	
11	Power Supply	+12 to +15V @ 100 mA -12 to -15V @ 100 mA	+15 @ 65 mA -15 @ 76 mA	

QA/QC Approval: _____

Date: _____

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Summary Data For PIQ-2G18G-360-16-CD-1

PL21868/1748

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Phase State Legend

Phase 1 (11.25 °)	Phase 2 (22.5 °)	Phase 3 (33.75 °)	Phase 4 (45 °)
Phase 5 (56.25 °)	Phase 6 (67.5 °)	Phase 7 (78.75 °)	Phase 8 (90 °)
Phase 9 (101.25 °)	Phase 10 (112.5 °)	Phase 11 (123.75 °)	Phase 12 (135 °)
Phase 13 (146.25 °)	Phase 14 (157.5 °)	Phase 15 (168.75 °)	Phase 16 (180 °)
Phase 17 (191.25 °)	Phase 18 (202.5 °)	Phase 19 (213.75 °)	Phase 20 (225 °)
Phase 21 (236.25 °)	Phase 22 (247.5 °)	Phase 23 (258.75 °)	Phase 24 (270 °)
Phase 25 (281.25 °)	Phase 26 (292.5 °)	Phase 27 (303.75 °)	Phase 28 (315 °)
Phase 29 (326.25 °)	Phase 30 (337.5 °)	Phase 31 (348.75 °)	Phase 32 (360 °)

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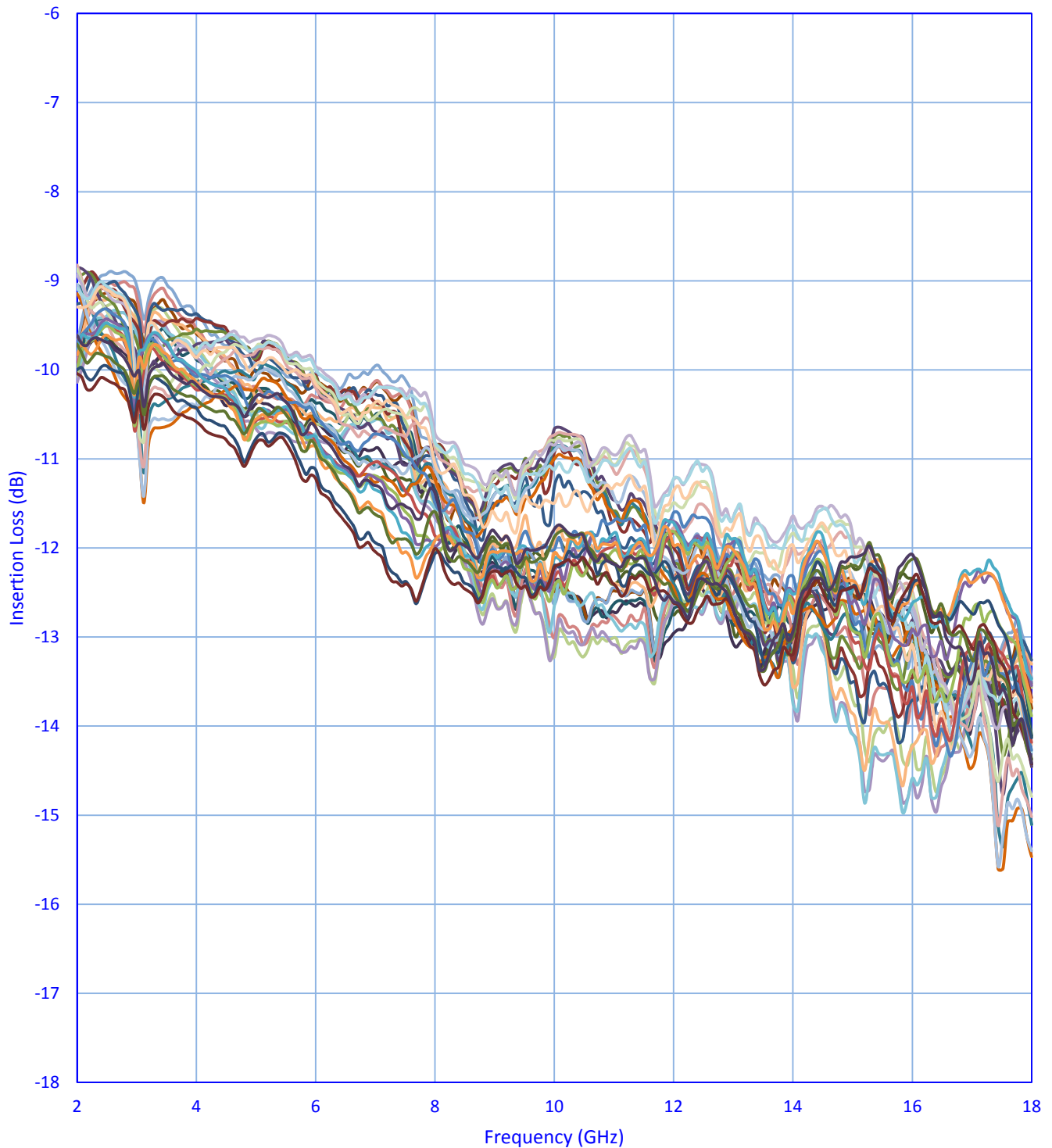
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Insertion Loss Vs. Frequency



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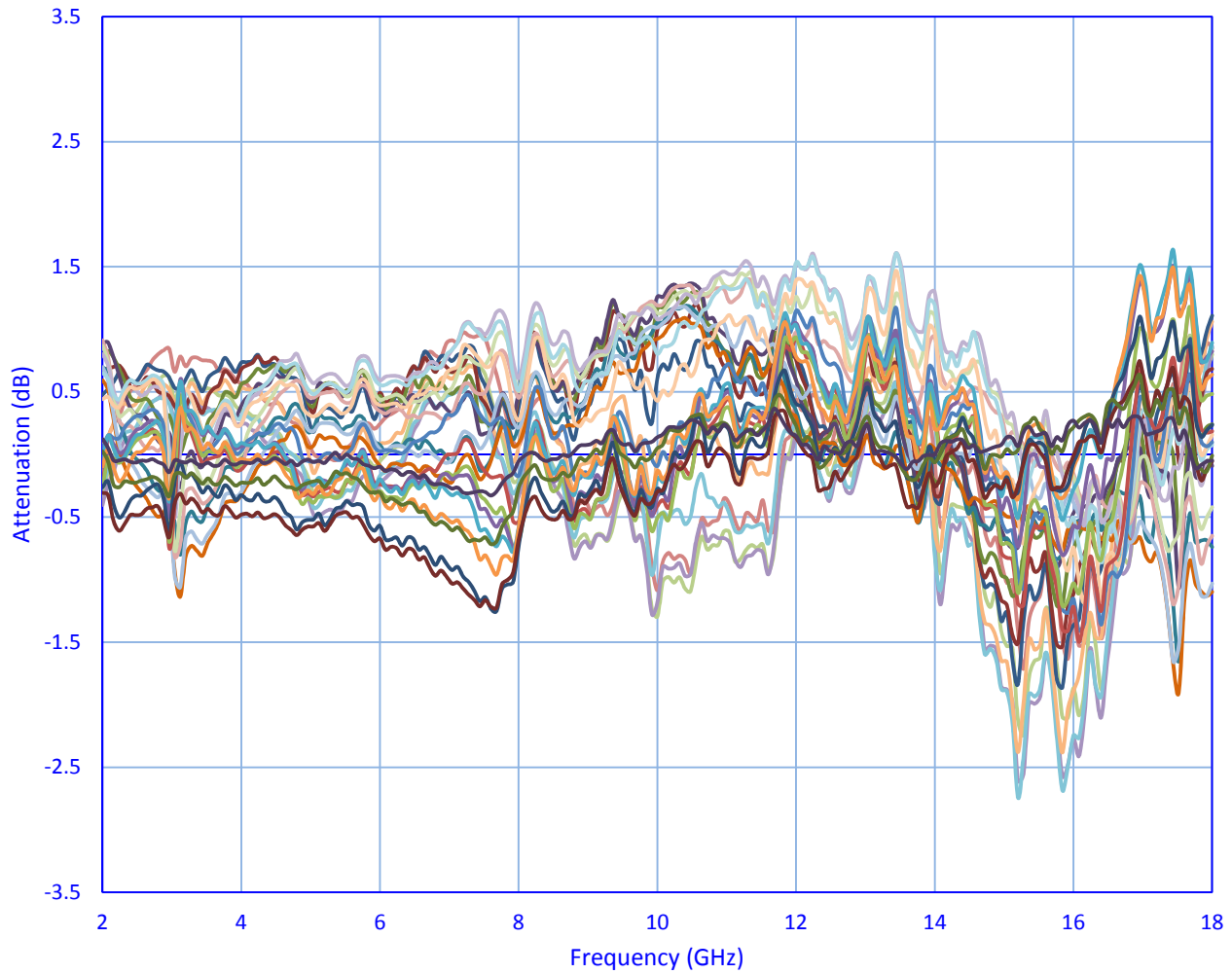
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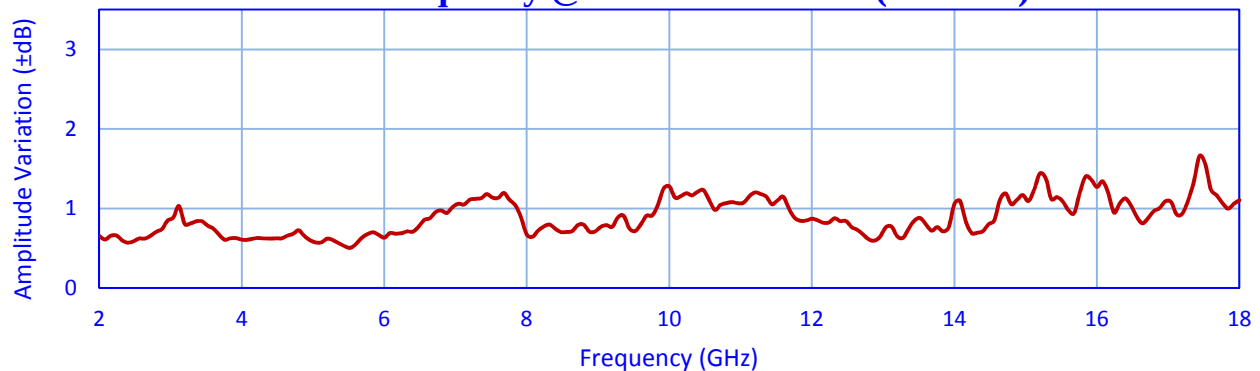
Summary Data For PIQ-2G18G-360-16-CD-1

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Attenuation Vs. Frequency @ 0 dB Attenuation (PM/AM)



Maximum Amplitude Variation From Center Vs. Frequency @ 0 dB Attenuation (PM/AM)



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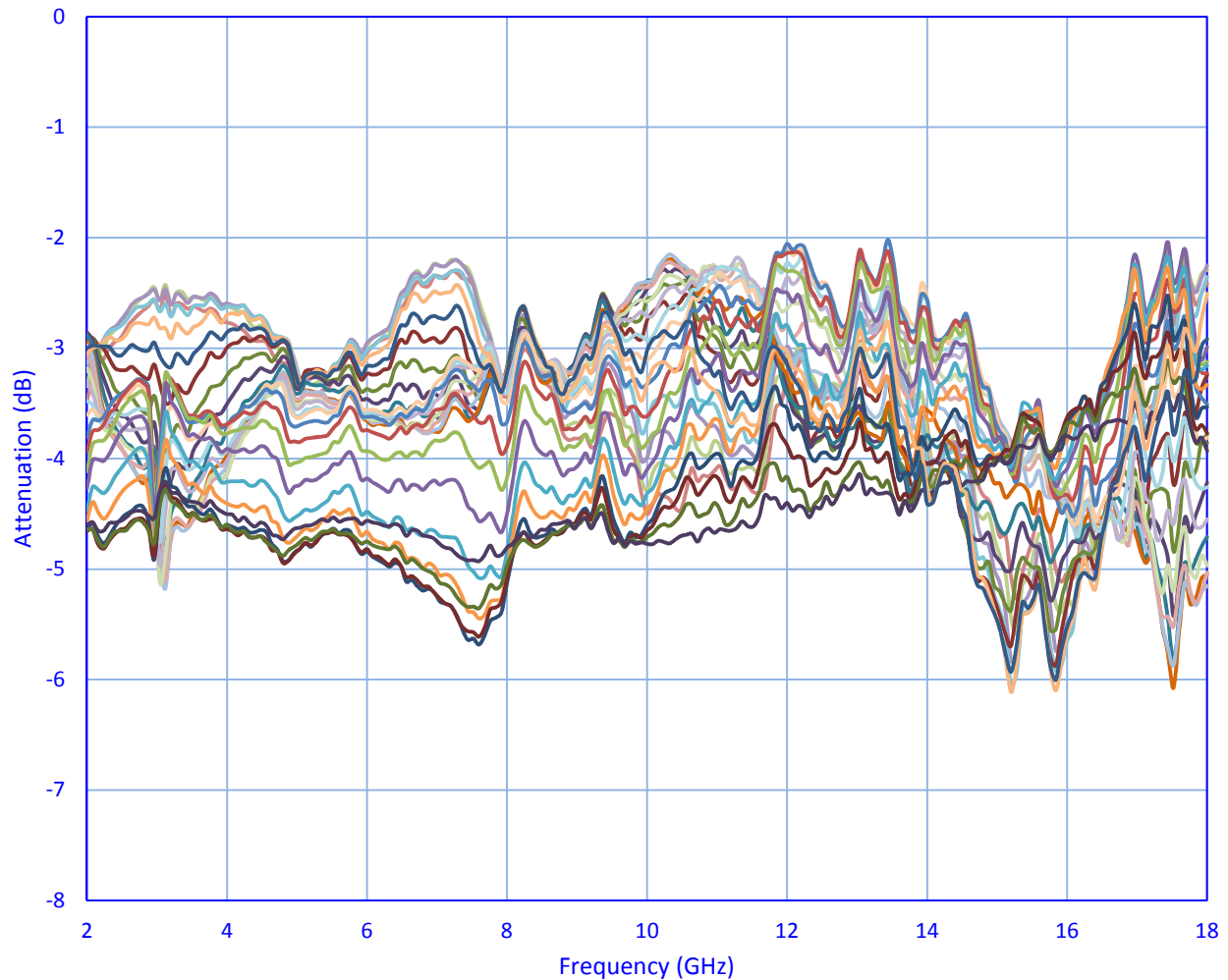
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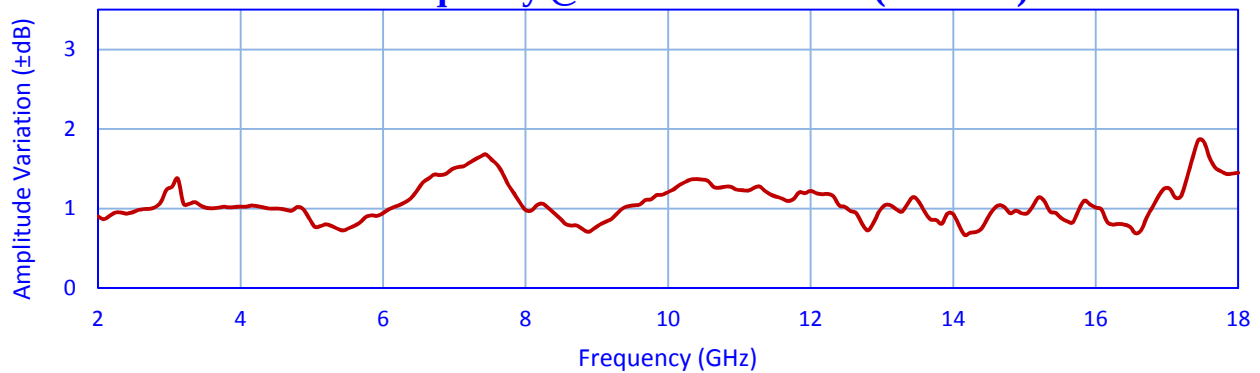
Summary Data For PIQ-2G18G-360-16-CD-1

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Attenuation Vs. Frequency @ 4 dB Attenuation (PM/AM)



Maximum Amplitude Variation From Center Vs. Frequency @ 4 dB Attenuation (PM/AM)



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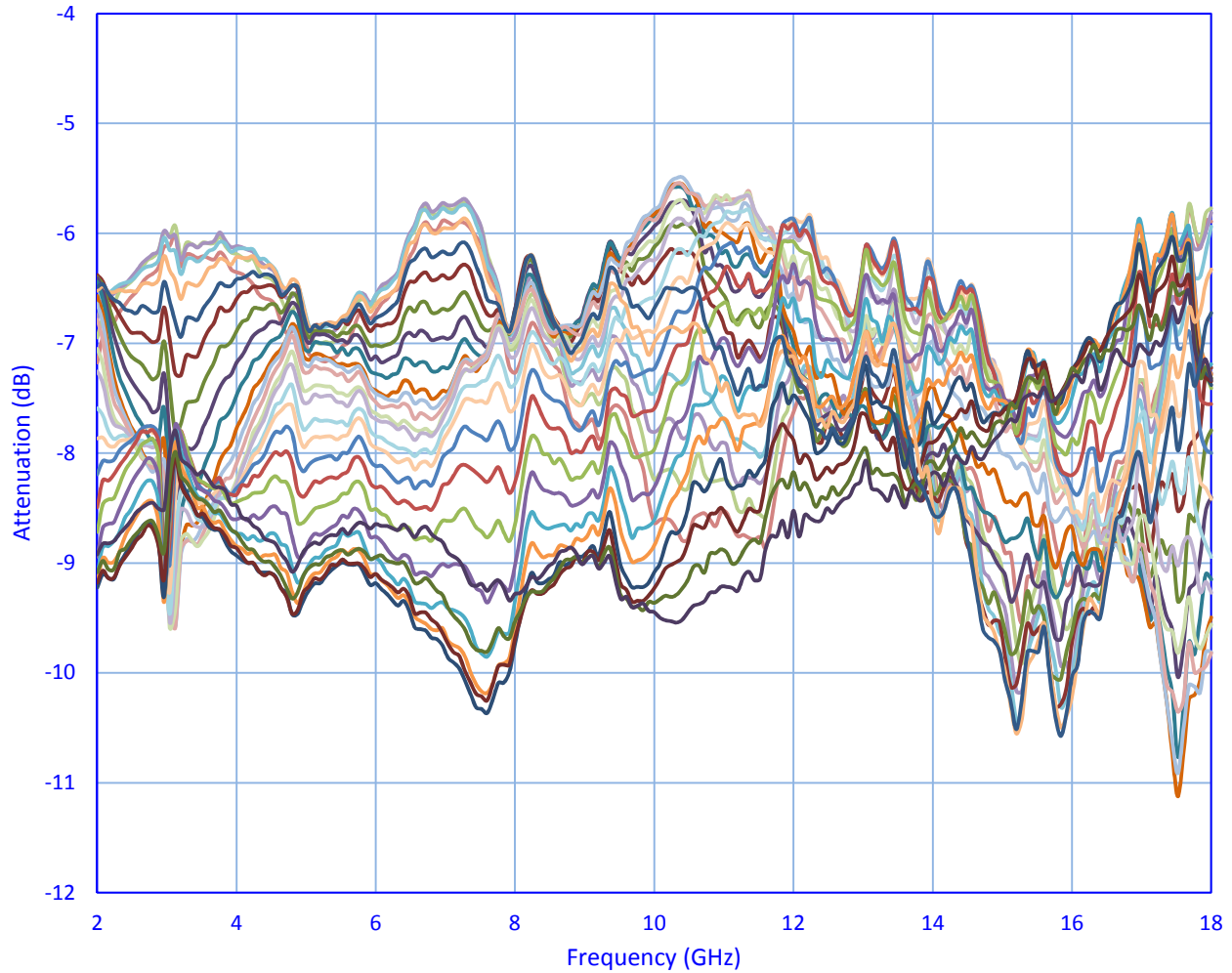
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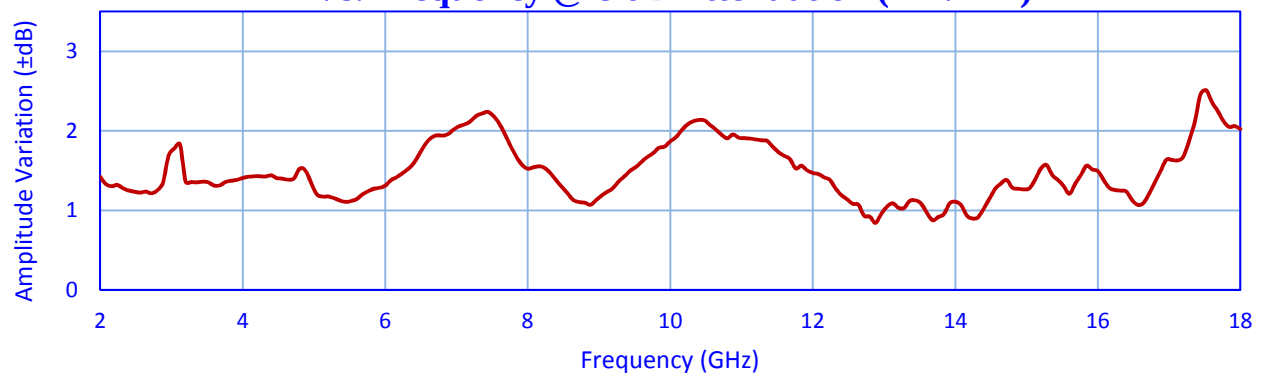
Summary Data For PIQ-2G18G-360-16-CD-1

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Attenuation Vs. Frequency @ 8 dB Attenuation (PM/AM)



Maximum Amplitude Variation From Center Vs. Frequency @ 8 dB Attenuation (PM/AM)



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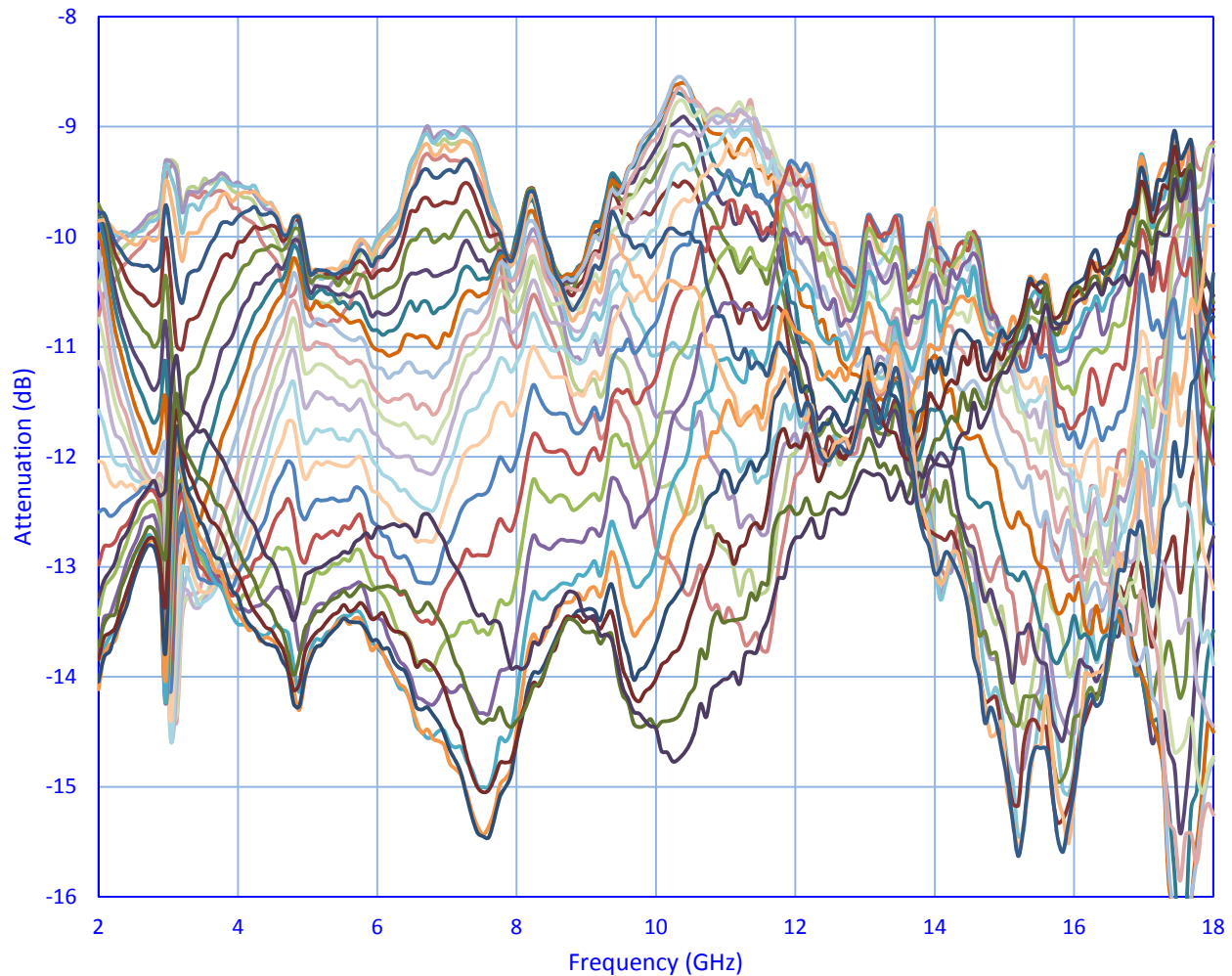
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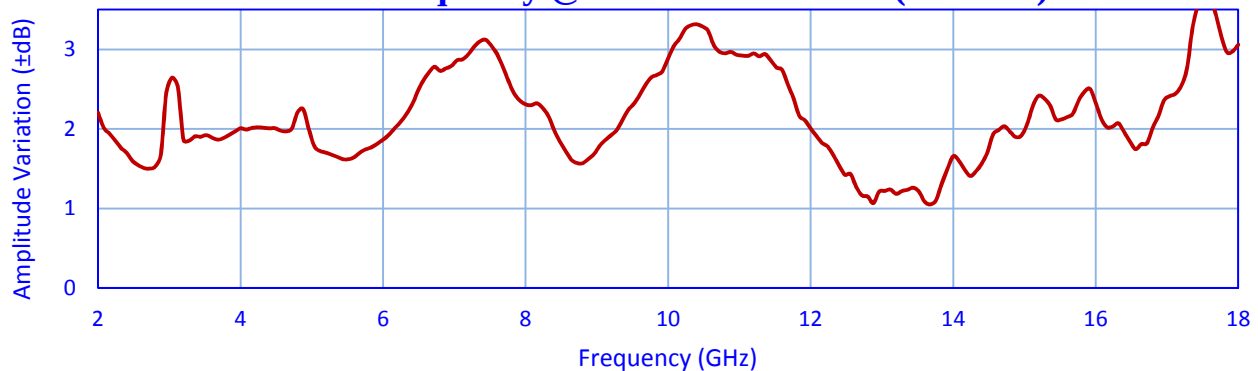
Summary Data For PIQ-2G18G-360-16-CD-1

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Attenuation Vs. Frequency @ 12 dB Attenuation (PM/AM)



Maximum Amplitude Variation From Center Vs. Frequency @ 12 dB Attenuation (PM/AM)



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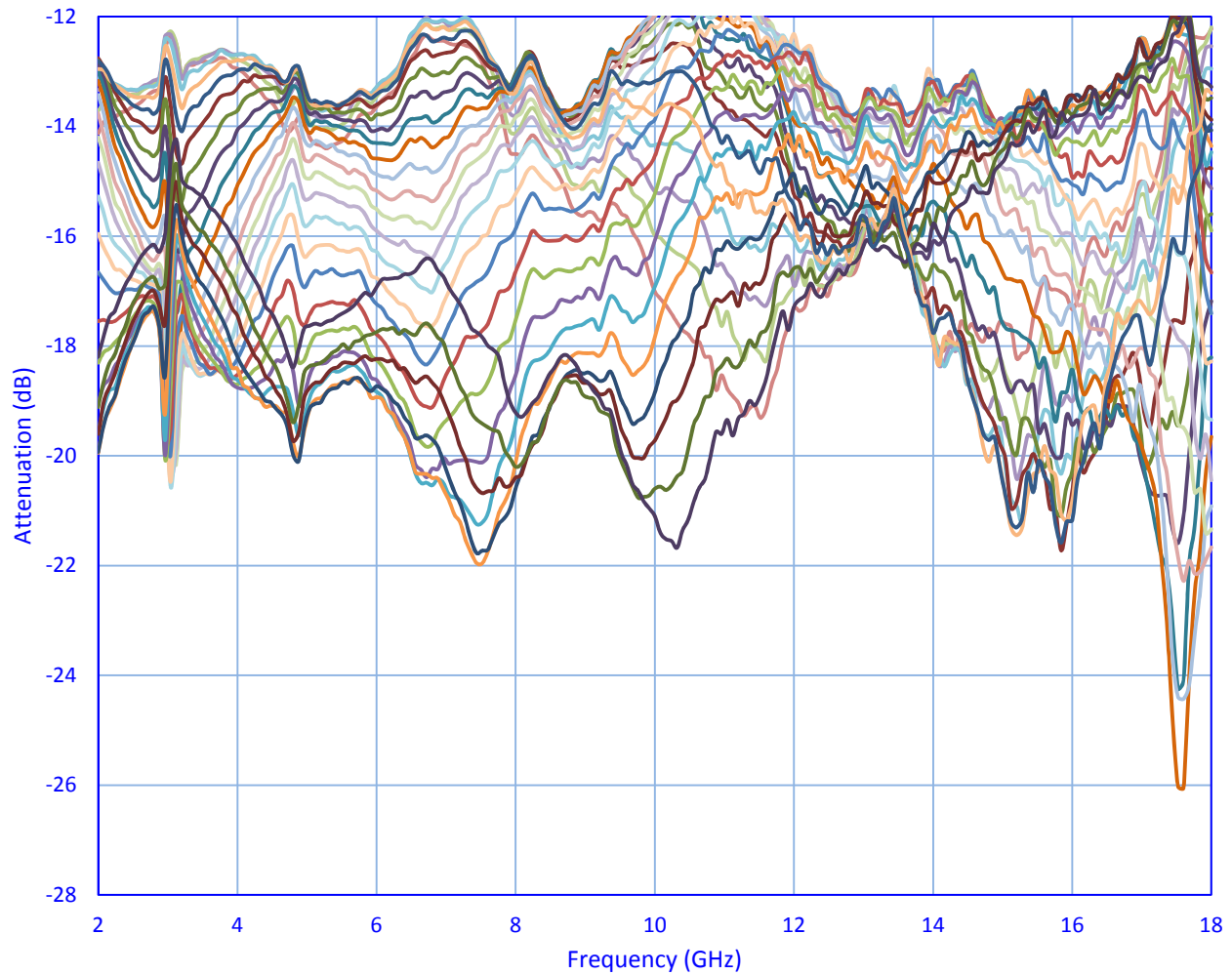
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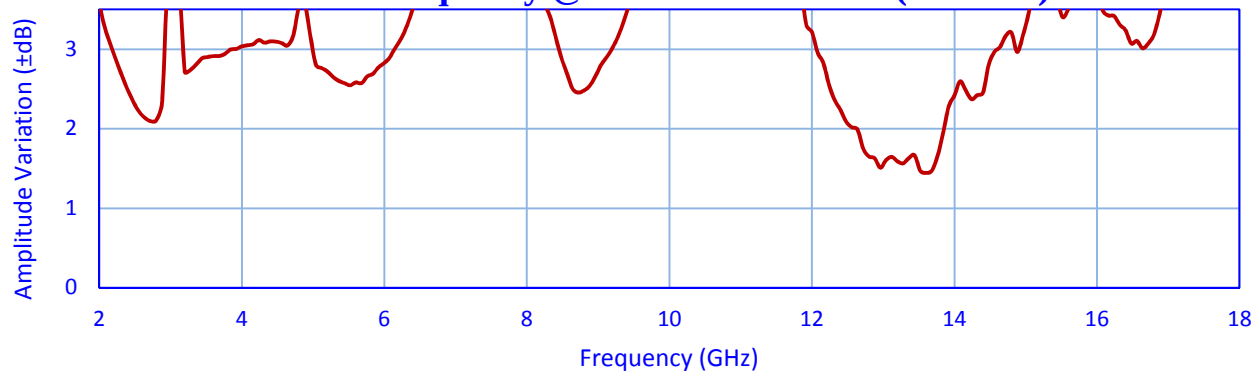
Summary Data For PIQ-2G18G-360-16-CD-1

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Attenuation Vs. Frequency @ 16 dB Attenuation (PM/AM)



Maximum Amplitude Variation From Center Vs. Frequency @ 16 dB Attenuation (PM/AM)



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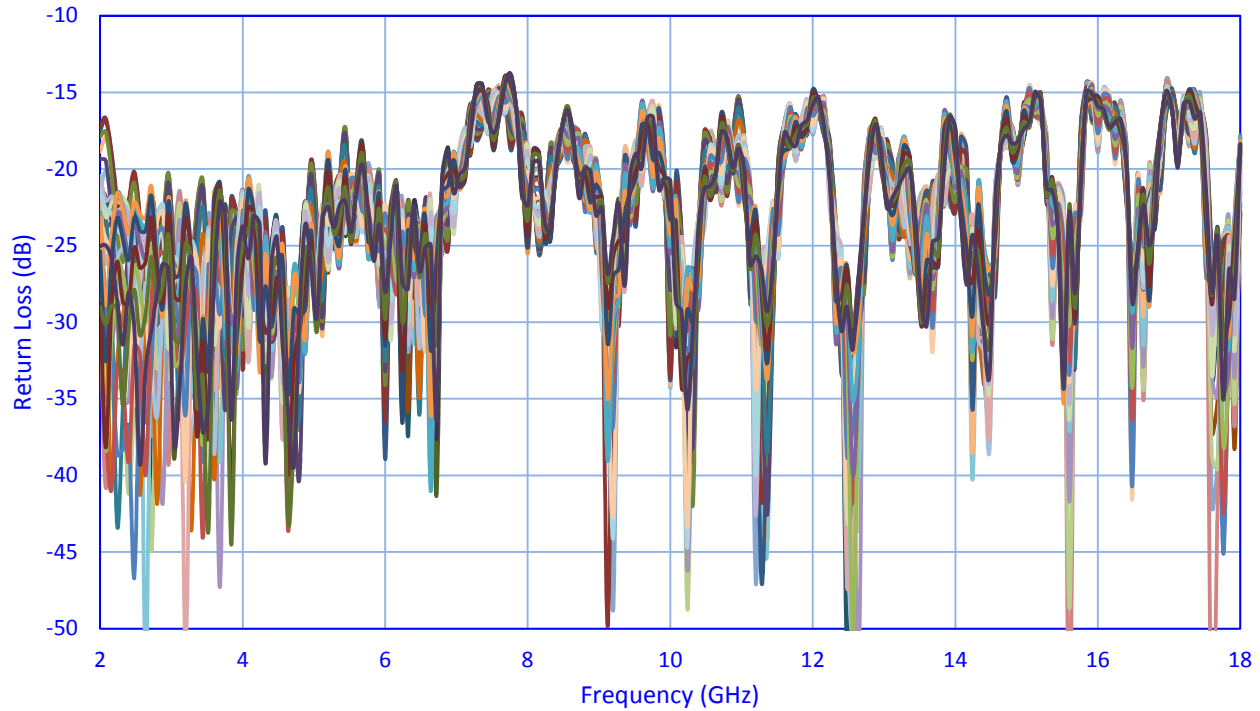
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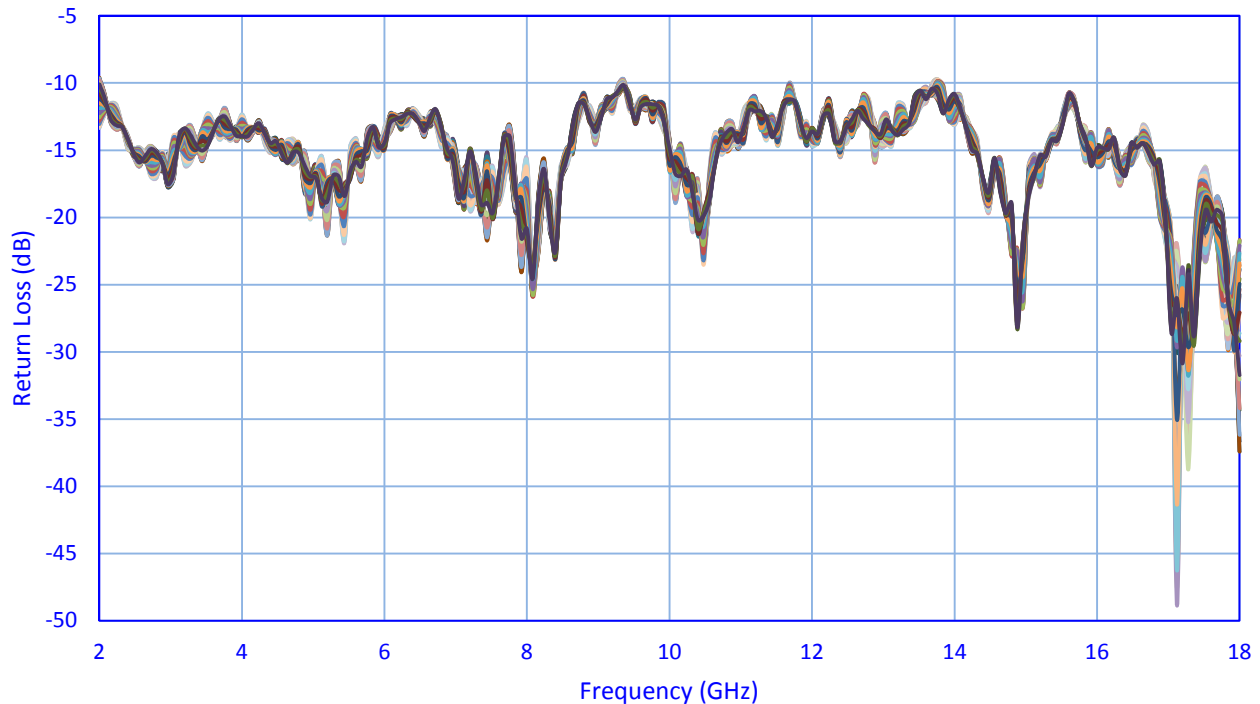
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Input Return Loss Vs. Frequency @ 0 dB Attenuation



Output Return Loss Vs. Frequency @ 0 dB Attenuation



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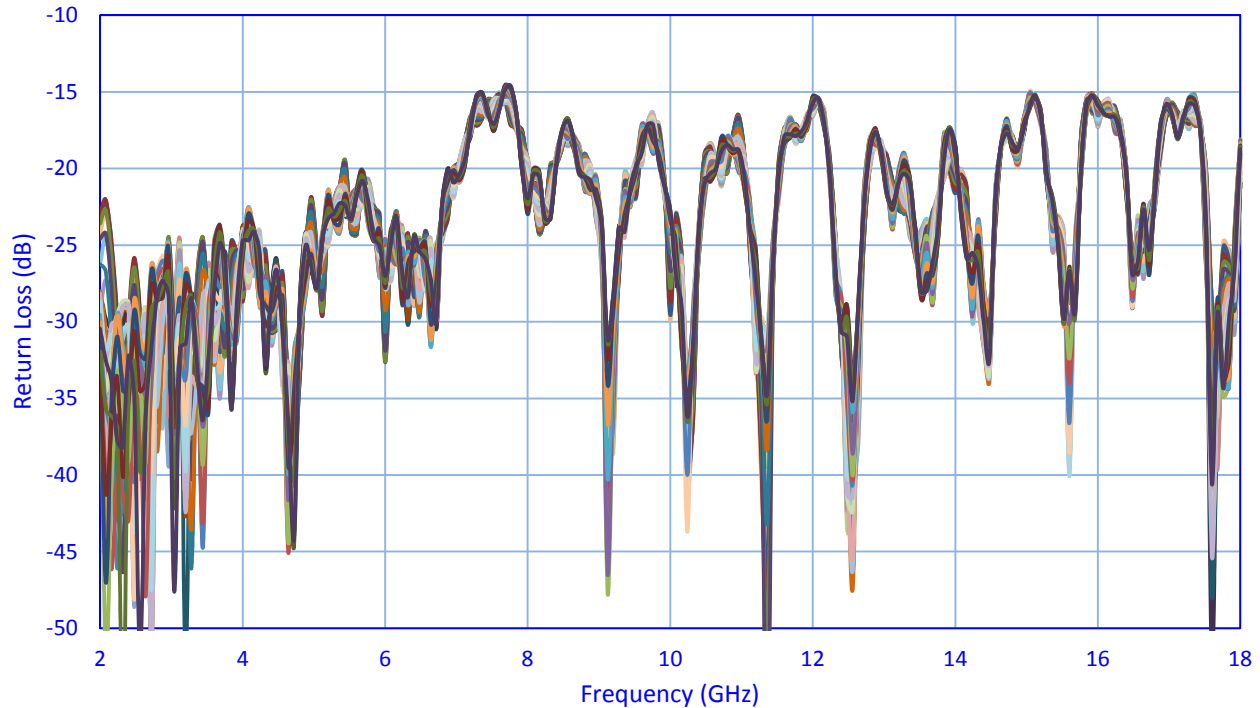
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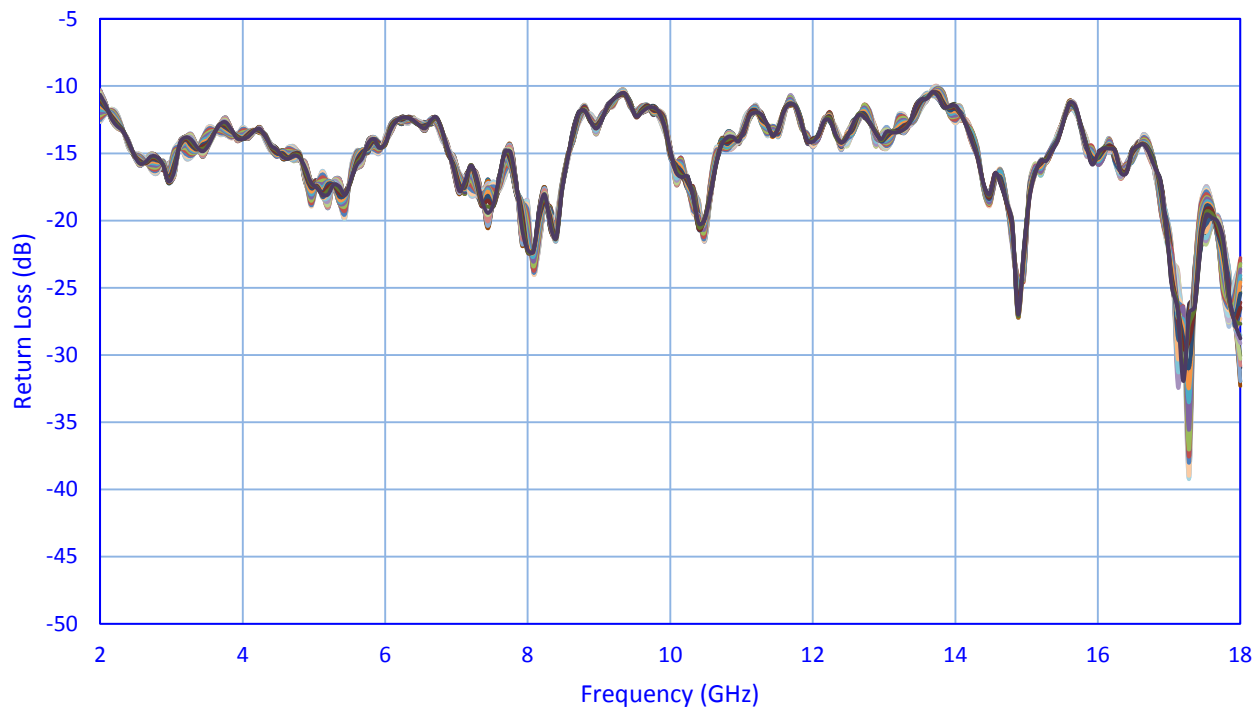
Summary Data For PIQ-2G18G-360-16-CD-1

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Input Return Loss Vs. Frequency @ 4 dB Attenuation



Output Return Loss Vs. Frequency @ 4 dB Attenuation



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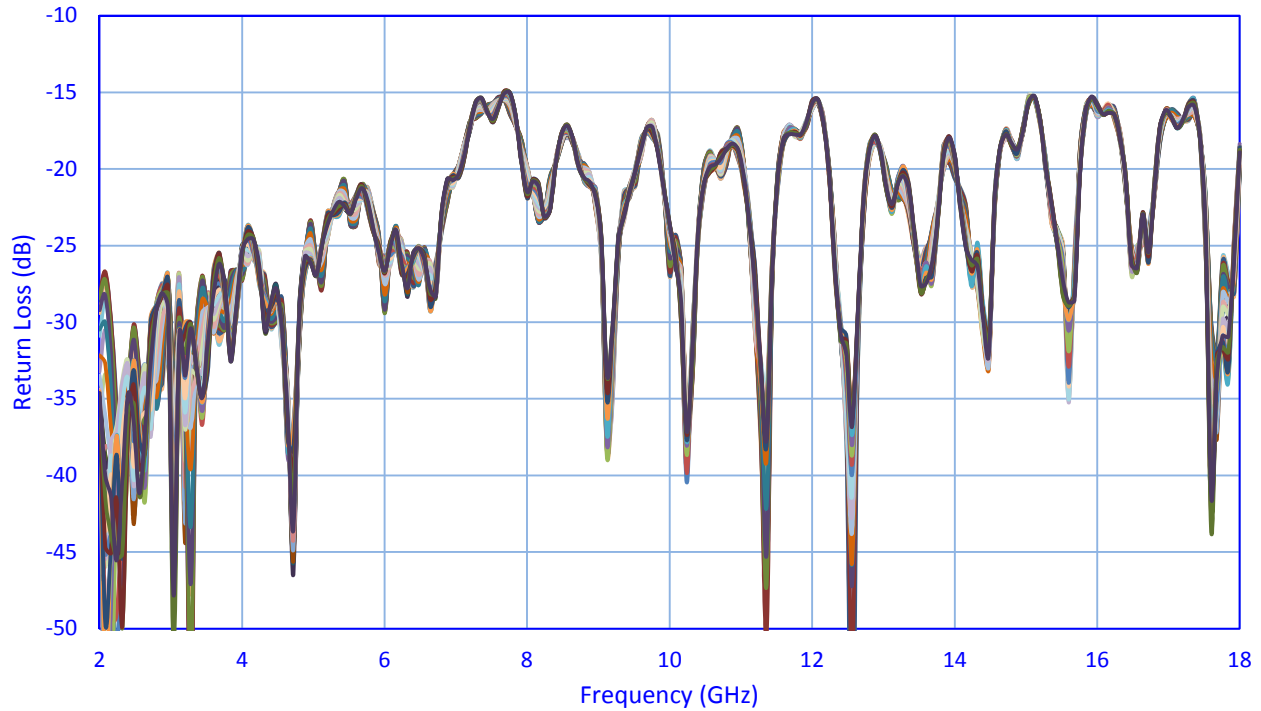
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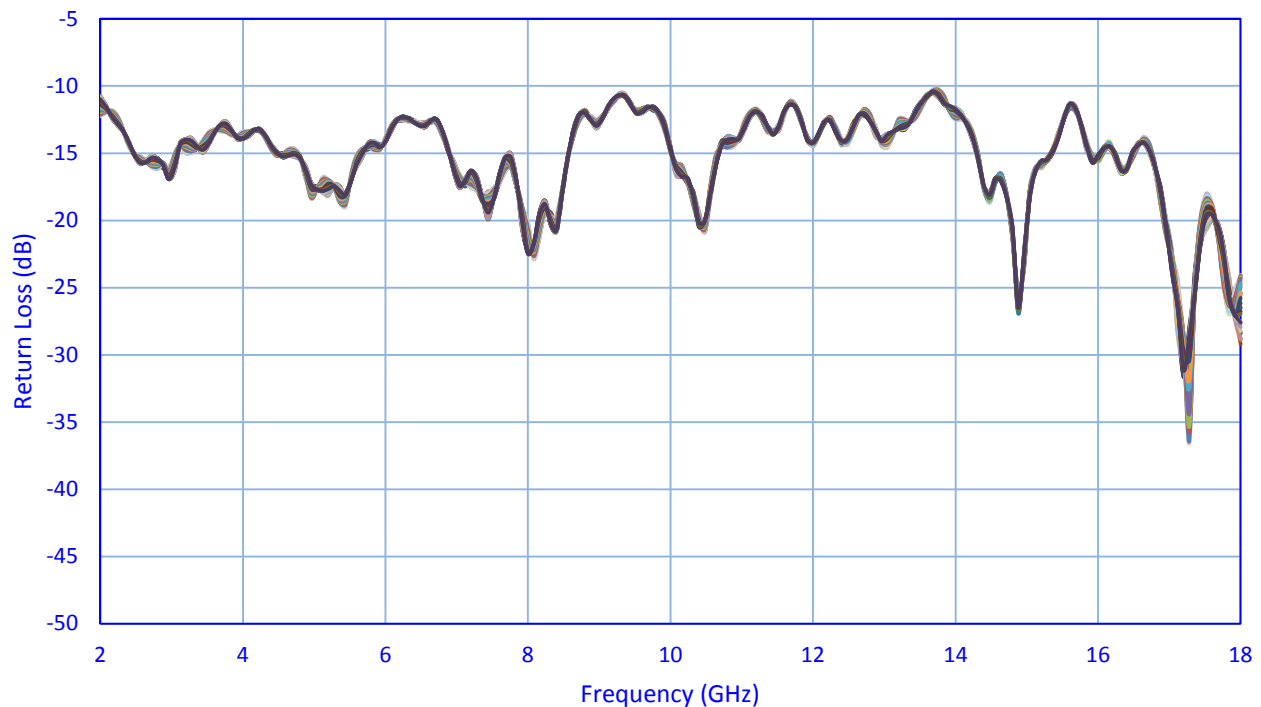
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Input Return Loss Vs. Frequency @ 8 dB Attenuation



Output Return Loss Vs. Frequency @ 8 dB Attenuation



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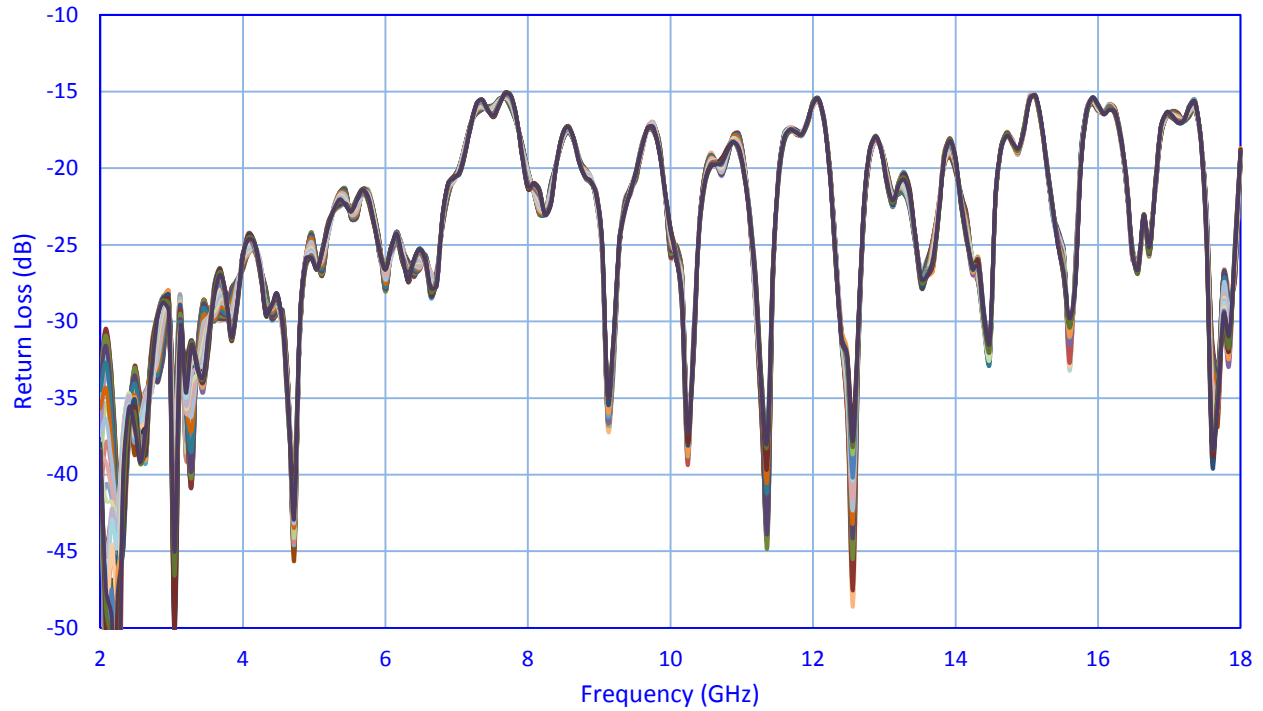
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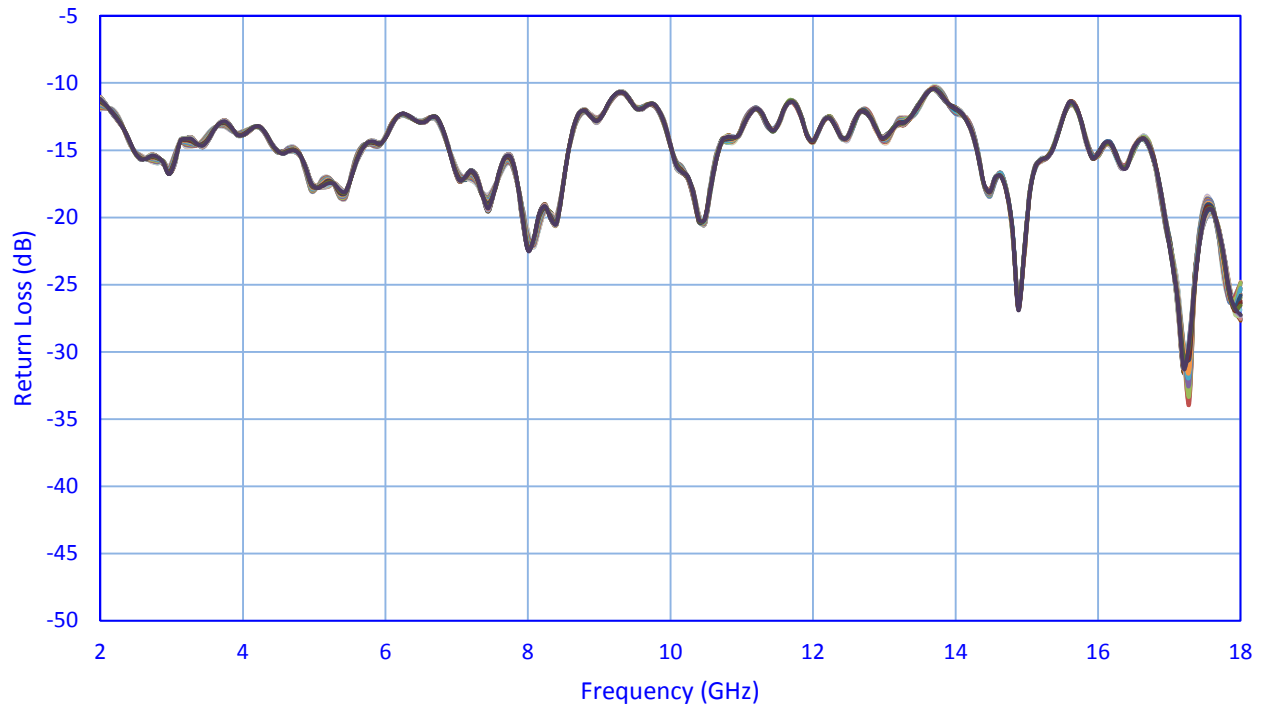
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Input Return Loss Vs. Frequency @ 12 dB Attenuation



Output Return Loss Vs. Frequency @ 12 dB Attenuation



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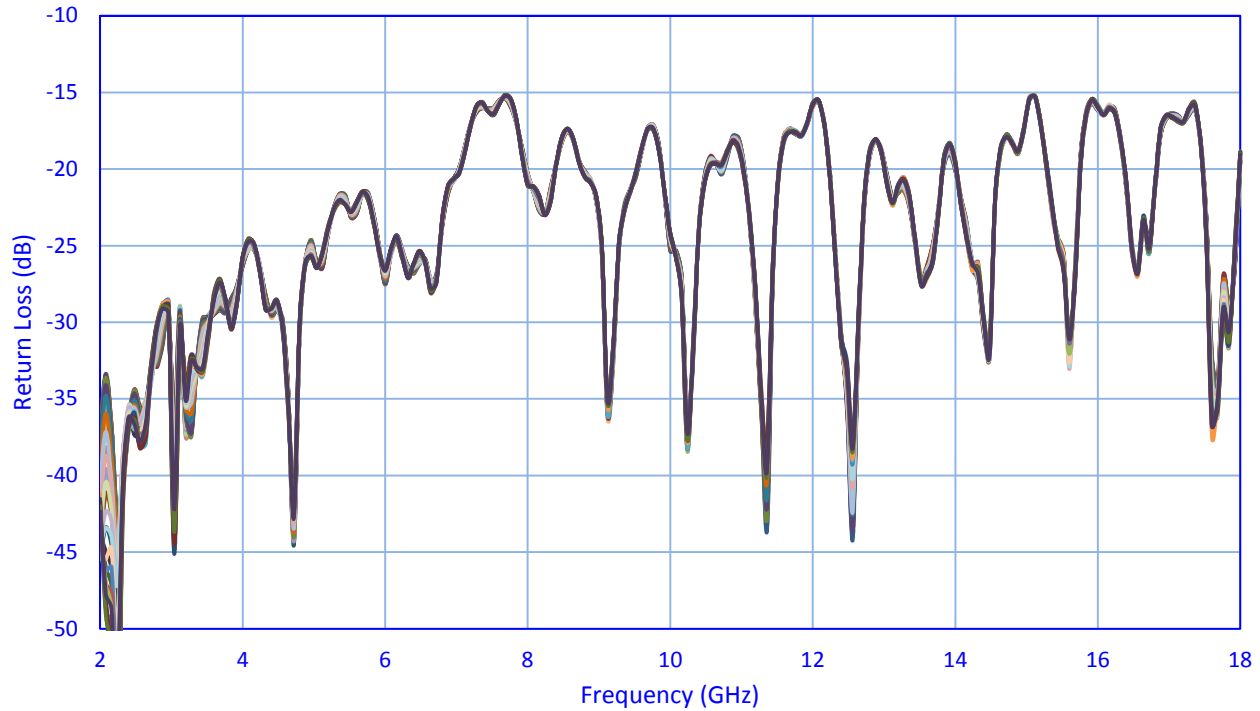
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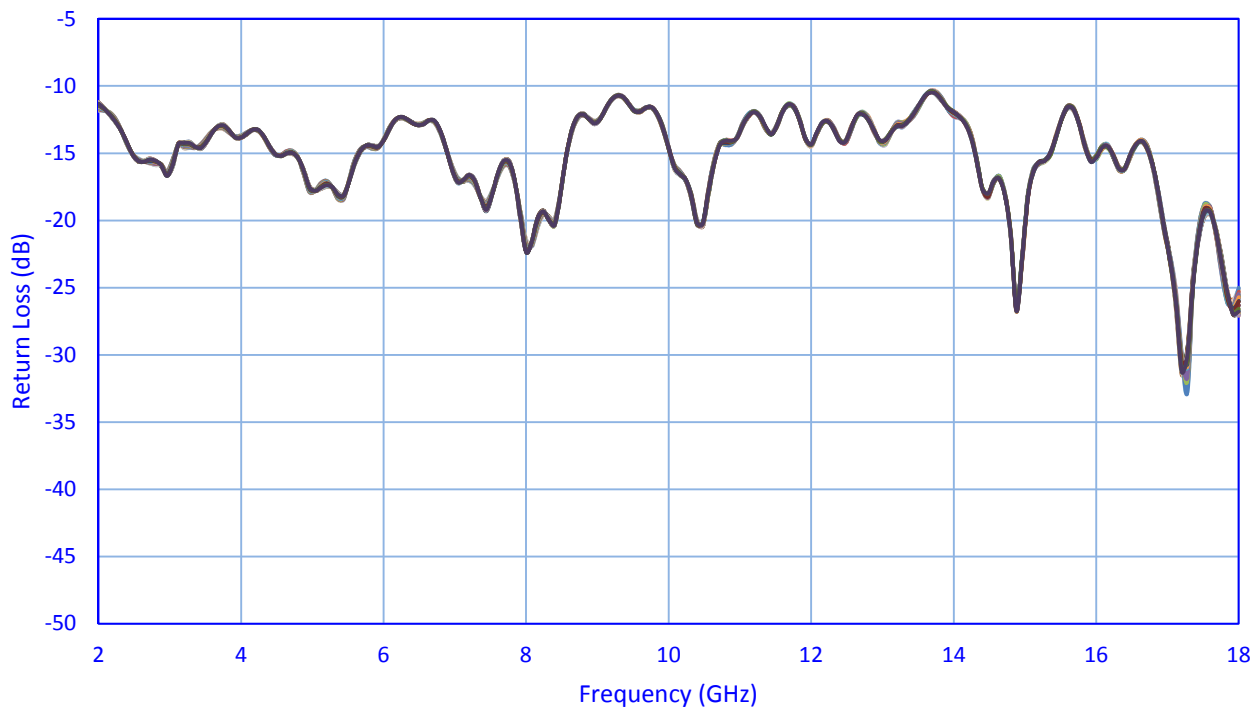
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Input Return Loss Vs. Frequency @ 16 dB Attenuation



Output Return Loss Vs. Frequency @ 16 dB Attenuation



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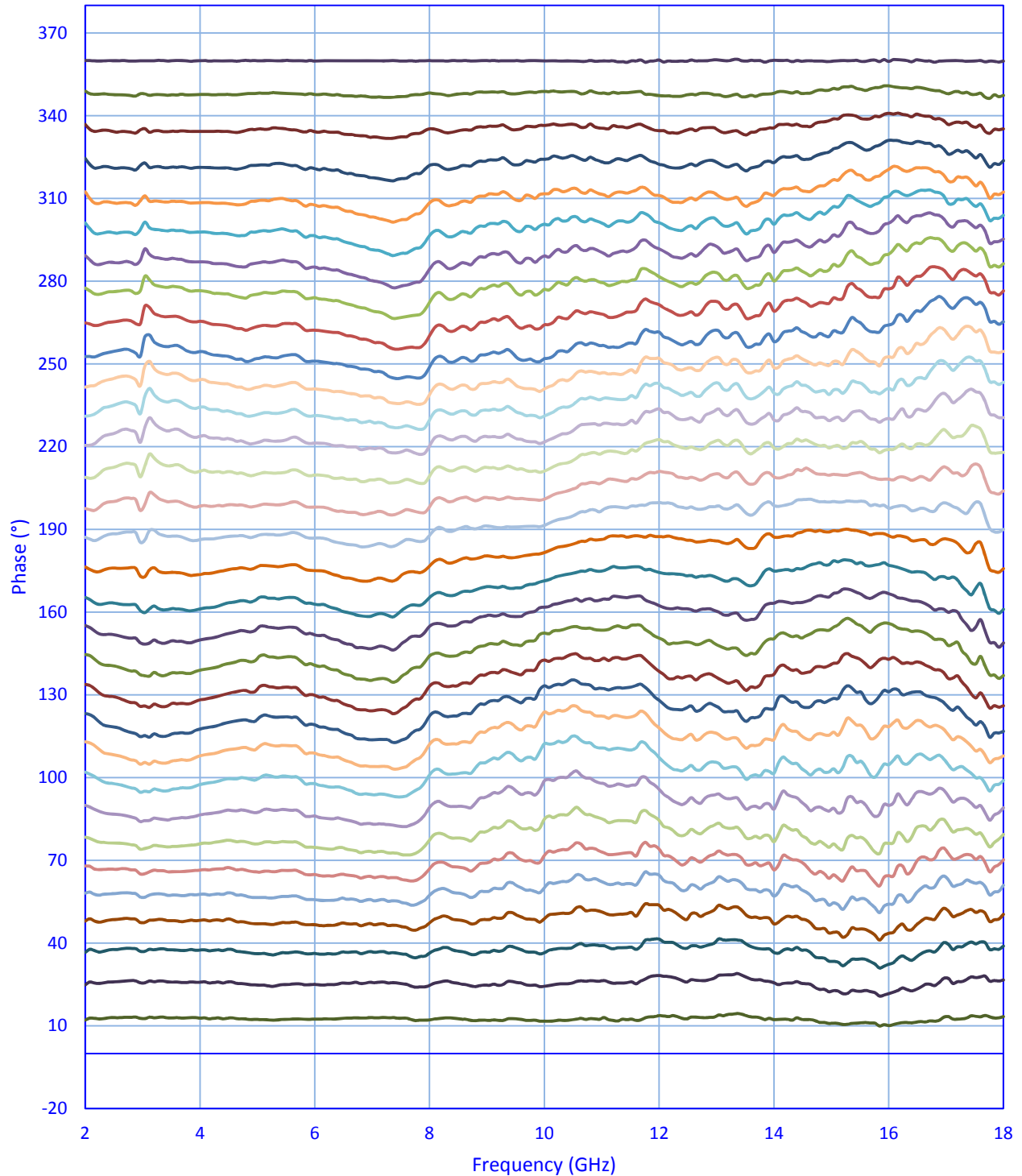
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Summary Data For PIQ-2G18G-360-16-CD-1

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Phase @ 0 dB Attenuation



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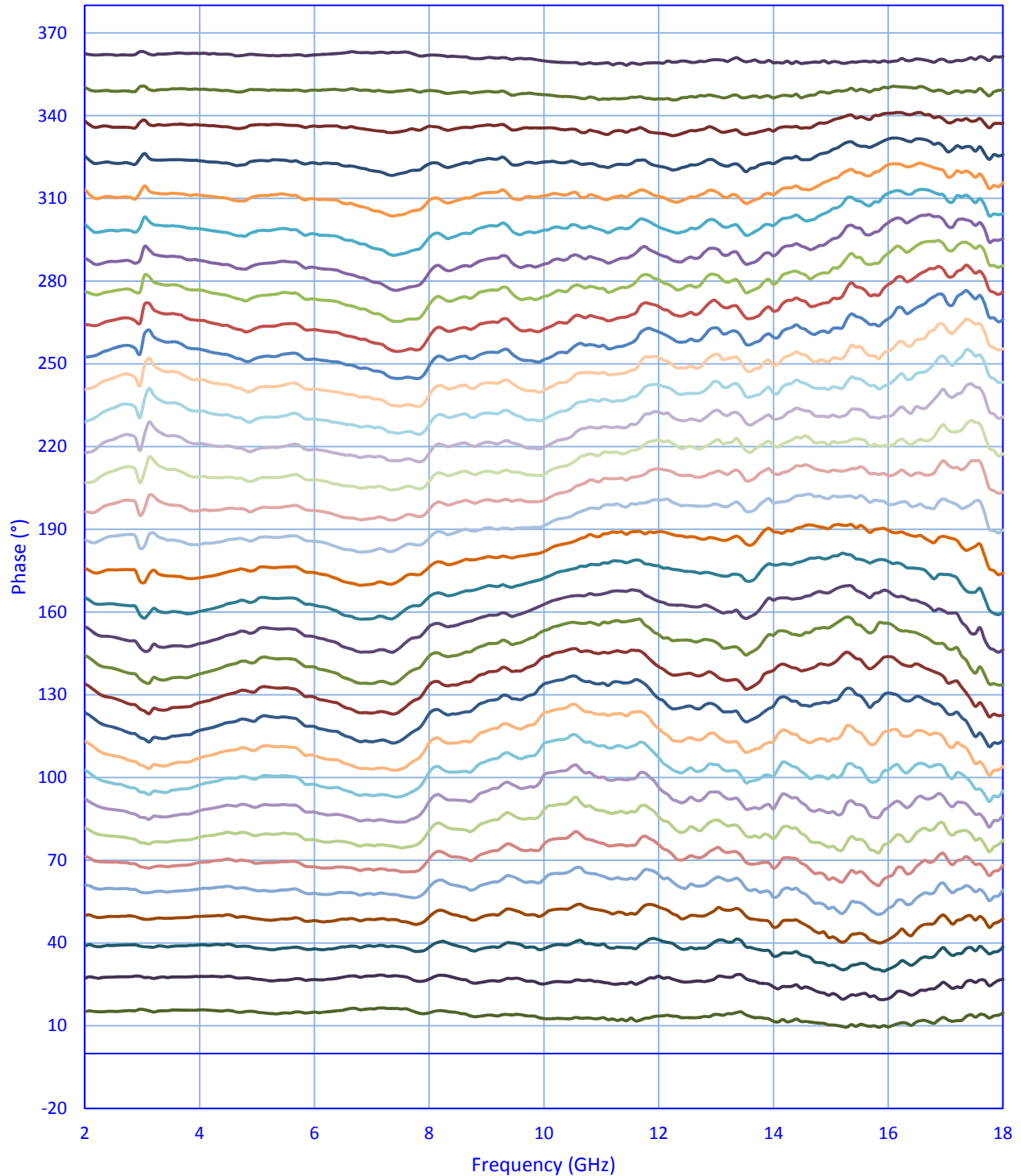
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Summary Data For PIQ-2G18G-360-16-CD-1

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Phase @ 4 dB Attenuation



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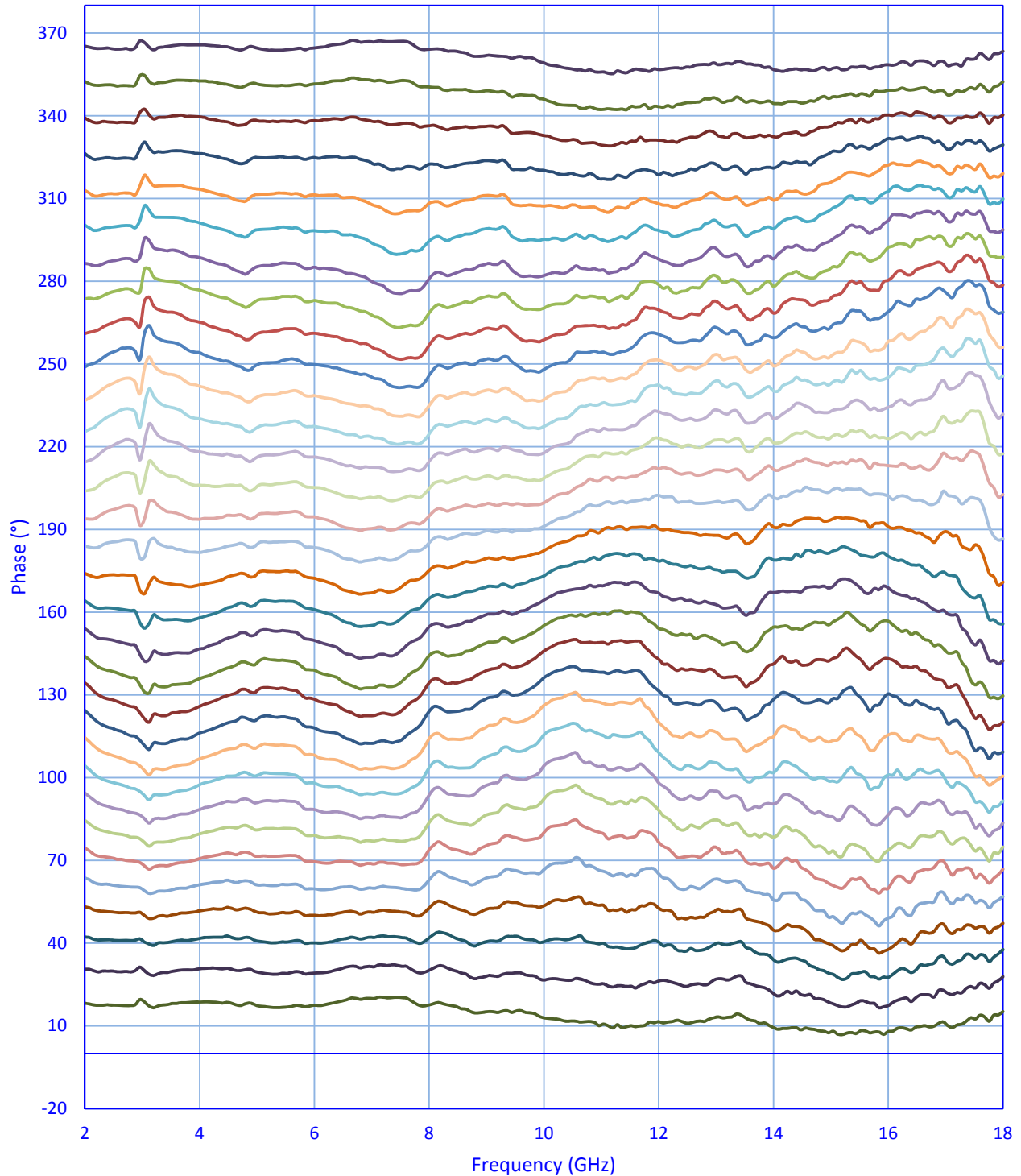
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Phase @ 8 dB Attenuation



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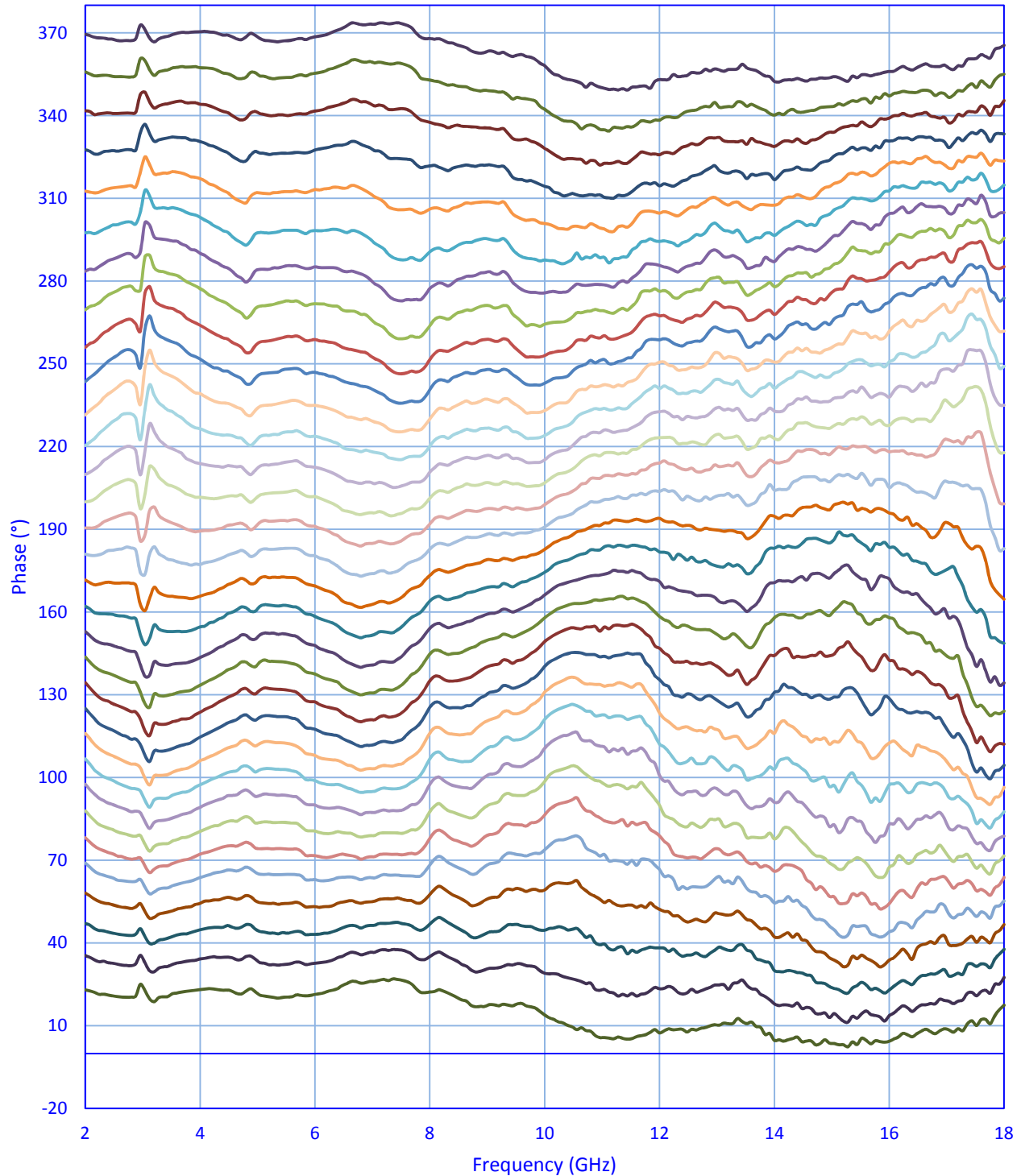
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Summary Data For PIQ-2G18G-360-16-CD-1

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Phase @ 12 dB Attenuation



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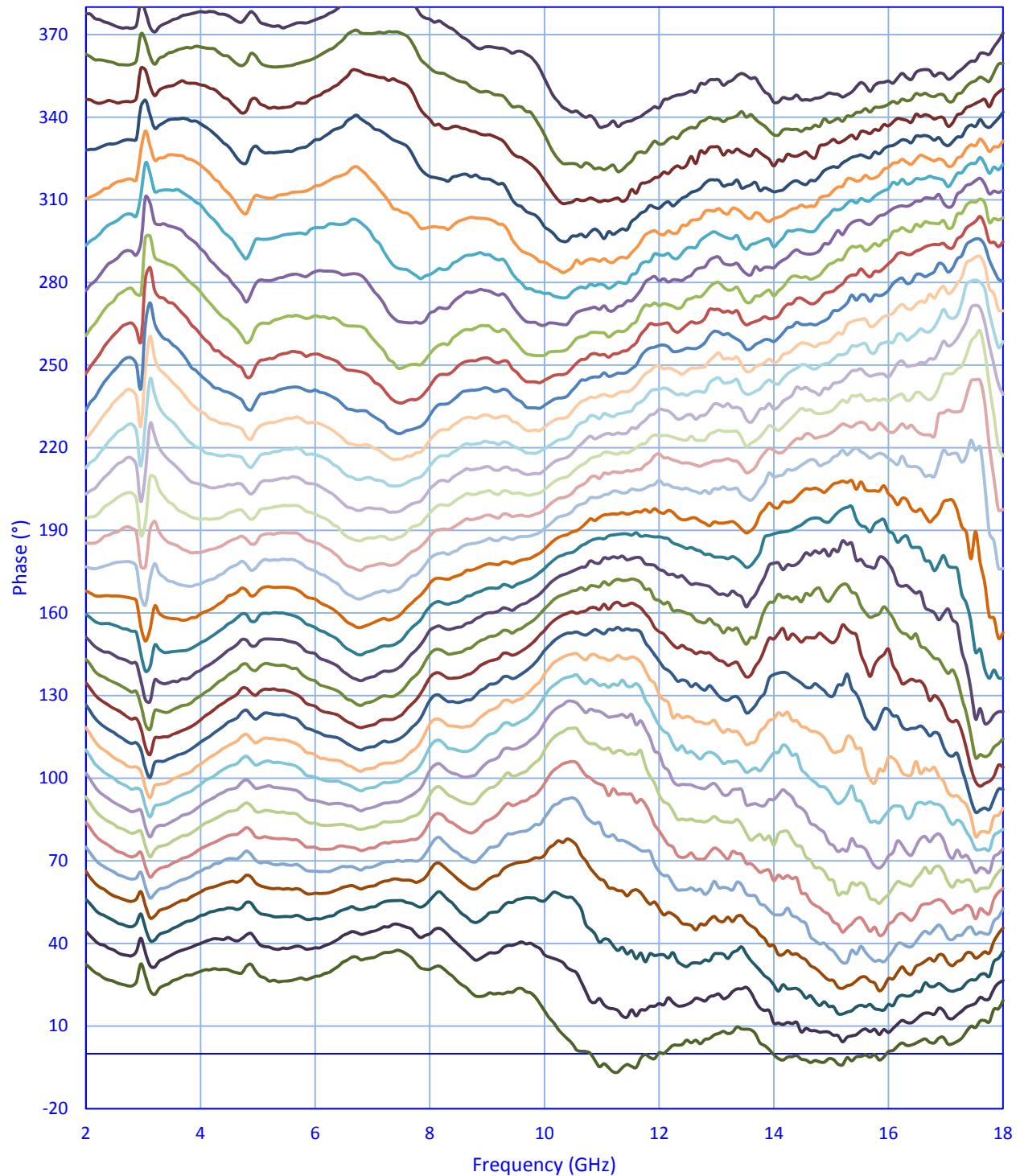
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Summary Data For PIQ-2G18G-360-16-CD-1

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Phase @ 16 dB Attenuation



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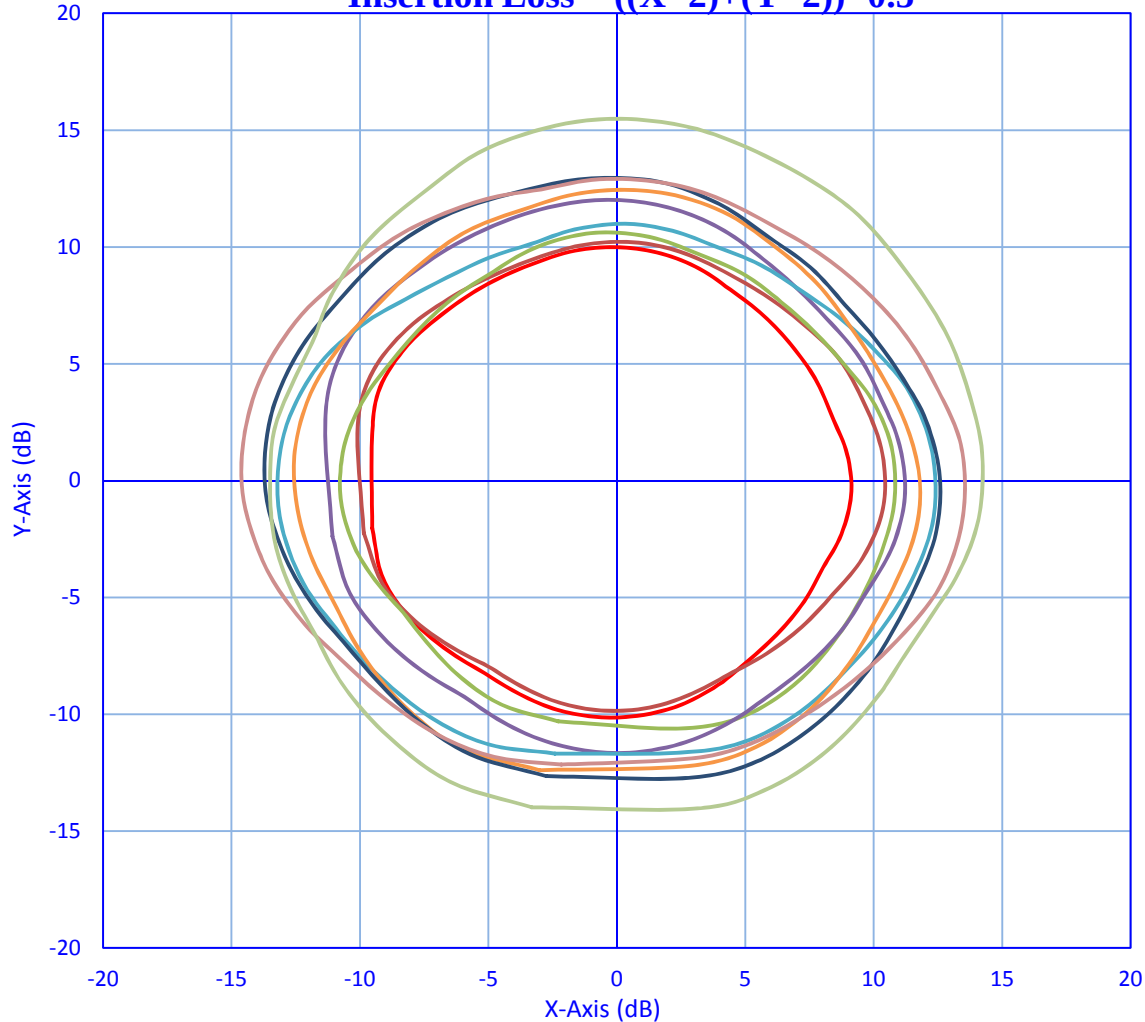


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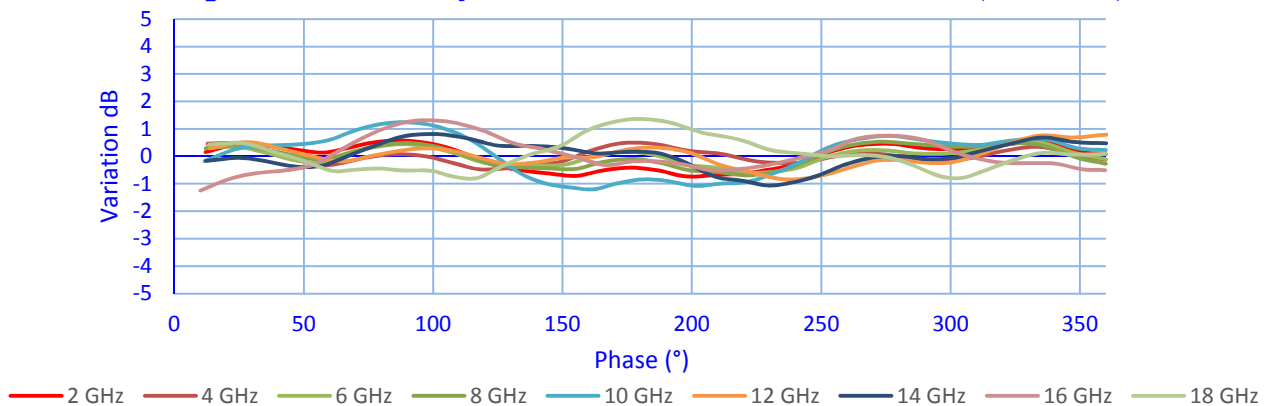
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Insertion Loss Vs. Phase @ 0 dB Attenuation

$$\text{Insertion Loss} = ((X^2) + (Y^2))^{0.5}$$



Amplitude Linearity Vs. Phase @ 0 dB Attenuation (PM/AM)



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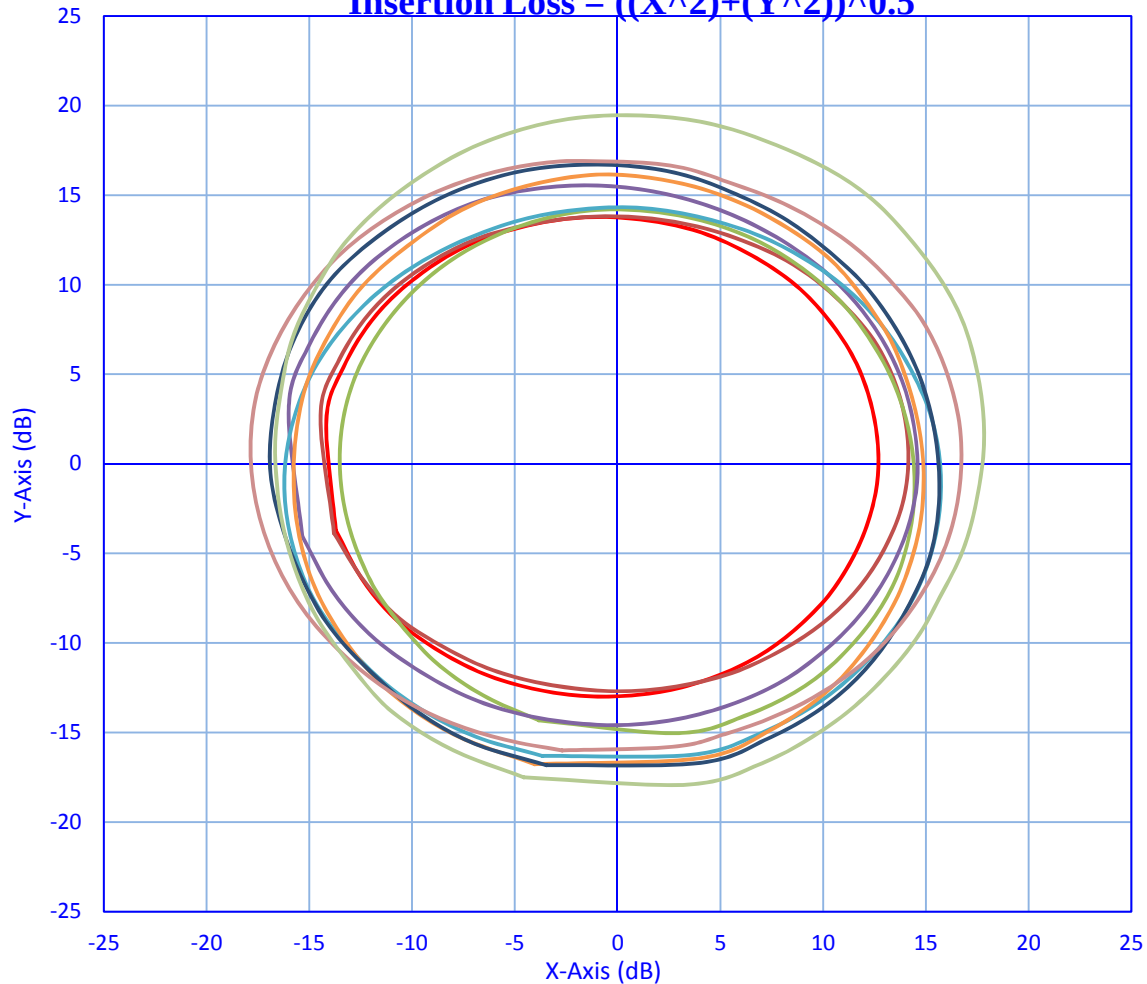


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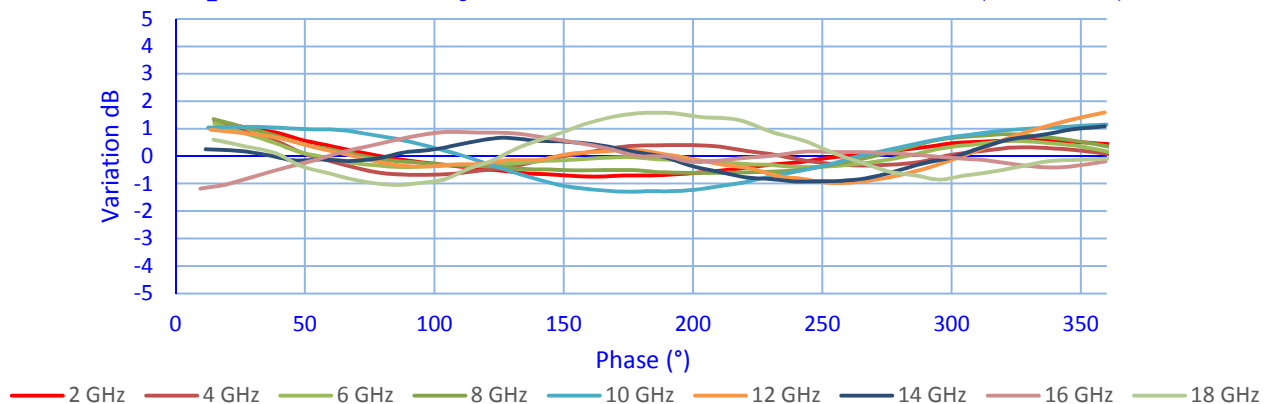
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Insertion Loss Vs. Phase @ 4 dB Attenuation

$$\text{Insertion Loss} = ((X^2) + (Y^2))^{0.5}$$



Amplitude Linearity Vs. Phase @ 4 dB Attenuation (PM/AM)



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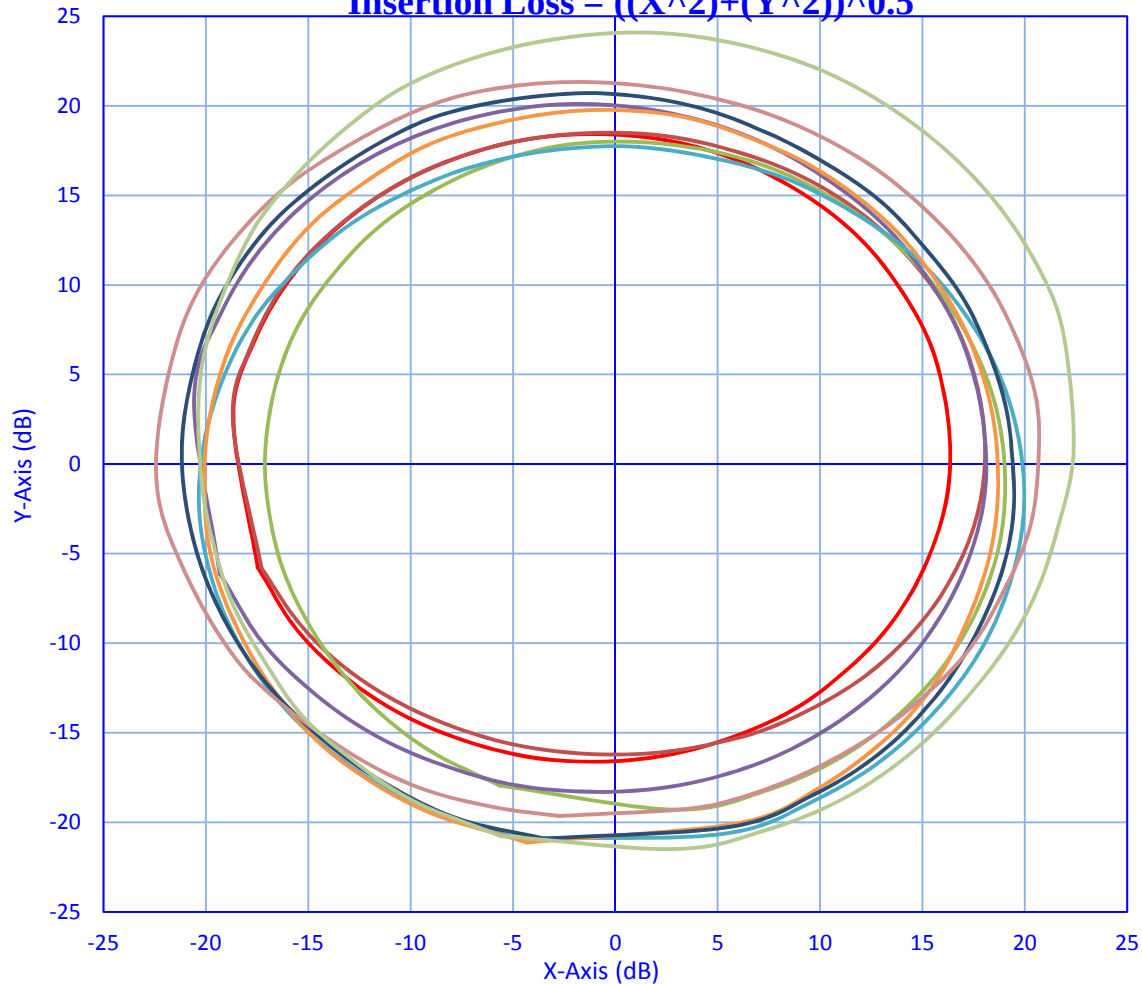


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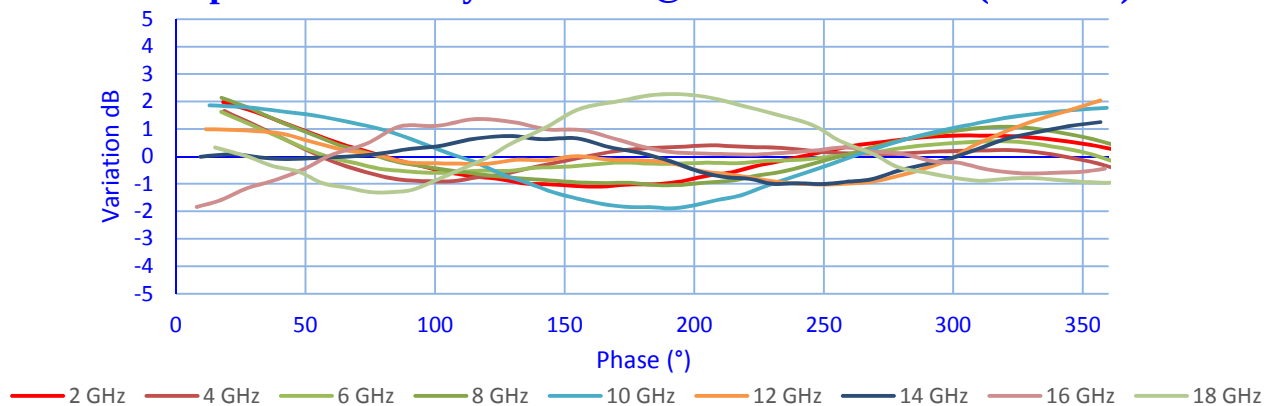
PL21868/1748

Insertion Loss Vs. Phase @ 8 dB Attenuation

$$\text{Insertion Loss} = ((X^2) + (Y^2))^{0.5}$$



Amplitude Linearity Vs. Phase @ 8 dB Attenuation (PM/AM)



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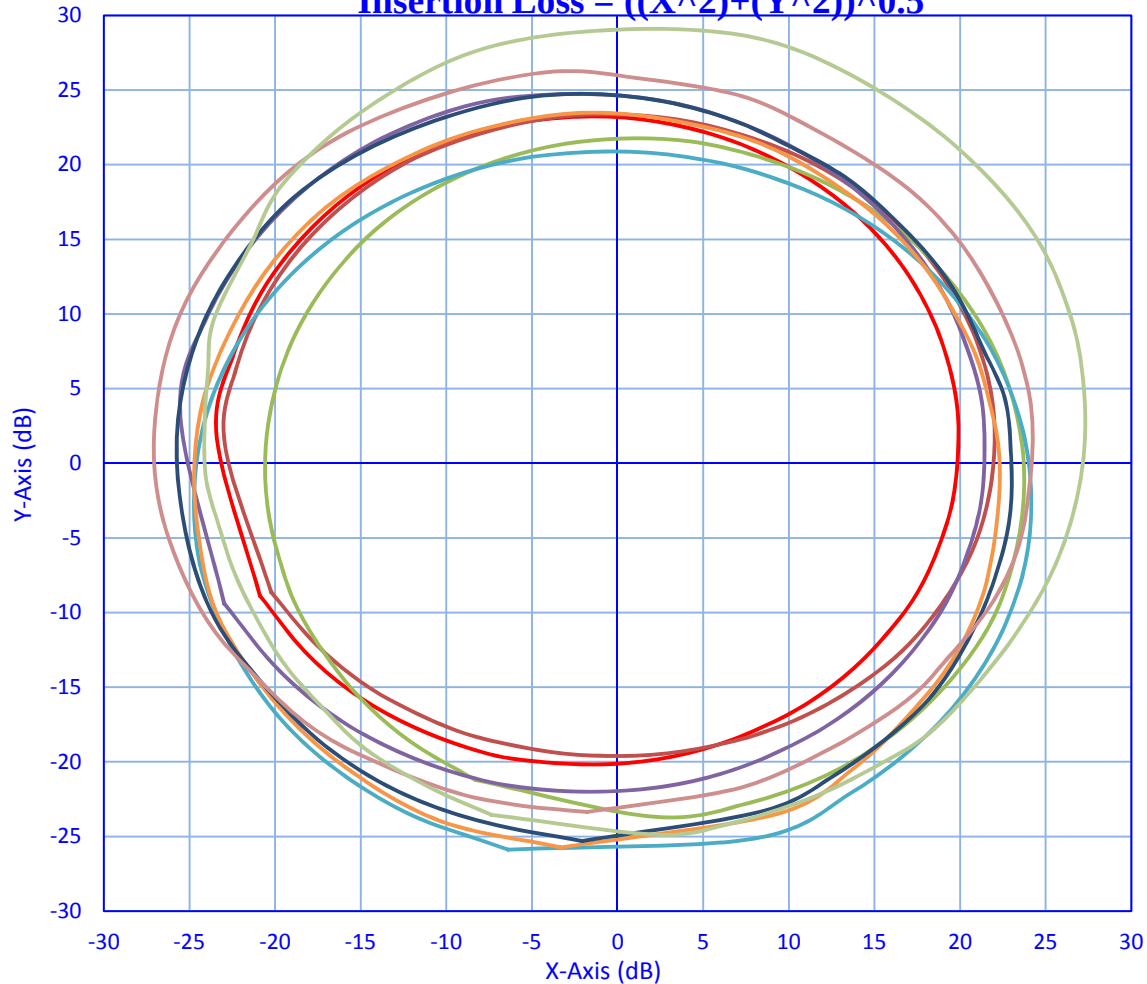


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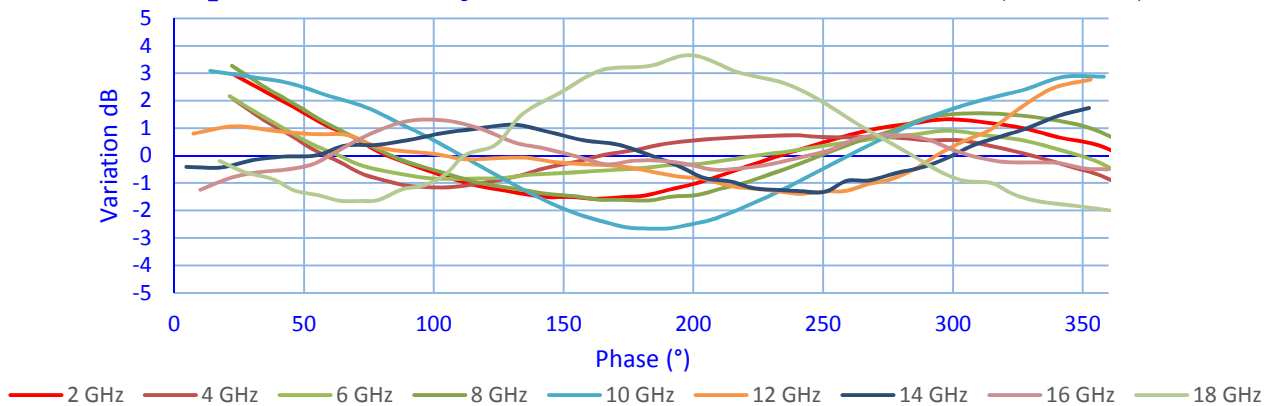
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Insertion Loss Vs. Phase @ 12 dB Attenuation

$$\text{Insertion Loss} = ((X^2) + (Y^2))^{0.5}$$



Amplitude Linearity Vs. Phase @ 12 dB Attenuation (PM/AM)



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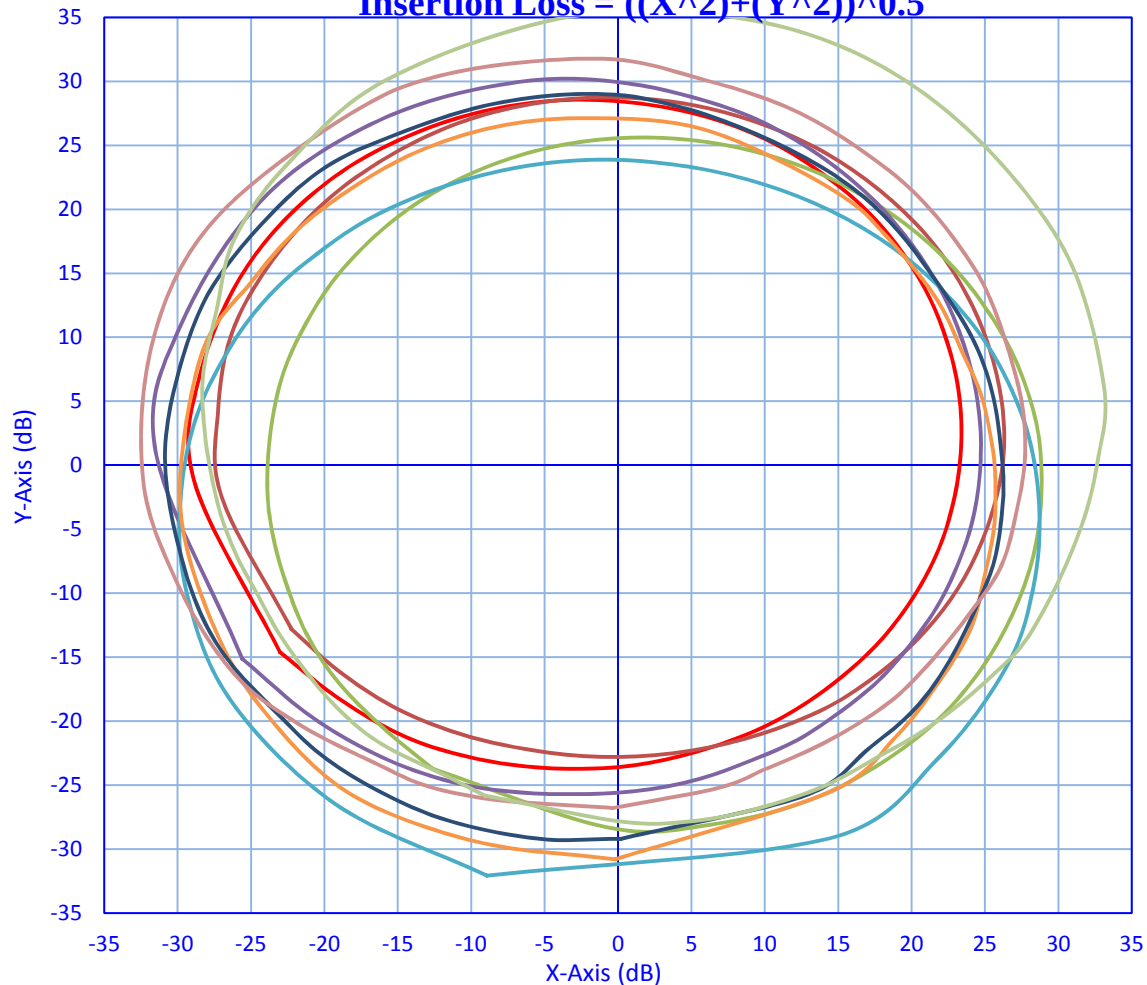


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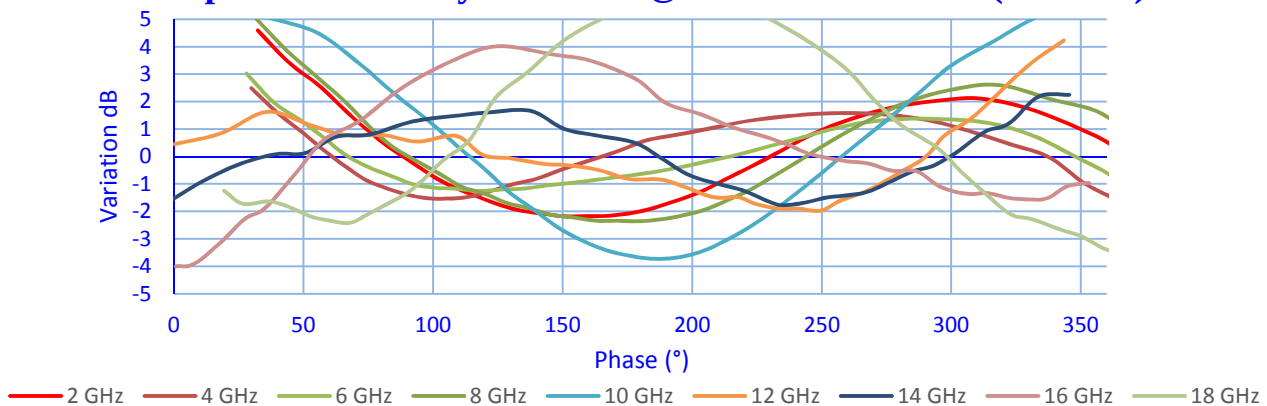
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Insertion Loss Vs. Phase @ 16 dB Attenuation

$$\text{Insertion Loss} = ((X^2) + (Y^2))^{0.5}$$



Amplitude Linearity Vs. Phase @ 16 dB Attenuation (PM/AM)



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