



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

PL46125/2422

Customer: _____	Tested By: Anton L. _____
SO No: _____	Temperature: +25°C _____
Model No: SDLVA-18G40G-65-CD-292FF	Date: 05/29/24 _____
Serial No: PL46125/2422	Drawing No: ETD000046 REV: A2

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	18.0 to 40.0GHz	Pass	PMI QA3
2	TSS (See Graph #2)	-65 dBm Max.	-69.5 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.	+1.37 dB -1.17 dB	
6	Log Slope: (See Graph #1)	25 mV/dB Nom.	24.47 mV/dB	
7	Log Slope Variation: (See Graph #1)	±2.0 mV/dB Max.	1.08 mV/dB	
8	Frequency Flatness: @+25C (See Graph #1)	±2.5dB Max.	±2.0dB	
9	Pulse Width Range:	30ns to CW	Pass	
10	Rise Time: (See Graph #3)	11ns Max. (8 ns Typ.)	6.8 ns	
11	Recovery Time: (See Graph #4)	60ns Max. (40 ns Typ.)	23.8 ns	
12	Delay Time:	15ns Max.	<15ns by design	
13	Input VSWR: (See Graph #5)	2.5:1 Max.	2.4:1	
14	Power Supply	+12V @ 500mA Max. -12V @ 200mA Max.	+12V @ 430mA -12V @ 160mA	

QA/QC Approval: K. [Signature] Date: 5-30-24



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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)	1672															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	24.4	158	265	383	499	614	737	853	979	1105	1222	1351	1488	1609	1736	Error (mV)	MAX	MIN	
			22	7	3	-3	-10	-9	-15	-10	-6	-11	-4	11	10	-15	LINEARITY ERROR (dB)	0.90	-0.60	
			0.90	0.29	0.13	-0.11	-0.40	-0.35	-0.60	-0.43	-0.26	-0.46	-0.17	0.44	0.41	0.61				
23.5 GHz	INTERCEPT (mV)	1684															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	24.7	156	262	380	500	616	726	838	964	1091	1215	1352	1506	1634	1763	Error (mV)	MAX	MIN	
			31	14	8	4	-3	-17	-29	-27	-23	-23	-10	20	25	30	LINEARITY ERROR (dB)	1.27	-1.17	
			1.27	0.55	0.32	0.17	-0.14	-0.69	-1.17	-1.08	-0.94	-0.93	-0.40	0.83	1.00	1.21				
29 GHz	INTERCEPT (mV)	1702															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	25.6	122	218	334	455	577	719	856	986	1114	1237	1378	1506	1628	1752	Error (mV)	MAX	MIN	
			35	3	9	-15	-23	-9	0	2	2	-4	9	9	3	-1	LINEARITY ERROR (dB)	1.37	-0.88	
			1.37	0.11	-0.36	-0.64	-0.88	-0.35	0.00	0.07	0.06	-0.14	0.36	0.35	0.11	-0.05				
34.5 GHz	INTERCEPT (mV)	1677															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	24.1	166	279	401	524	643	749	869	998	1127	1252	1371	1483	1602	1727	Error (mV)	MAX	MIN	
			7	-1	1	3	2	-12	-13	-4	4	9	7	-1	-3	2	LINEARITY ERROR (dB)	0.36	-0.54	
			0.29	-0.02	0.04	0.14	0.08	-0.52	-0.54	-0.18	0.17	0.36	0.29	-0.06	-0.12	0.07				
40 GHz	INTERCEPT (mV)	1663															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	23.5	181	296	420	551	672	763	868	997	1122	1253	1372	1470	1586	1712	Error (mV)	MAX	MIN	
			-2	-5	2	15	19	-17	-20	-8	-1	13	14	-5	-7	2	LINEARITY ERROR (dB)	0.81	-0.85	
			-0.10	-0.20	0.08	0.65	0.81	-0.74	-0.85	-0.36	-0.03	0.54	0.61	-0.22	-0.28	0.09				
Flatness +/- dB		1.20	1.60	1.80	2.00	1.90	0.70	0.60	0.70	0.70	0.80	0.60	0.70	1.00	1.00					
Max. Video Output (V)		0.18	0.30	0.42	0.55	0.67	0.75	0.87	1.00	1.13	1.25	1.38	1.51	1.63	1.76					
Min. Video Output (V)		0.12	0.22	0.33	0.46	0.58	0.72	0.84	0.96	1.09	1.22	1.35	1.47	1.59	1.71					
Nominal Log Slope mV/dB	24.47															Video Output @ -63dBm		Video Output @ +2dBm		
Log Slope Variation: ± mV/dB	1.08															Min(V)= 122.0		Min(V)= 1712.0		
																Max(V)= 181.0		Max(V)= 1763.0		

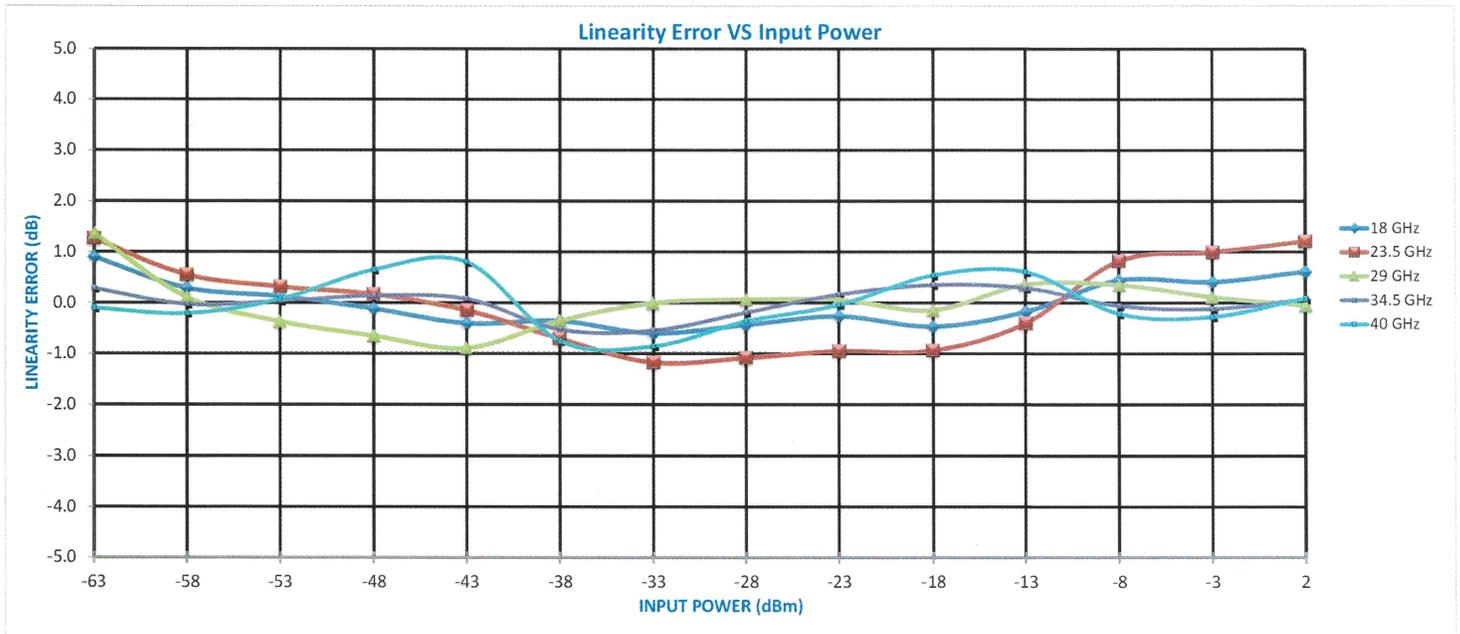


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Graph #1 (cont.)

Log Transfer vs Frequency @+25C





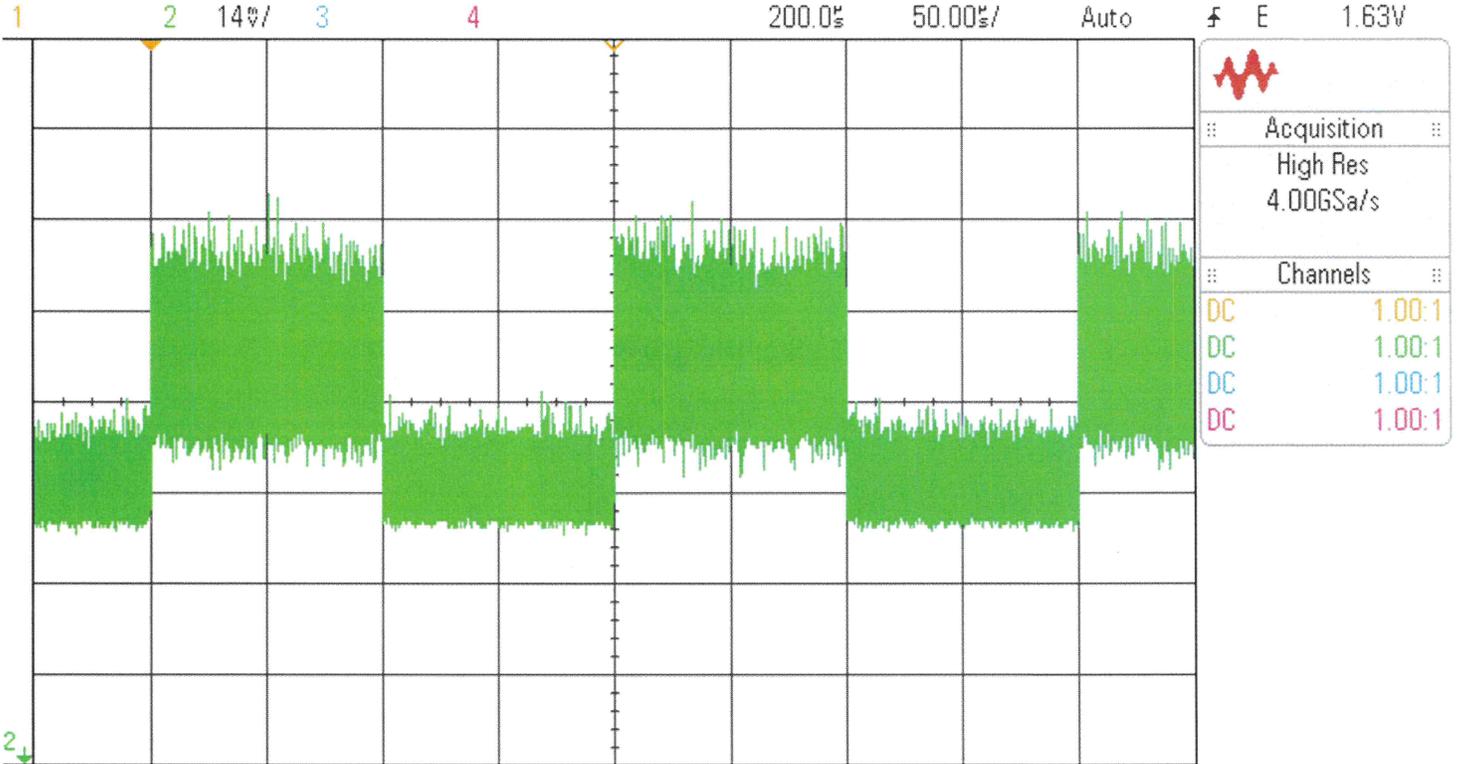
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Graph #2

TSS-69.5 dBm @+25C

DSO-X 3024A, MY54490369: Tue May 28 16:54:54 2024



Acquire Menu

Acq Mode
High Res

Avgs
1

Segmented



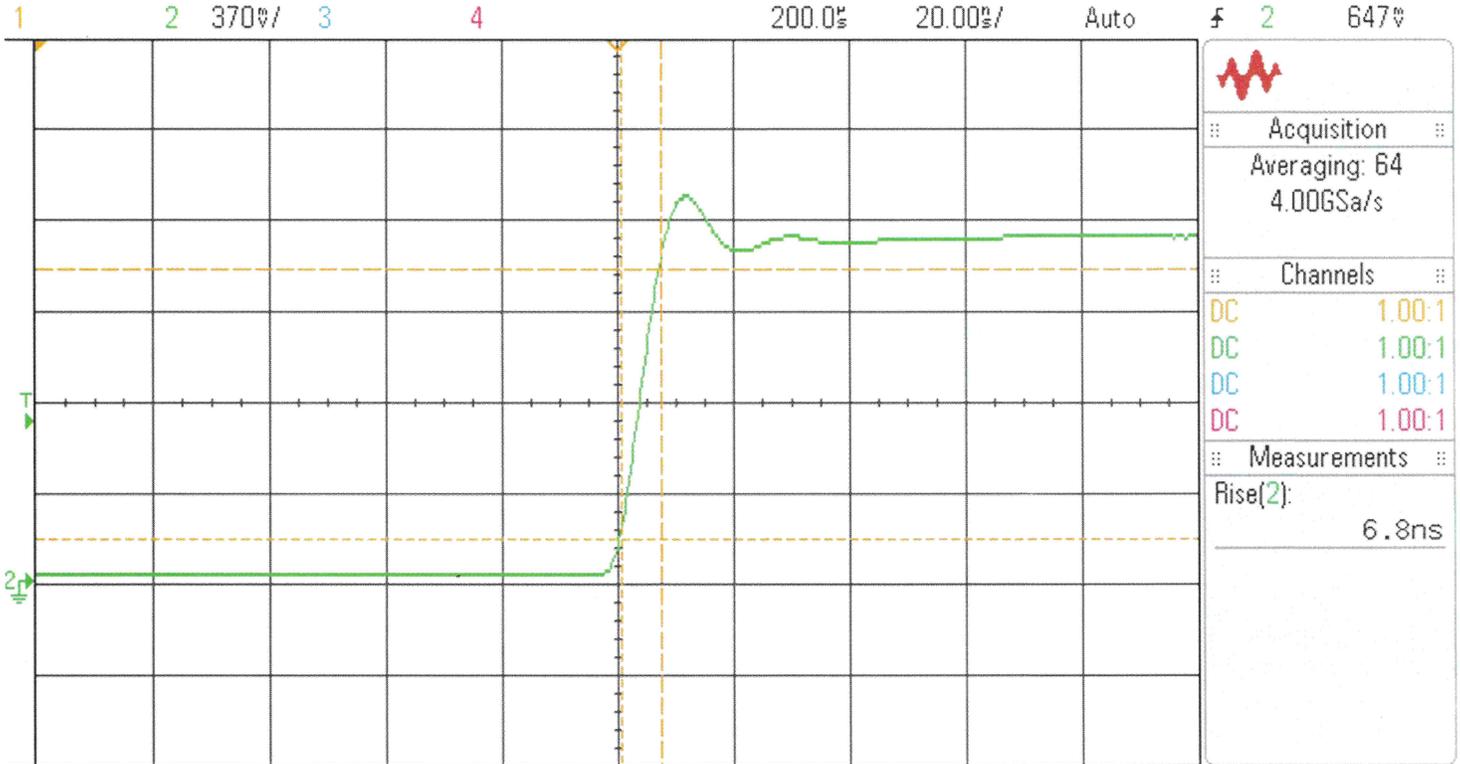
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Graph #3

Rise Time 6.8ns

DSO-X 3024A, MY54490369, Tue May 28 17:02:04 2024



Trigger Menu

Trigger Type: Edge Source: 2 Slope: f



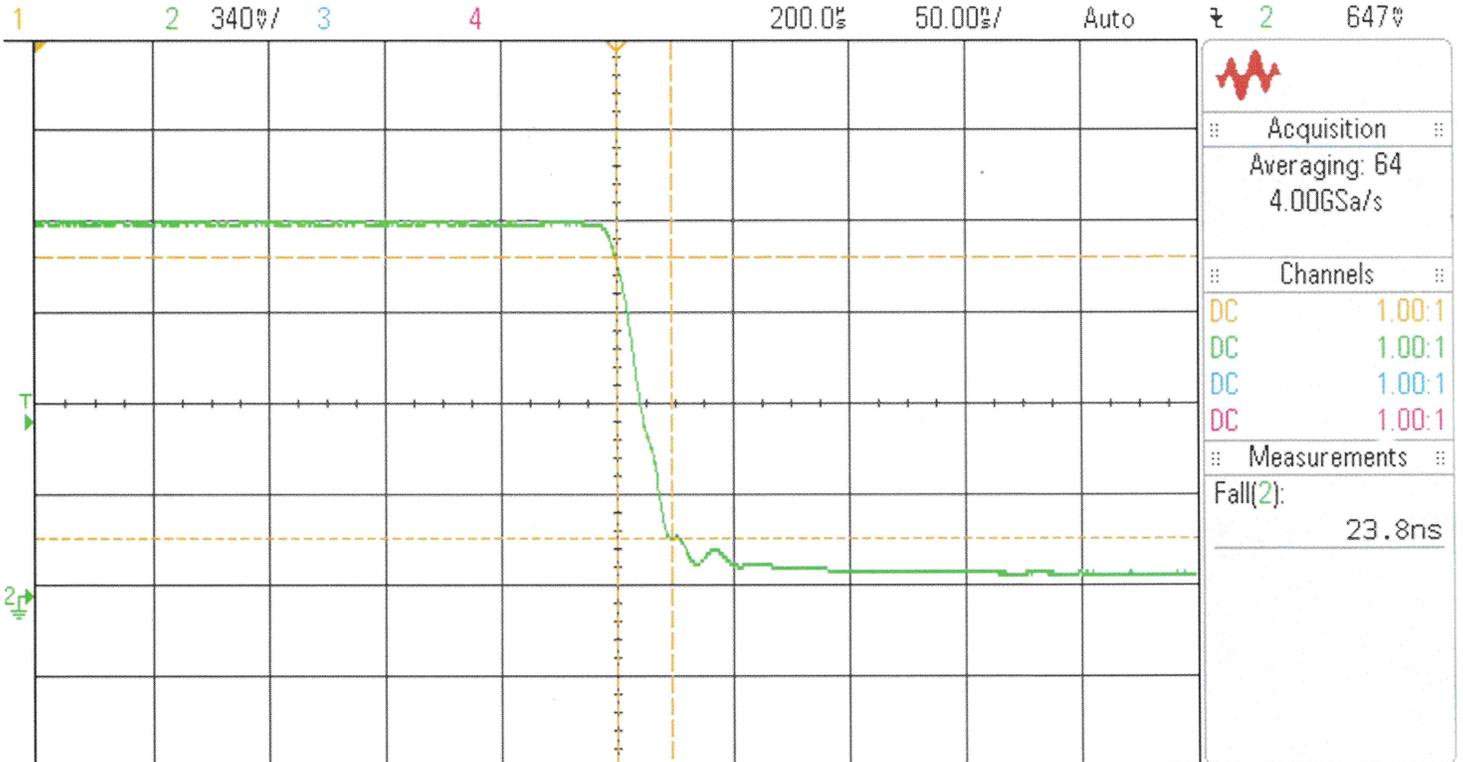
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Graph #4

Recovery Time 23.8ns

DSO-X 3024A, MY54490369: Tue May 28 17:07:02 2024



Trigger Menu



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Graph #5

VSWR 2.4:1 @+25C & -20 dBm

