



**SUMMARY TEST DATA
ON
SDLVA-18G40G-65-CD-292FF**

PL45721/2418

Customer: _____ Tested By: Anton L.
SO No: _____ Temperature: +25°C
Model No: SDLVA-18G40G-65-CD-292FF Date: 05/02/24
Serial No: PL45721/2418 Drawing No: ETD000046 REV: A2

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC PMI QA3
1	Frequency Range:	18.0 to 40.0GHz	Pass	
2	TSS (See Graph #2)	-65 dBm Max.	-71.5 dBm	
3	Power Handling	+10dBm Max.	Pass	
4	Dynamic Range:	-63dBm to +2dBm	Pass	
5	Log Linearity: @+25C (See Graph #1)	± 2.0 dB Max.	+1.45 dB -1.35 dB	
6	Log Slope: (See Graph #1)	25 mV/dB Nom.	25.16 mV/dB	
7	Log Slope Variation: (See Graph #1)	±2.0 mV/dB Max.	0.74 mV/dB	
8	Frequency Flatness: @+25C (See Graph #1)	±2.5dB Max.	±1.3dB	
9	Pulse Width Range:	30ns to CW	Pass	
10	Rise Time: (See Graph #3)	11ns Max. (8 ns Typ.)	7.3 ns	
11	Recovery Time: (See Graph #4)	60ns Max. (40 ns Typ.)	23.5 ns	
12	Delay Time:	15ns Max.	<15ns by design	
13	Input VSWR: (See Graph #5)	2.5:1 Max.	2.3:1	
14	Power Supply	+12V @ 500mA Max. -12V @ 200mA Max.	+12V @ 370mA -12V @ 160mA	

QA/QC Approval: K. Huter Date: U-30-24



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Graph #1

Log Transfer vs Frequency @+25C

Frequency		-63	-58	-53	-48	-43	-38	-33	-28	-23	-18	-13	-8	-3	2	RF Input Power (dBm)		
18 GHz	INTERCEPT (mV)	131	228	343	459	600	729	857	988	1120	1258	1377	1506	1632	1752	Measured Value (mV)		
	SLOPE (mV/dB)	32	2	-10	-22	-8	-7	-6	-3	2	12	4	5	4	-4	Error (mV)	MAX	MIN
		1.27	0.08	-0.41	-0.86	-0.33	-0.27	-0.25	-0.11	0.06	0.48	0.14	0.20	0.15	-0.15	LINEARITY ERROR (dB)	1.27	-0.86
23.5 GHz	INTERCEPT (mV)	158	265	383	504	628	746	875	1009	1141	1274	1390	1520	1648	1770	Measured Value (mV)		
	SLOPE (mV/dB)	24	5	-3	-7	-9	-16	-13	-5	2	9	0	4	6	3	Error (mV)	MAX	MIN
		0.94	0.20	-0.10	-0.28	-0.35	-0.65	-0.52	-0.18	0.07	0.37	-0.02	0.16	0.25	0.11	LINEARITY ERROR (dB)	0.94	-0.65
29 GHz	INTERCEPT (mV)	153	261	379	501	636	756	884	1015	1147	1272	1384	1512	1641	1763	Measured Value (mV)		
	SLOPE (mV/dB)	17	-1	-8	-11	-1	-6	-4	2	9	9	-5	-2	2	-1	Error (mV)	MAX	MIN
		0.66	-0.02	-0.31	-0.44	-0.05	-0.26	-0.15	0.08	0.36	0.35	-0.18	-0.07	0.08	-0.05	LINEARITY ERROR (dB)	0.66	-0.44
34.5 GHz	INTERCEPT (mV)	149	255	373	493	621	745	874	1007	1143	1261	1338	1464	1592	1719	Measured Value (mV)		
	SLOPE (mV/dB)	9	-7	-10	-12	-6	-3	4	15	29	26	-19	-15	-8	-3	Error (mV)	MAX	MIN
		0.37	-0.27	-0.42	-0.49	-0.24	-0.14	0.16	0.62	1.21	1.06	-0.78	-0.60	-0.35	-0.13	LINEARITY ERROR (dB)	1.21	-0.78
40 GHz	INTERCEPT (mV)	123	220	339	477	649	785	917	1053	1186	1283	1393	1520	1648	1775	Measured Value (mV)		
	SLOPE (mV/dB)	7	-25	-35	-26	17	24	27	34	38	5	-14	-16	-17	-19	Error (mV)	MAX	MIN
		0.28	-0.96	-1.35	-1.01	0.65	0.92	1.03	1.30	1.45	0.21	-0.53	-0.61	-0.65	-0.73	LINEARITY ERROR (dB)	1.45	-1.35
Flatness +/- dB		0.70	0.90	0.90	0.90	1.00	1.10	1.20	1.30	1.30	0.50	1.10	1.10	1.10	1.10			
Max. Video Output (V)		0.16	0.27	0.38	0.50	0.65	0.79	0.92	1.05	1.19	1.28	1.39	1.52	1.65	1.78			
Min. Video Output (V)		0.12	0.22	0.34	0.46	0.60	0.73	0.86	0.99	1.12	1.26	1.34	1.46	1.59	1.72			
Nominal Log Slope mV/dB		25.16														Video Output @ -63dBm		
Log Slope Variation: ± mV/dB		0.74														Min(V)= 123.0		
																Max(V)= 158.0		
																Video Output @ +2dBm		
																Min(V)= 1719.0		
																Max(V)= 1775.0		

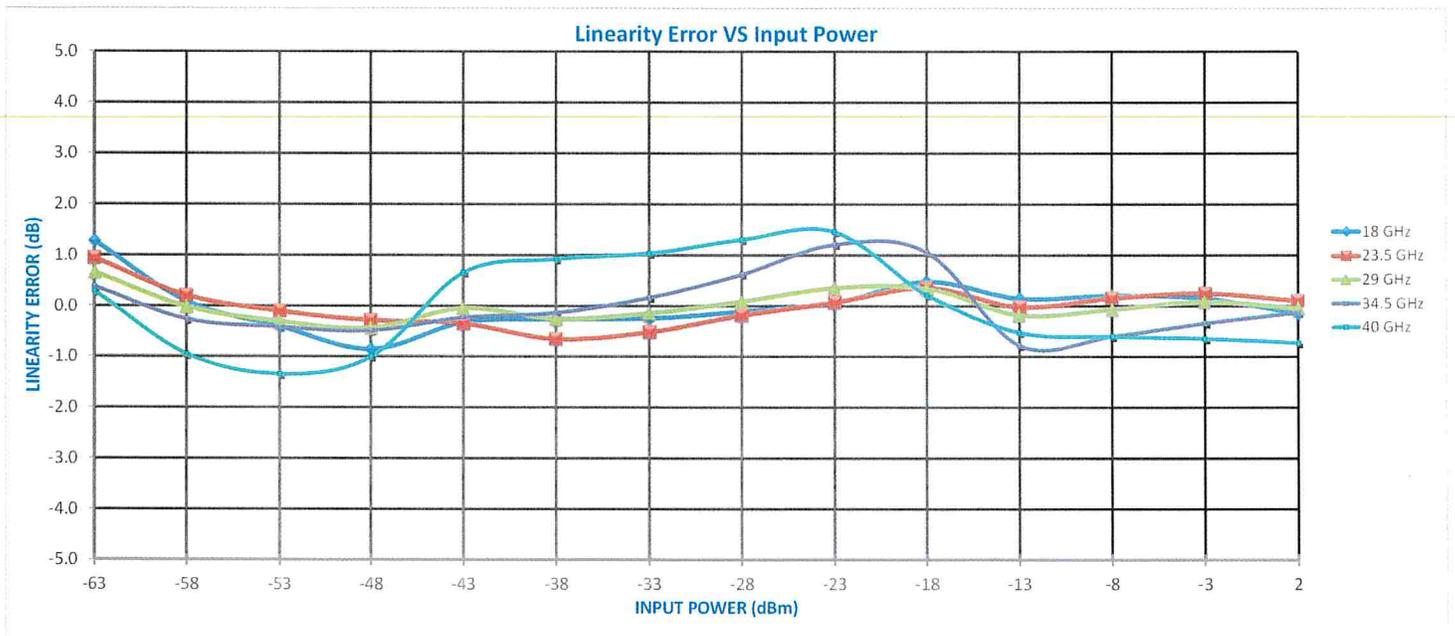


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Graph #1 (cont.)

Log Transfer vs Frequency @+25C





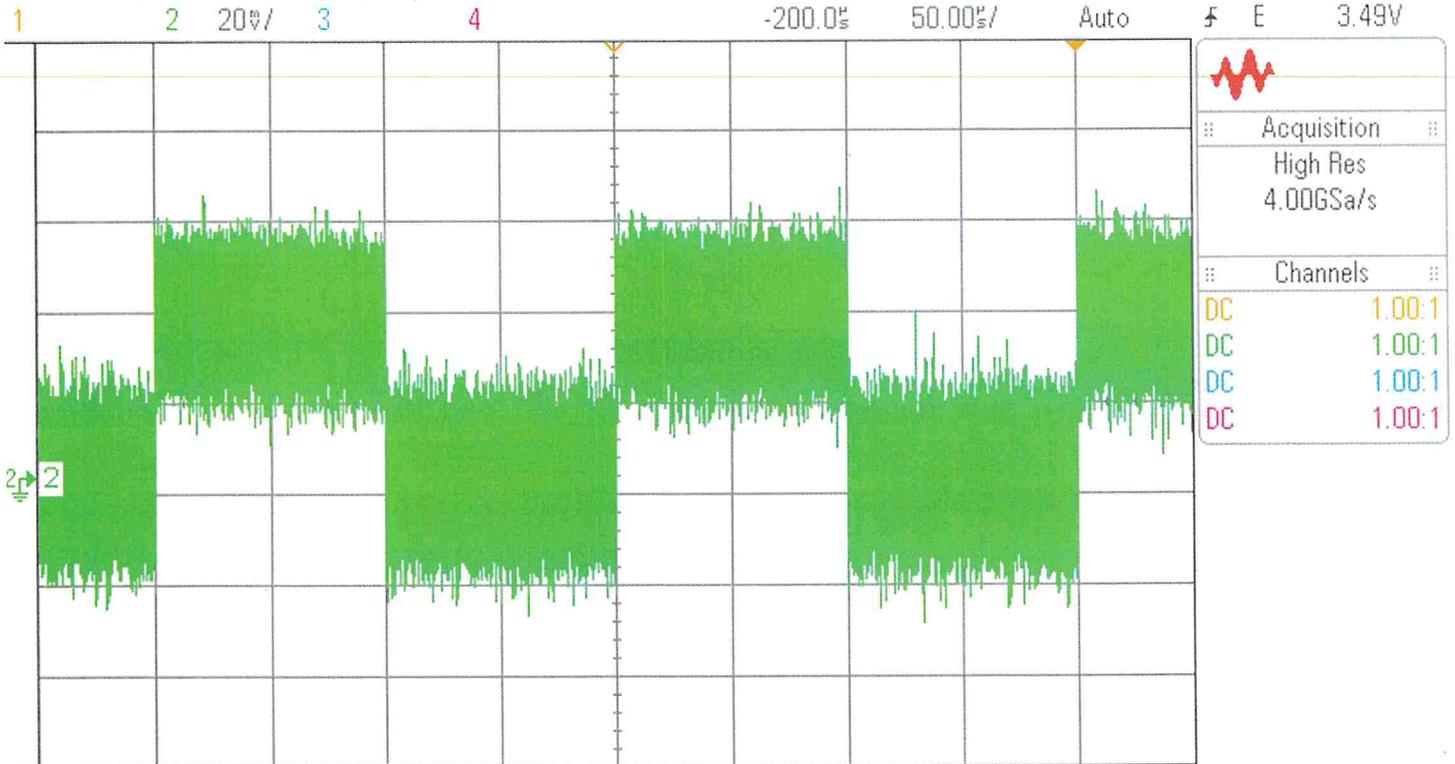
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Graph #2

TSS-71.5 dBm @+25C

DSO-X 3024A, MY54490369: Thu May 02 09:17:44 2024



Acquire Menu

Acq Mode
High Res

Avgs
1

Segmented



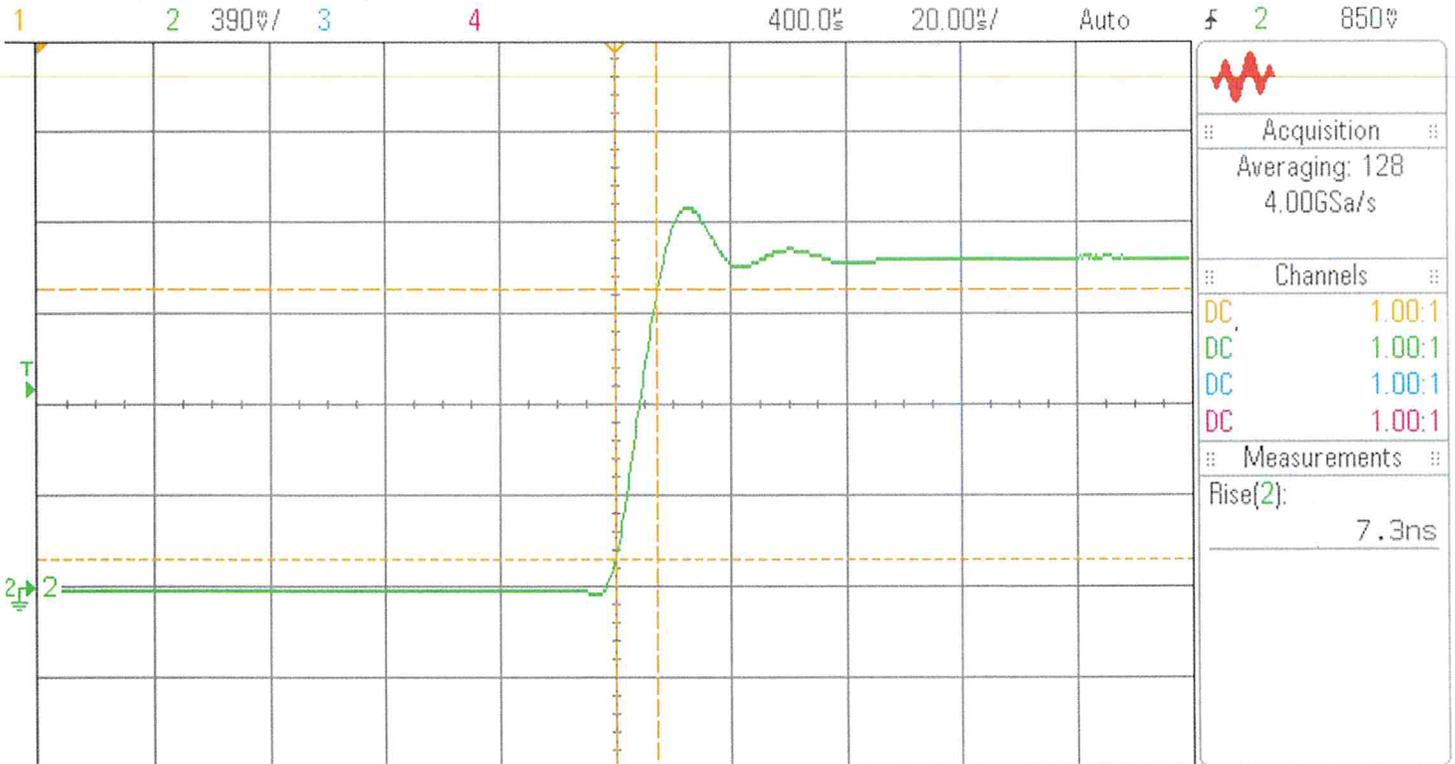
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Graph #3

Rise Time 7.3ns

DSO-X 3024A, MY54490369: Thu May 02 13:11:57 2024



Trigger Menu



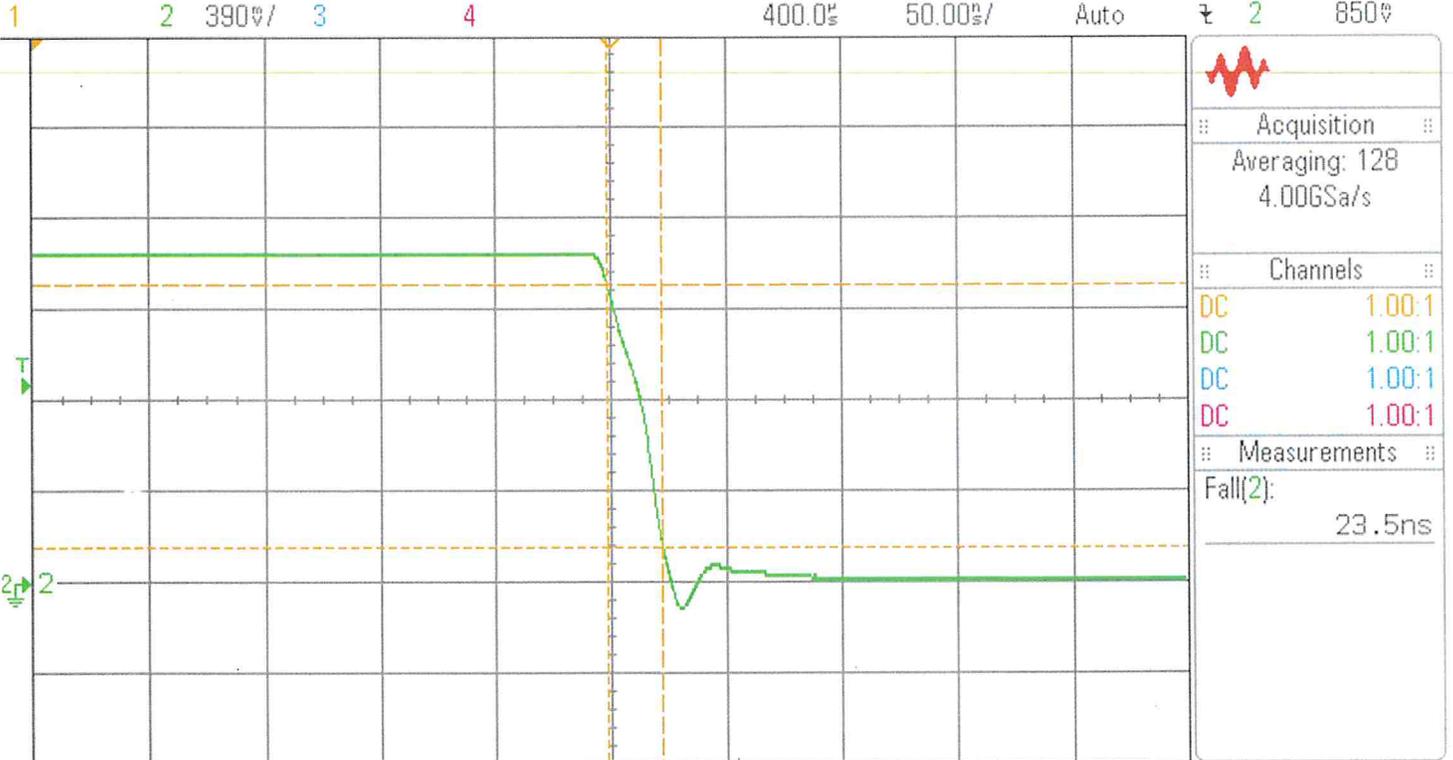
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Graph #4

Recovery Time 23.5ns

DSO-X 3024A, MY54490369: Thu May 02 13:11:22 2024



Trigger Menu

Trigger Type
 Edge
 Source
 2
 Slope
 ↑



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Graph #5

VSWR 2.3:1 @+25C & -20 dBm

