



# Typical Characteristics For APD-8-3D13D5-40W-SFF

Serial No. PL17509/1529

PMI MODEL APD-8-3D13D5-40W-SFF IS A 3.1 GHz TO 3.5 GHz 8-WAY POWER DIVIDER THAT OFFERS MAXIMUM INSERTION LOSS OF 0.6 dB WITH 23 dB MINIMUM PORT TO PORT ISOLATION. THIS POWER DIVIDER IS PORT TO PORT PHASE MATCHED WITHIN  $\pm 2^\circ$ . FIELD REMOVABLE SMA FEMALE CONNECTORS ARE OFFERED IN A HOUSING MEASURING 4.10" x 2.15" x 0.44".



July 14, 2015  
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# Typical Characteristics For APD-8-3D13D5-40W-SFF

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## Product Feature Drawing

REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
	A1	ORIGINAL RELEASE	07/08/15

**DESCRIPTION**  
PMI MODEL: APD-8-3D13D5-40W-SFF IS A 8 WAY DIVIDER OPERATING BETWEEN 3.1 TO 3.5 GHz.

**SPECIFICATIONS**

- FREQUENCY RANGE: 3.1 TO 3.5 GHz
- INSERTION LOSS:  $\leq 0.6$  dB
- ISOLATION:  $\geq 23$  dB
- VSWR: INPUT  $\leq 1.30:1$   
OUTPUT  $\leq 1.20:1$
- AMPLITUDE BALANCE:  $\leq \pm 0.2$  dB
- PHASE BALANCE:  $\leq \pm 2^\circ$
- POWER HANDLING: FORWARD  $\leq 40$  Watt  
REVERSED  $\leq 1$  Watt
- IMPEDANCE: 50  $\Omega$
- PORT CONNECTORS: SMA FEMALE
- FINISH: PAINTED BLUE
- NOTE: AMPLITUDE & PHASE BALANCE RELATIVE TO J1 PORT

**MECHANICAL OUTLINE**

**ENVIRONMENTAL RATINGS**

- TEMPERATURE: -55 °C TO +85 °C (OPERATING)
- HUMIDITY: UP TO 90%, NON-CONDENSING

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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ISO 9001 CERTIFIED

ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XXX ±0.005  
X.XXXX ±0.010

**PMI CONFIDENTIAL AND PROPRIETARY**

APPROVALS		DATE		TITLE			
DESIGN	<i>B. Thomas</i>		07/08/15	PRODUCT FEATURE APD-8-3D13D5-40W-SFF			
CHECKED		REV.		FIG. NO.	DWG. NO.	REV.	
ISSUED		A		05XQ0	27026081	A1	
		SCALE	N/S	SHEET		1 OF 1	

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## Summary Data Sheet

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range	3.1 TO 3.5 GHz	3.1 TO 3.5 GHz	
2	Insertion Loss	≤0.6 dB	0.27 dB (See Plots)	
3	Isolation	≥23 dB	23.60 dB (See Plots)	
4	VSWR	INPUT ≤1.30:1 OUTPUT ≤1.20:1	INPUT 1.21:1 OUTPUT 1.15:1 (See Plots)	
5	*Amplitude Balance	≤ ±0.2 dB	-0.07 dB +0.01 dB (See Plots)	
6	*Phase Balance	≤ ±2°	-0.65° +1.29° (See Plots)	
7	Power Handling	Forward ≤40 W Reverse ≤1 W	40 W 1 W	
8	Impedance	50 Ω	50 Ω	

\*Note: Amplitude & Phase Balance relative to J1 Port

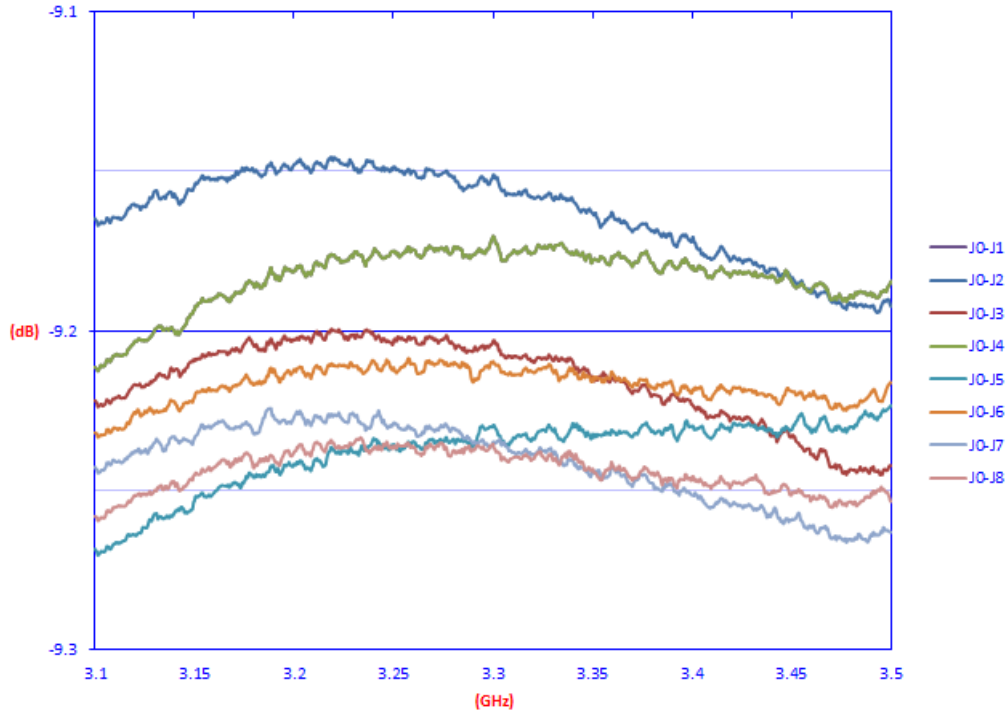
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## Insertion Loss



## Amplitude Balance (Referenced to J1)

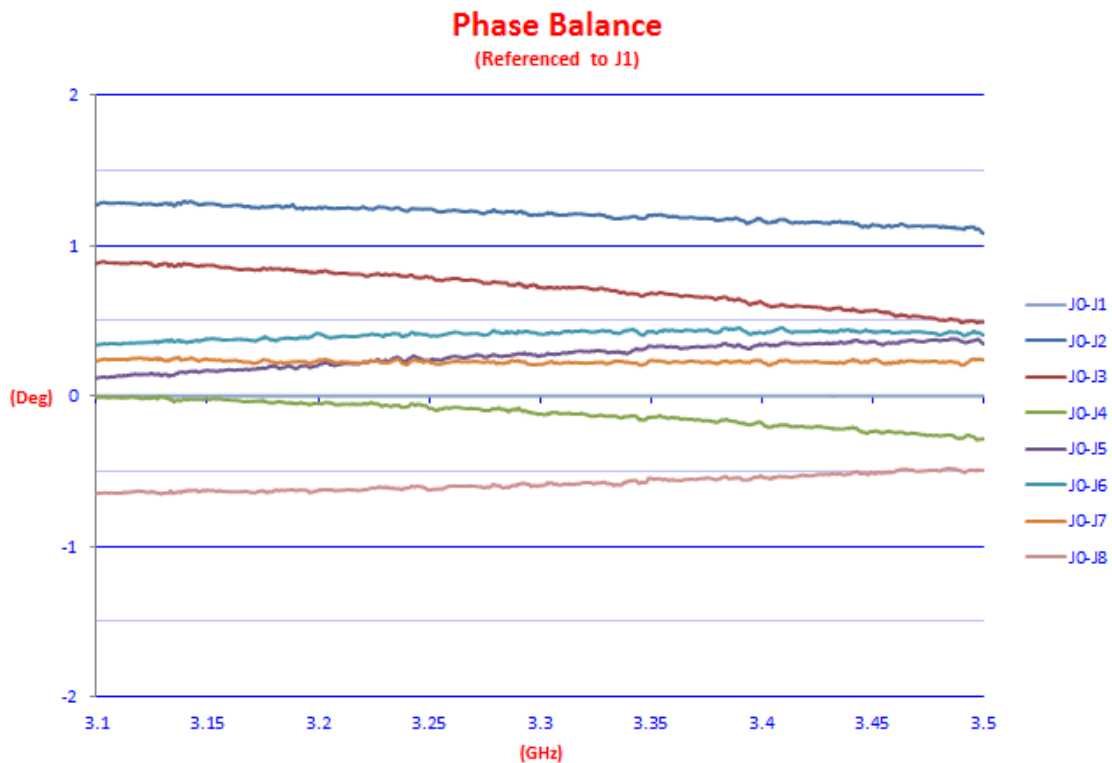


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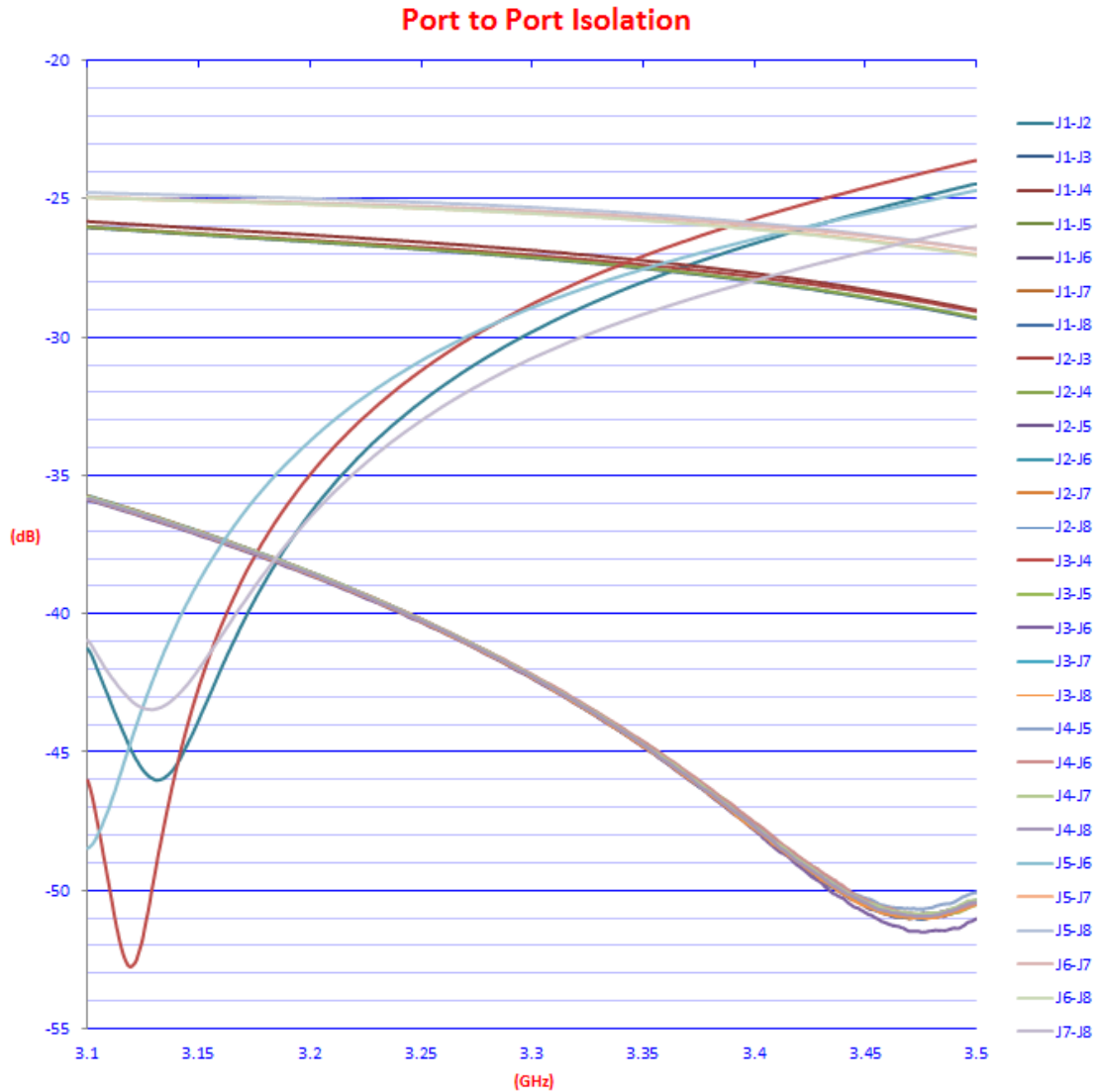
Serial No. PL17509/1529





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Serial No. PL17509/1529



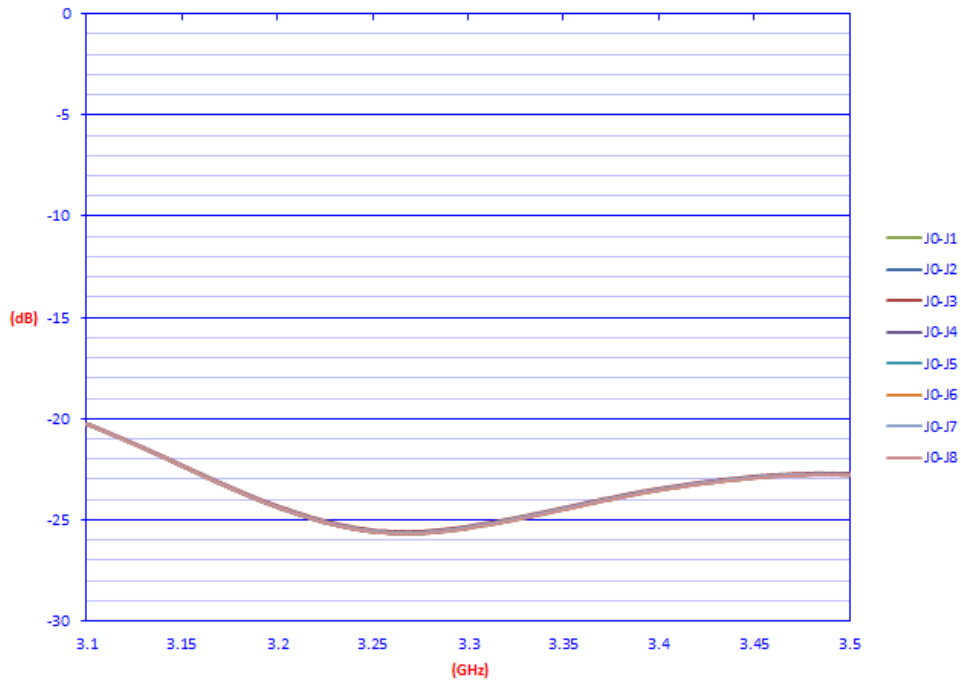
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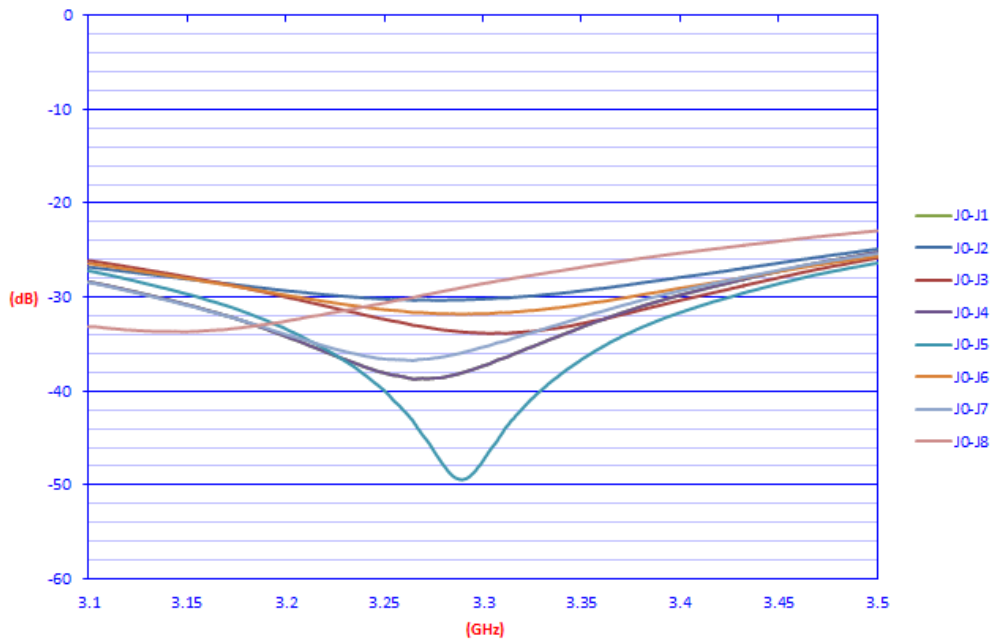
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### Input VSWR



### Output VSWR



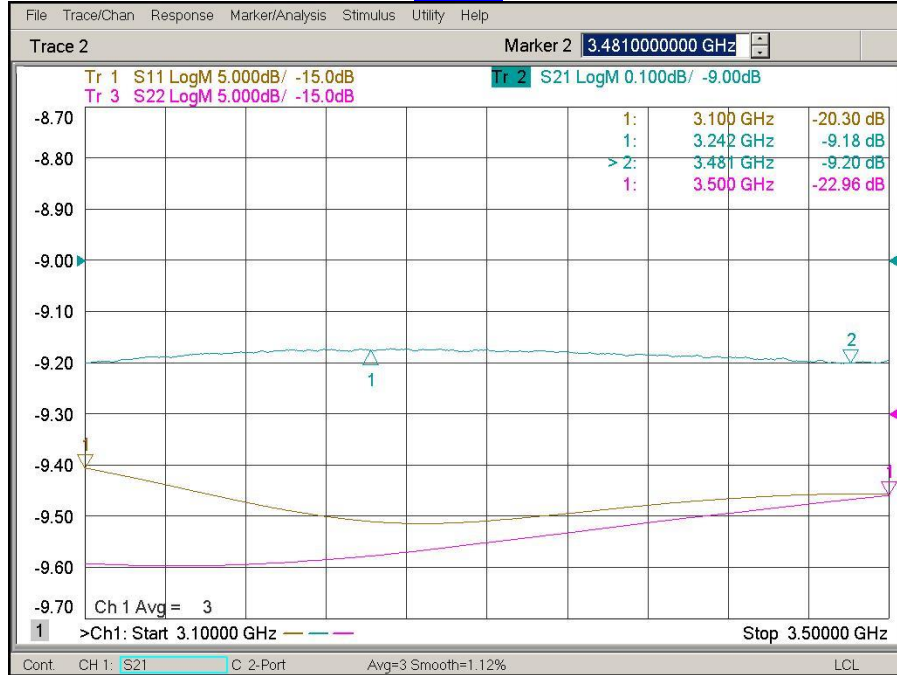




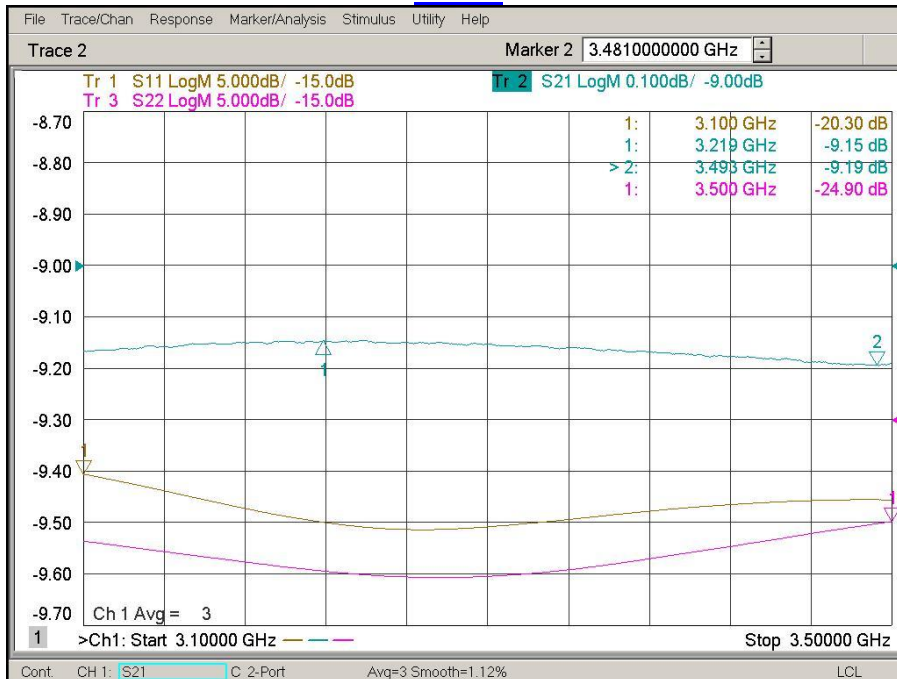
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## Insertion Loss & VSWR J0 - J1



## Insertion Loss & VSWR J0 - J2



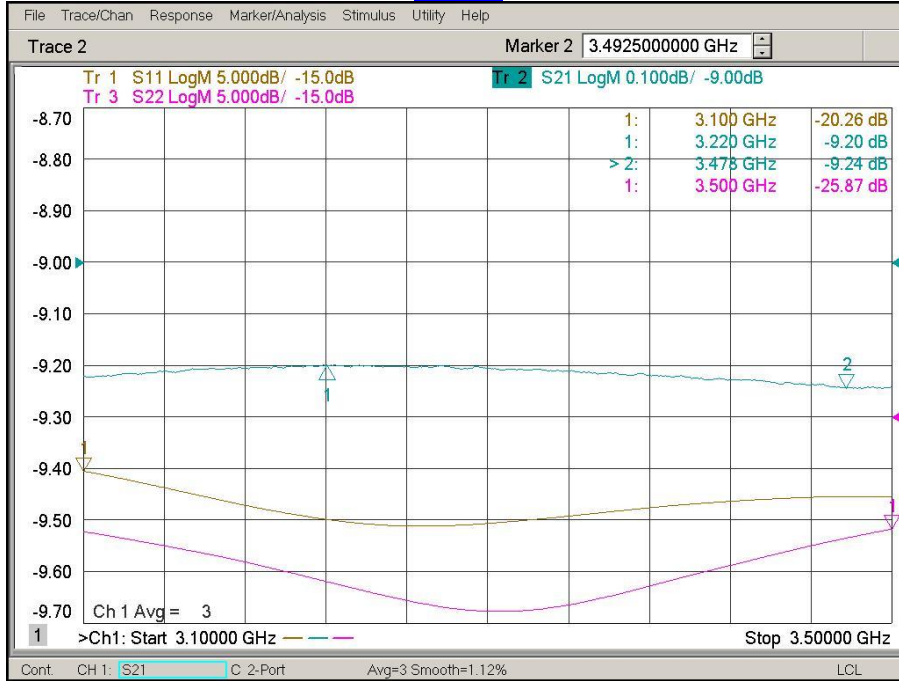
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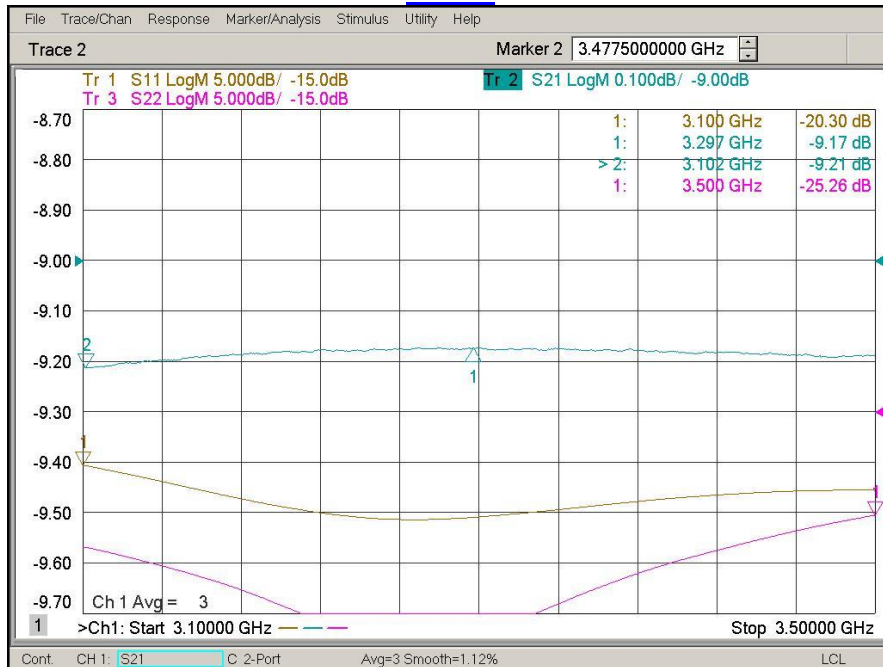
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## Insertion Loss & VSWR J0 - J3



## Insertion Loss & VSWR J0 - J4



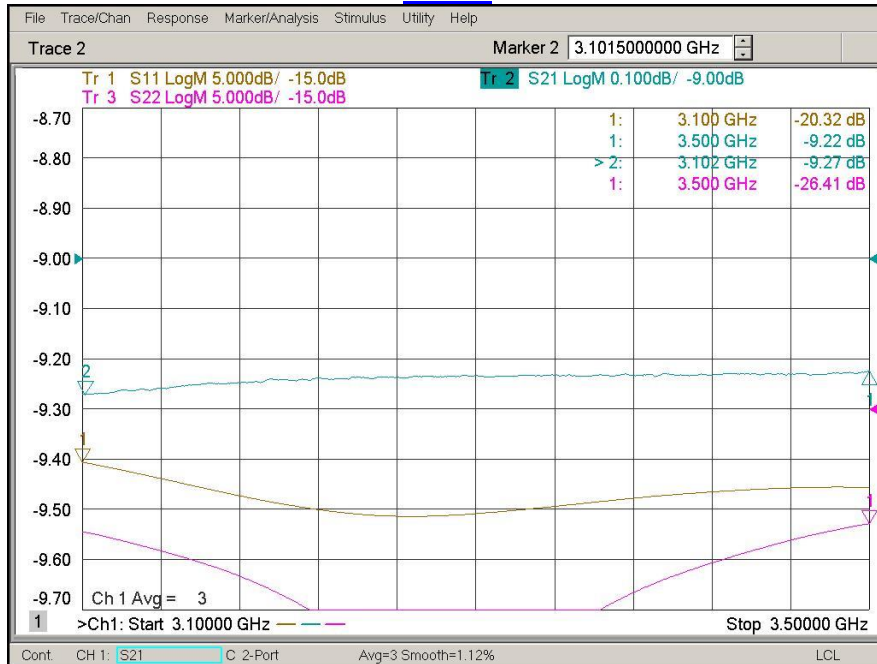
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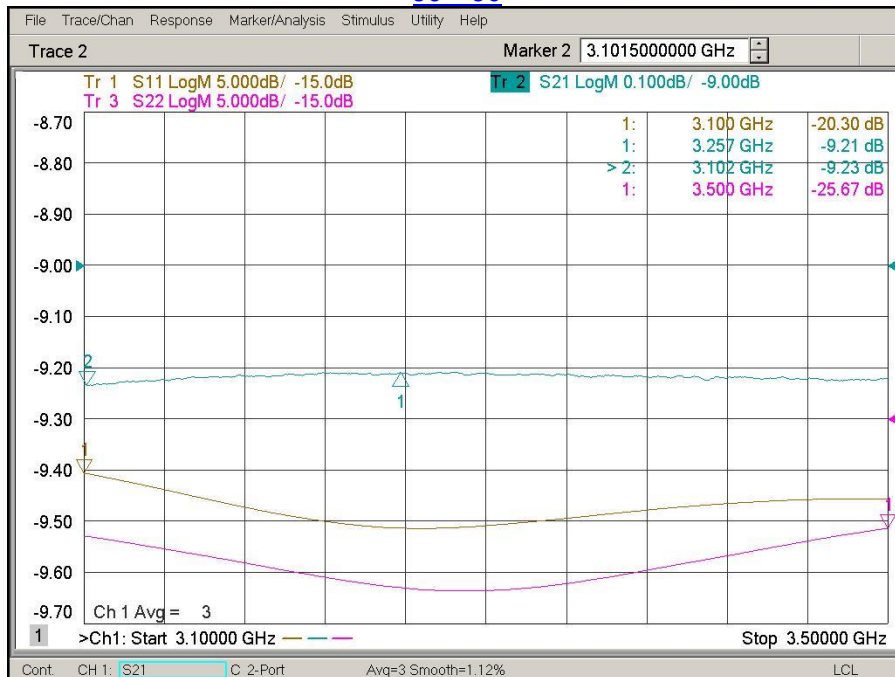
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## Insertion Loss & VSWR J0 - J5



## Insertion Loss & VSWR J0 - J6



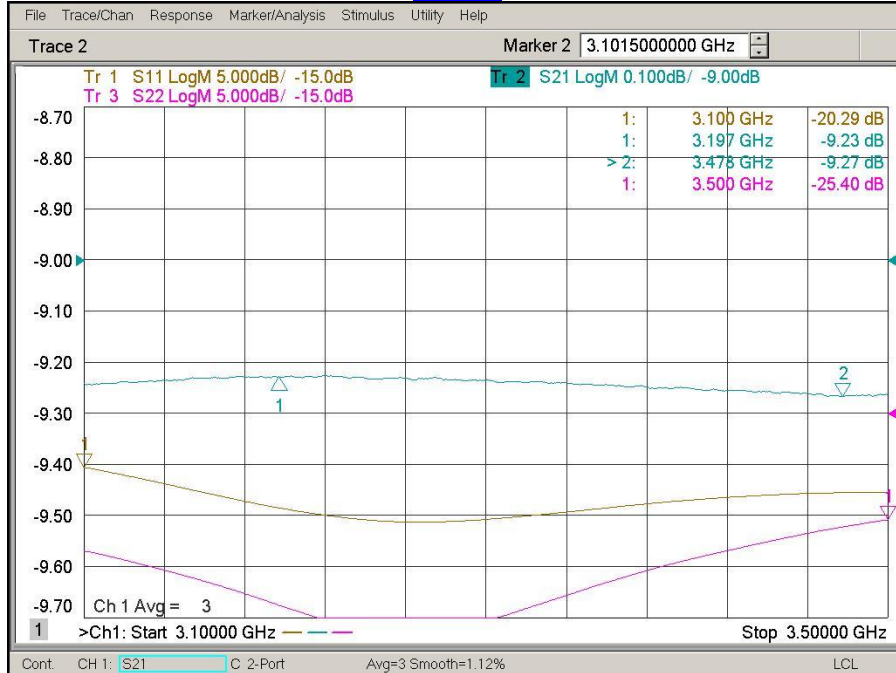
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## Insertion Loss & VSWR J0 - J7



## Insertion Loss & VSWR J0 - J8



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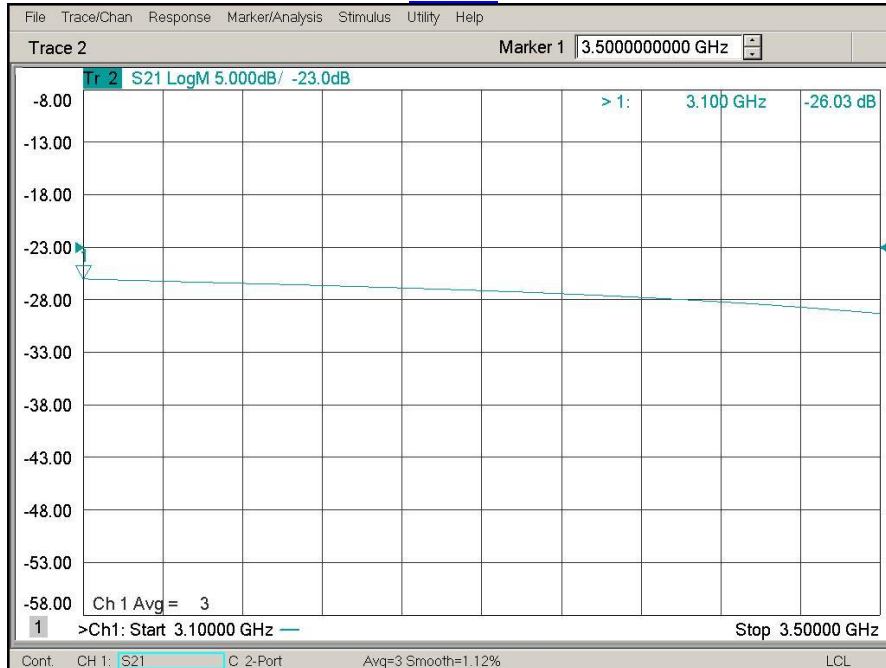
# Typical Characteristics For APD-8-3D13D5-40W-SFF

Serial No. PL17509/1529

## Isolation J1 - J2



## Isolation J1 - J3



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# Typical Characteristics For APD-8-3D13D5-40W-SFF

Serial No. PL17509/1529

## Isolation J1 - J4



## Isolation J1 - J5



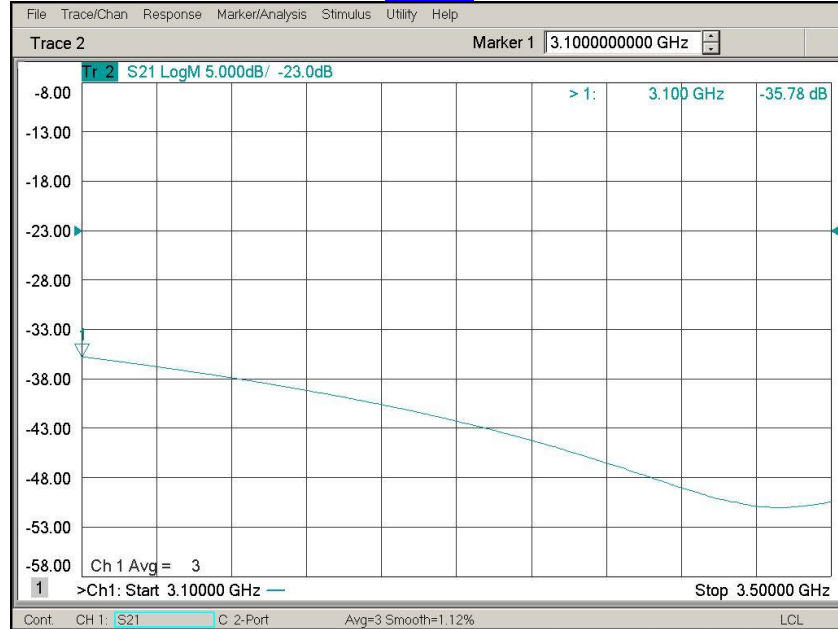
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## Isolation J1 - J6



## Isolation J1 - J7



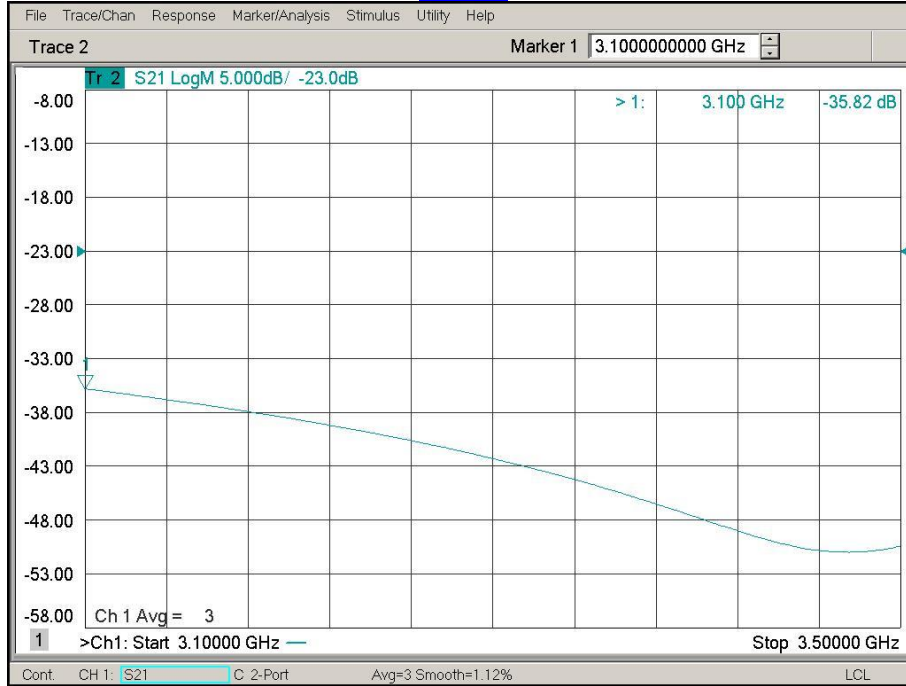
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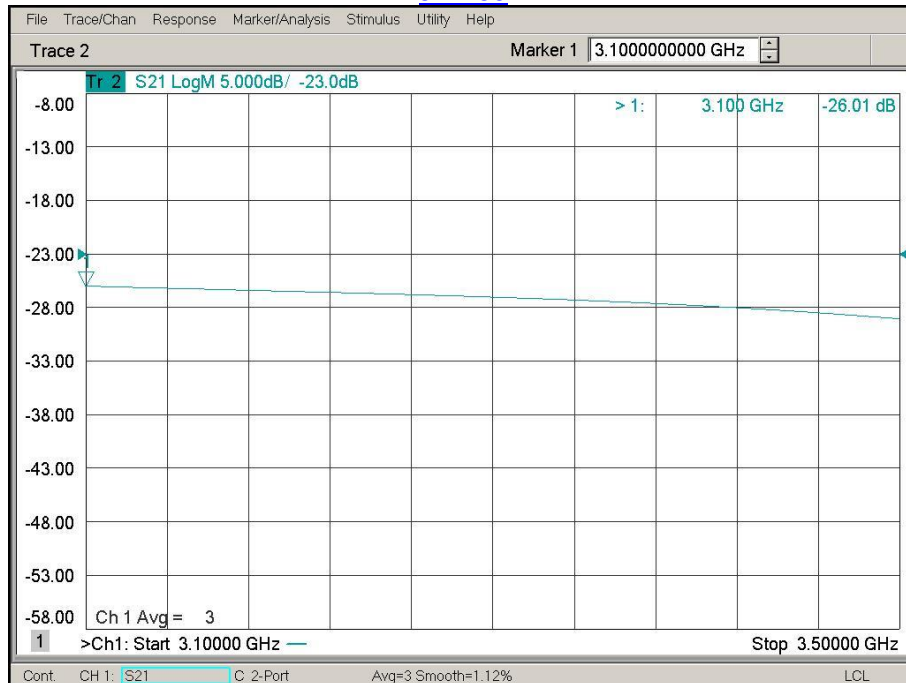
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## Isolation J1 – J8



## Isolation J2 – J3



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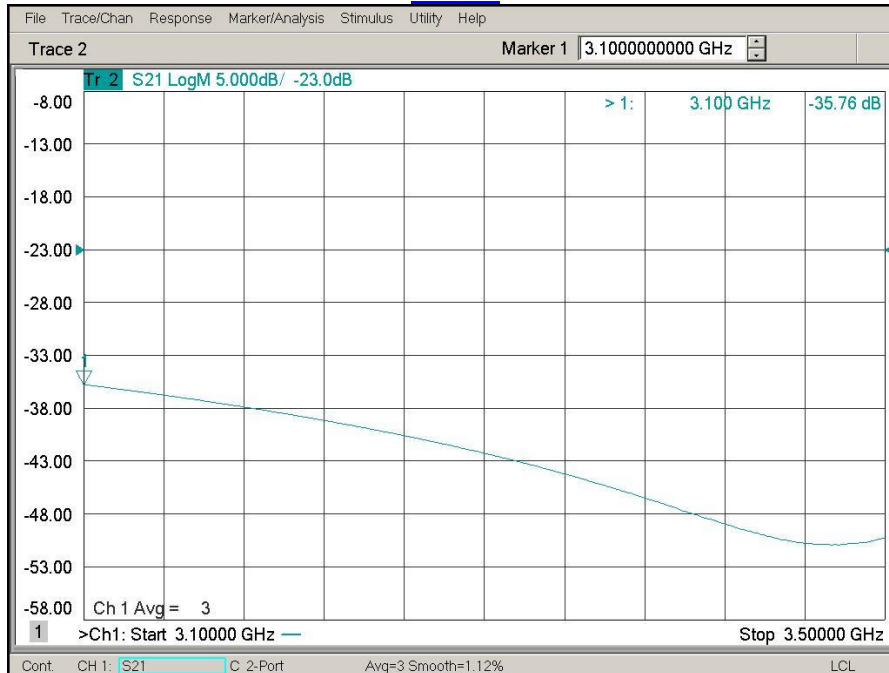
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## Isolation J2 - J4



## Isolation J2 - J5



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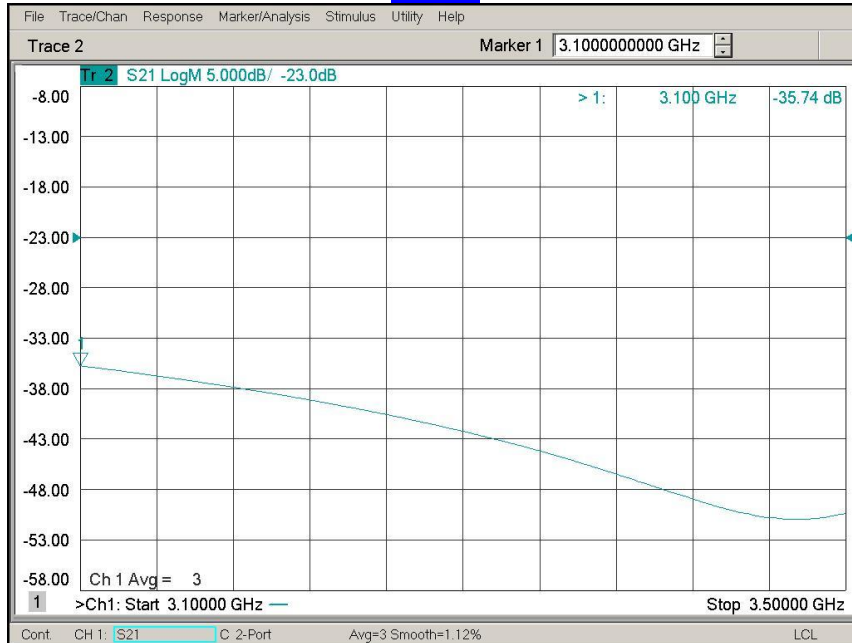
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## Isolation J2 - J6



## Isolation J2 - J7



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## Isolation J2 - J8



## Isolation J3 - J4



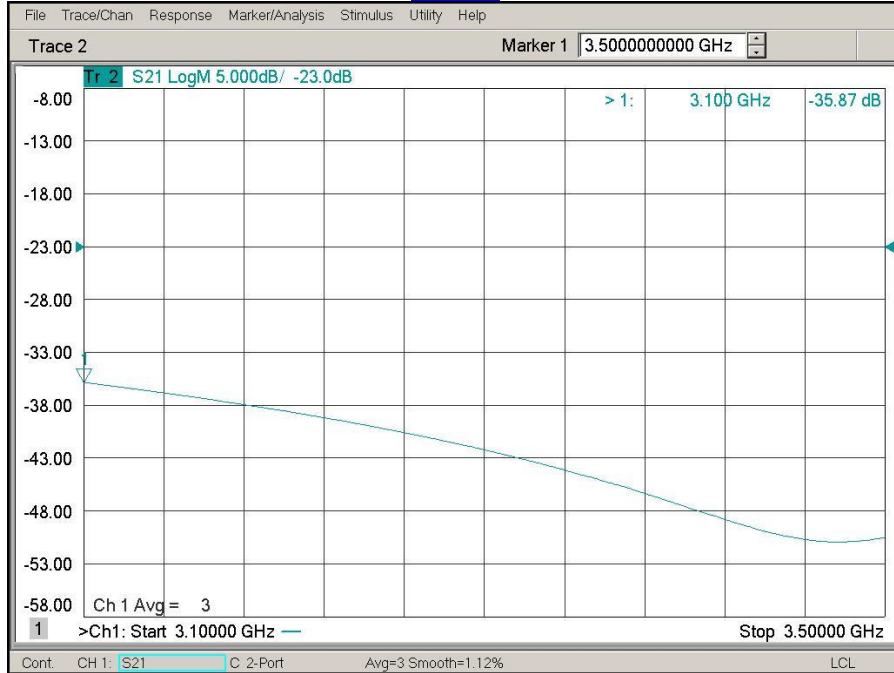
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## Isolation J3 - J5



## Isolation J3 - J6



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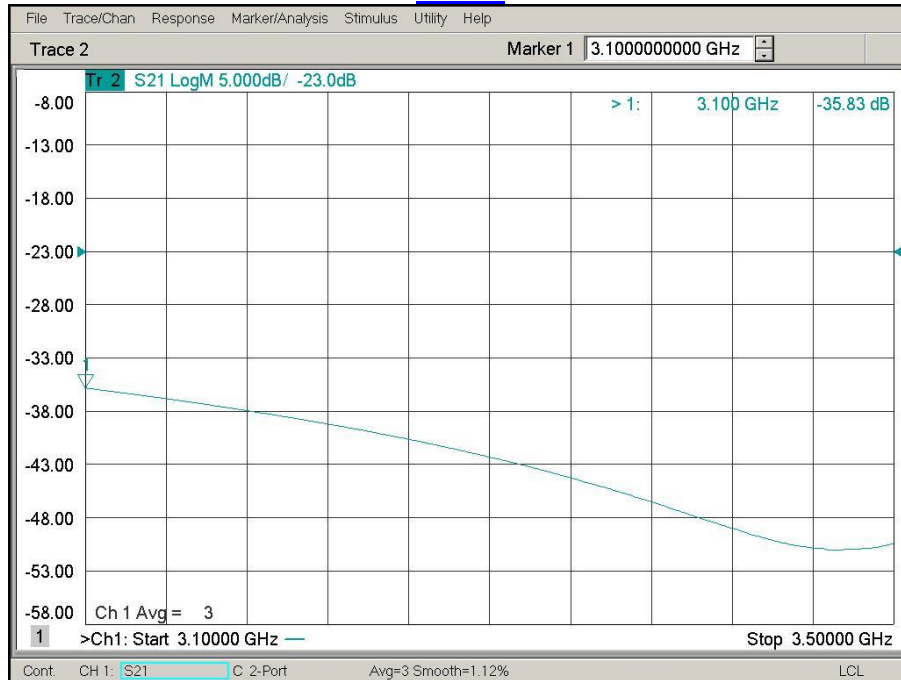
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## Isolation J3 - J7



## Isolation J3 - J8



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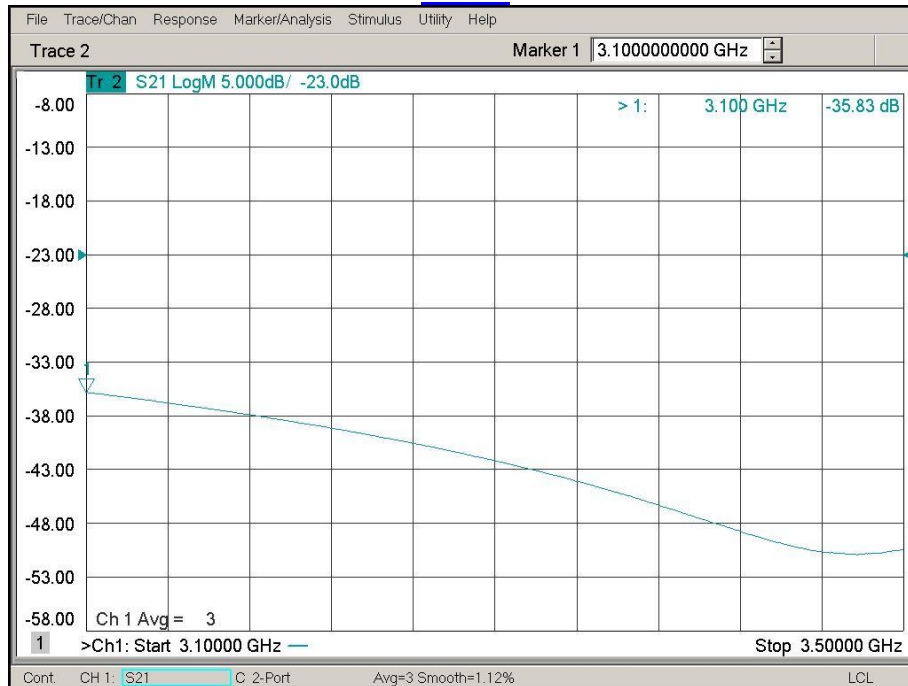
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## Isolation J4 – J5



## Isolation J4 – J6



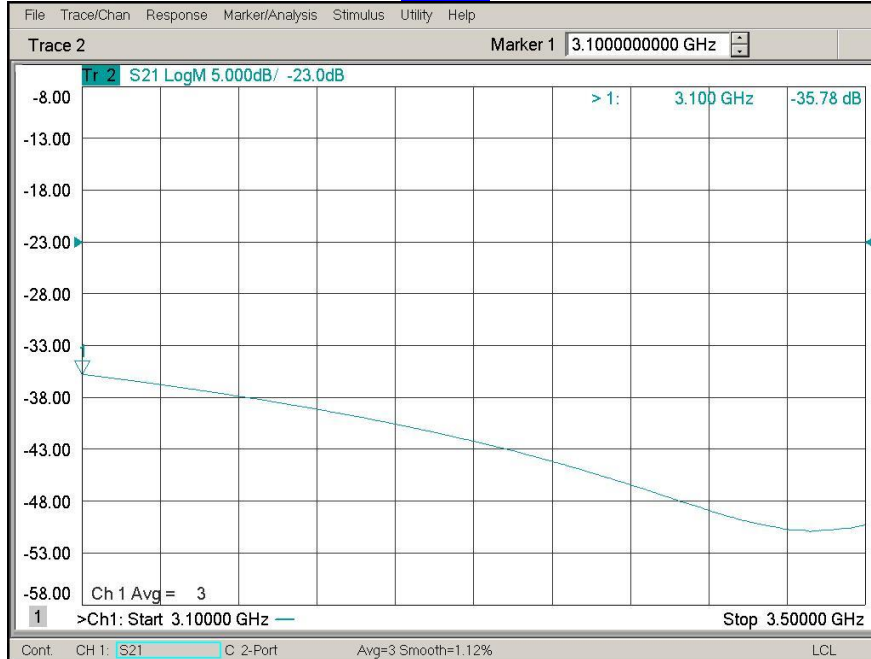
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## Isolation J4 - J7



## Isolation J4 - J8



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## Isolation J5 - J6



## Isolation J5 - J7



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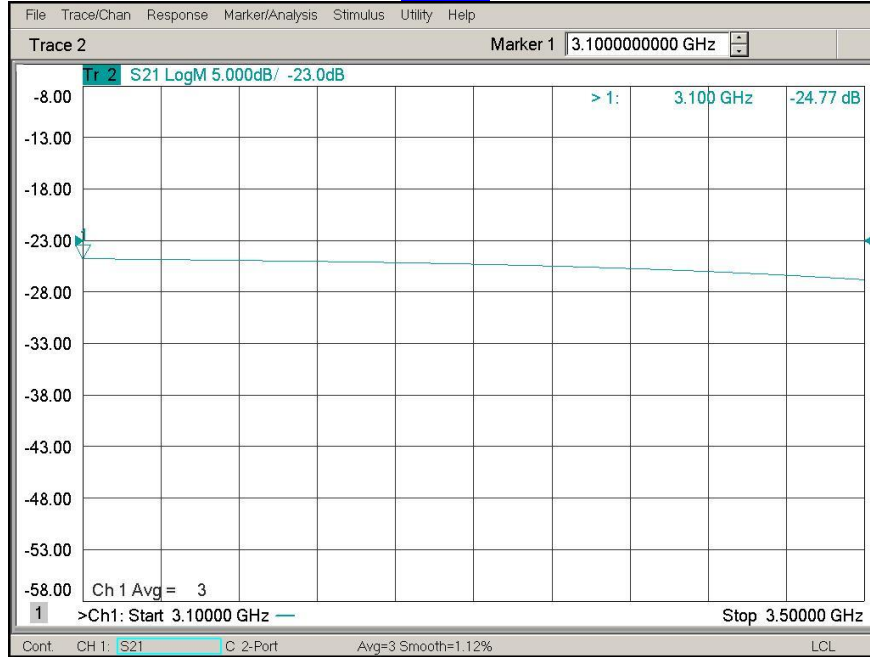




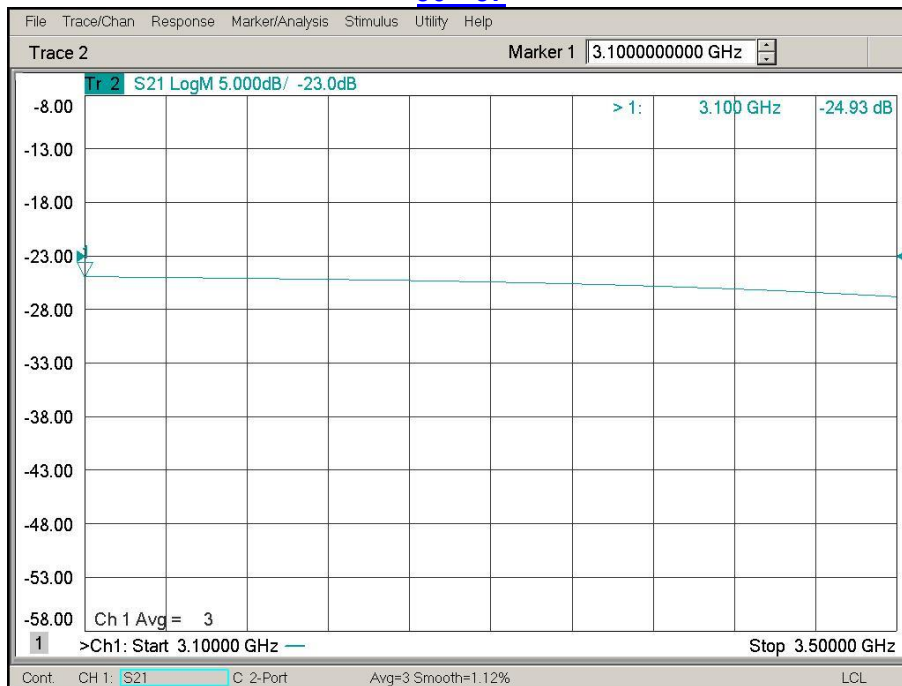
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## Isolation J5 - J8



## Isolation J6 - J7



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## Isolation J6 – J8



## Isolation J7 – J8



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