



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

PL45417/2418

Customer: _____ Tested By: Anton L.
SO No: _____ Temperature: +25°C
Model No: SDLVA-18G40G-65-CD-292FF Date: 05/02/24
Serial No: PL45417/2418 Drawing No: ETD000046 REV: A2

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	18.0 to 40.0GHz	Pass	QA QC Bv/1 QA3
2	TSS (See Graph #2)	-65 dBm Max.	-68 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.	+1.84 dB -1.58 dB	
6	Log Slope: (See Graph #1)	25 mV/dB Nom.	24.68 mV/dB	
7	Log Slope Variation: (See Graph #1)	±2.0 mV/dB Max.	1.10 mV/dB	
8	Frequency Flatness: @+25C (See Graph #1)	±2.5dB Max.	±1.5dB	
9	Pulse Width Range:	30ns to CW	Pass	
10	Rise Time: (See Graph #3)	11ns Max. (8 ns Typ.)	7.0 ns	
11	Recovery Time: (See Graph #4)	60ns Max. (40 ns Typ.)	24.3 ns	
12	Delay Time:	15ns Max.	<15ns by design	
13	Input VSWR: (See Graph #5)	2.5:1 Max.	2.2:1	
14	Power Supply	+12V @ 500mA Max. -12V @ 200mA Max.	+12V @ 460mA -12V @ 160mA	

QA/QC Approval: K. Lutz Date: 4-30-24



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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)	1685															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	25.3	106	197	307	429	596	769	884	998	1110	1230	1363	1480	1597	1708	Error (mV)	MAX	MIN	
			17	-19	-35	-40	0	47	35	22	8	1	7	-2	-12	-28	LINEARITY ERROR (dB)	1.84	-1.58	
			0.66	-0.74	-1.40	-1.58	0.01	1.84	1.38	0.88	0.30	0.04	0.29	-0.09	-0.47	-1.09				
23.5 GHz	INTERCEPT (mV)	1661															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	25	117	214	327	447	586	722	832	949	1066	1192	1355	1477	1596	1710	Error (mV)	MAX	MIN	
			29	1	-11	-15	-1	10	-5	-13	-21	-19	19	16	10	-1	LINEARITY ERROR (dB)	1.17	-0.82	
			1.17	0.05	-0.42	-0.62	-0.05	0.40	-0.20	-0.51	-0.82	-0.78	0.75	0.64	0.41	-0.03				
29 GHz	INTERCEPT (mV)	1672															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	25.4	104	198	309	428	565	719	831	951	1071	1203	1363	1483	1602	1716	Error (mV)	MAX	MIN	
			35	2	-15	-23	-13	14	-1	8	-16	-11	22	15	6	-7	LINEARITY ERROR (dB)	1.37	-0.89	
			1.37	0.07	-0.57	-0.89	-0.51	0.55	-0.05	-0.34	-0.62	-0.43	0.86	0.58	0.25	-0.27				
34.5 GHz	INTERCEPT (mV)	1594															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	23.2	138	244	361	484	614	707	811	928	1046	1162	1288	1410	1533	1658	Error (mV)	MAX	MIN	
			9	-1	-1	6	20	-3	-15	-15	-13	-13	-3	2	9	18	LINEARITY ERROR (dB)	0.86	-0.67	
			0.38	-0.06	-0.02	0.27	0.86	-0.14	-0.67	-0.63	-0.56	-0.56	-0.14	0.10	0.40	0.77				
40 GHz	INTERCEPT (mV)	1656															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	24.4	136	241	358	489	626	722	832	954	1075	1210	1352	1473	1593	1710	Error (mV)	MAX	MIN	
			17	0	-5	4	19	-7	-19	-19	-20	-7	13	12	10	5	LINEARITY ERROR (dB)	0.77	-0.83	
			0.69	-0.01	-0.21	0.16	0.77	-0.30	-0.79	-0.79	-0.83	-0.30	0.52	0.48	0.40	0.20				
Flatness +/- dB		0.70	1.00	1.10	1.20	1.20	1.30	1.50	1.40	1.30	1.40	1.50	1.50	1.40	1.20					
Max. Video Output (V)		0.14	0.24	0.36	0.49	0.63	0.77	0.88	1.00	1.11	1.23	1.36	1.48	1.60	1.72					
Min. Video Output (V)		0.10	0.20	0.31	0.43	0.57	0.71	0.81	0.93	1.05	1.16	1.29	1.41	1.53	1.66					
Nominal Log Slope mV/dB	24.68															Video Output @ -63dBm		Video Output @ +=2dBm		
Log Slope Variation: ± mV/dB	1.10															Min(V)= 104.0		Min(V)= 1658.0		
																Max(V)= 138.0		Max(V)= 1716.0		

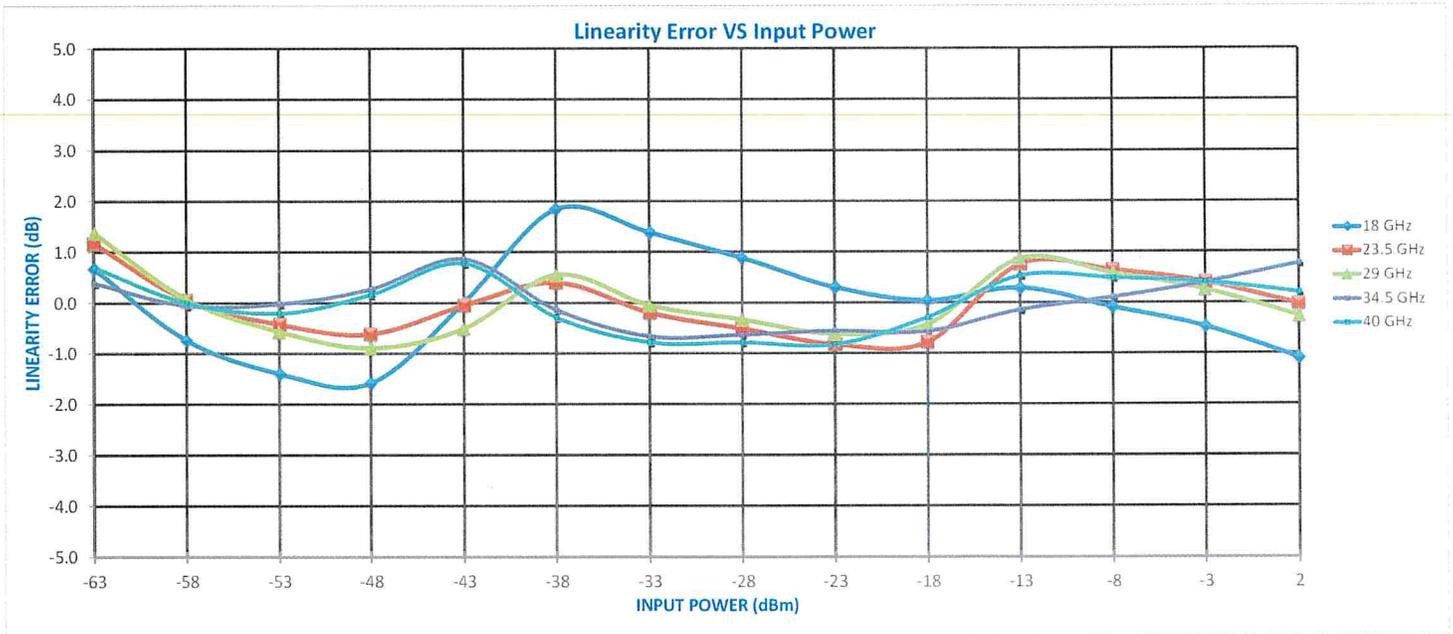


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Graph #1 (cont.)

Log Transfer vs Frequency @+25C





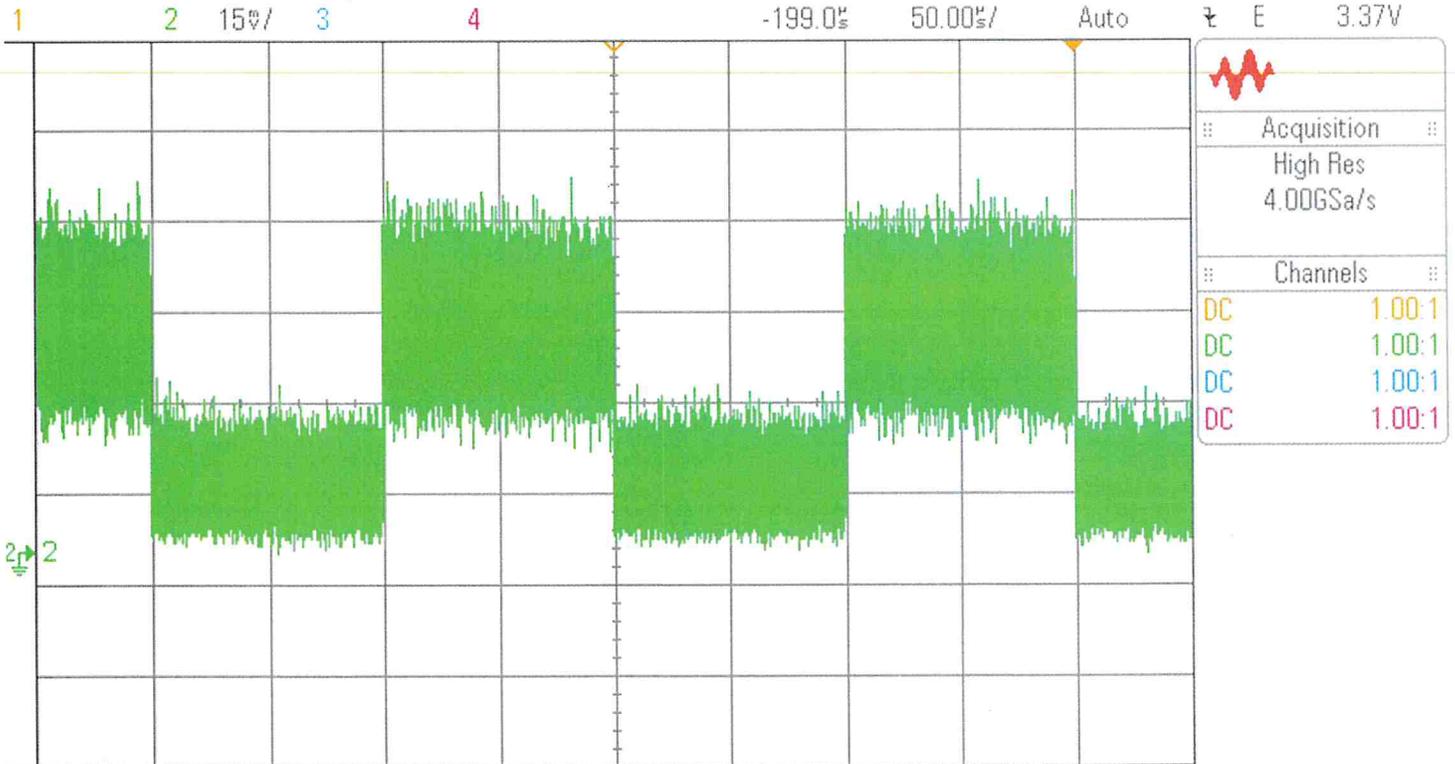
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Graph #2

TSS-68 dBm @+25C

DSO-X 3024A, MY54490369: Tue Apr 30 13:51:40 2024



Acquire Menu

Acq Mode
High Res

Avars
1

Segmented



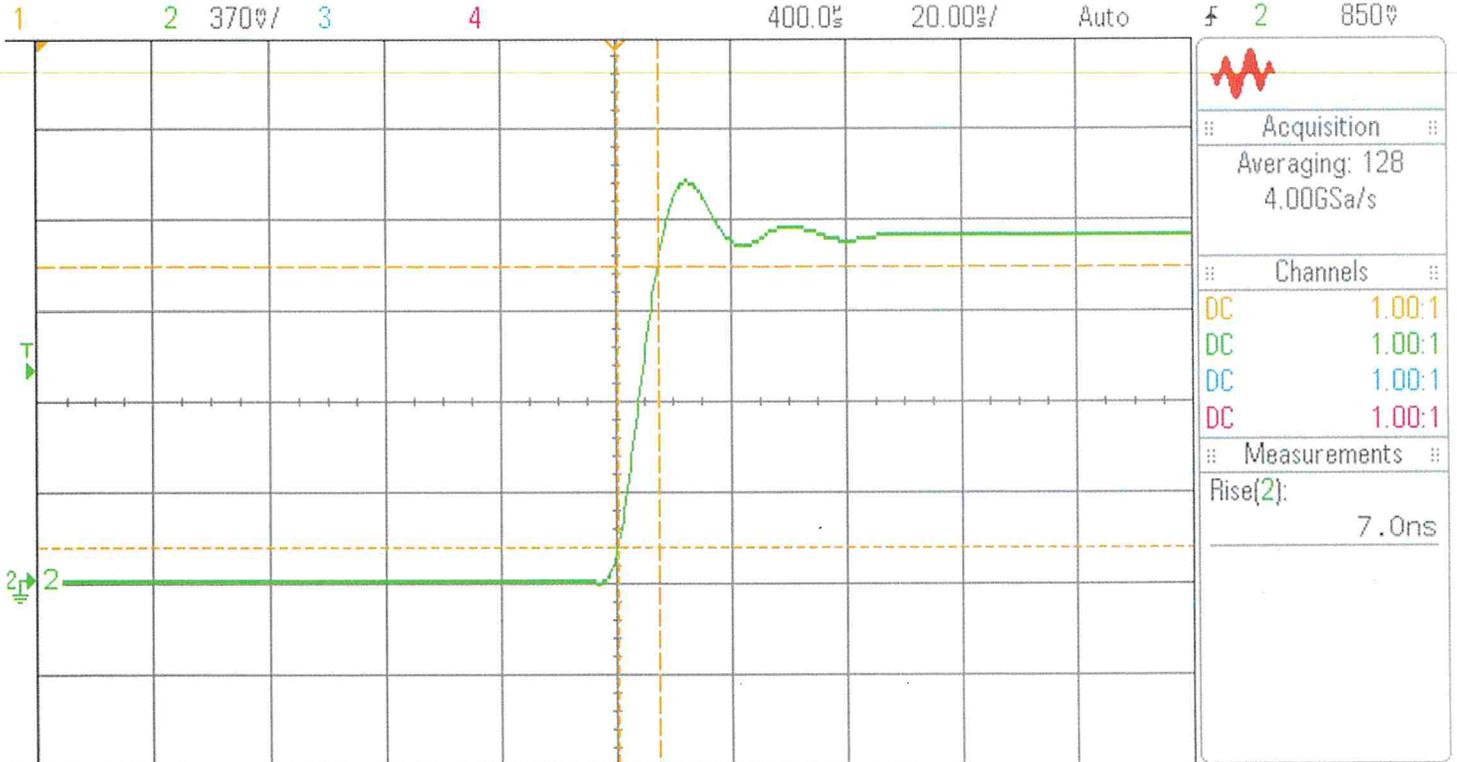
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Graph #3

Rise Time 7.0ns

DSO-X 3024A, MY54490369: Thu May 02 13:15:59 2024



Trigger Menu

Edge
 2
 f



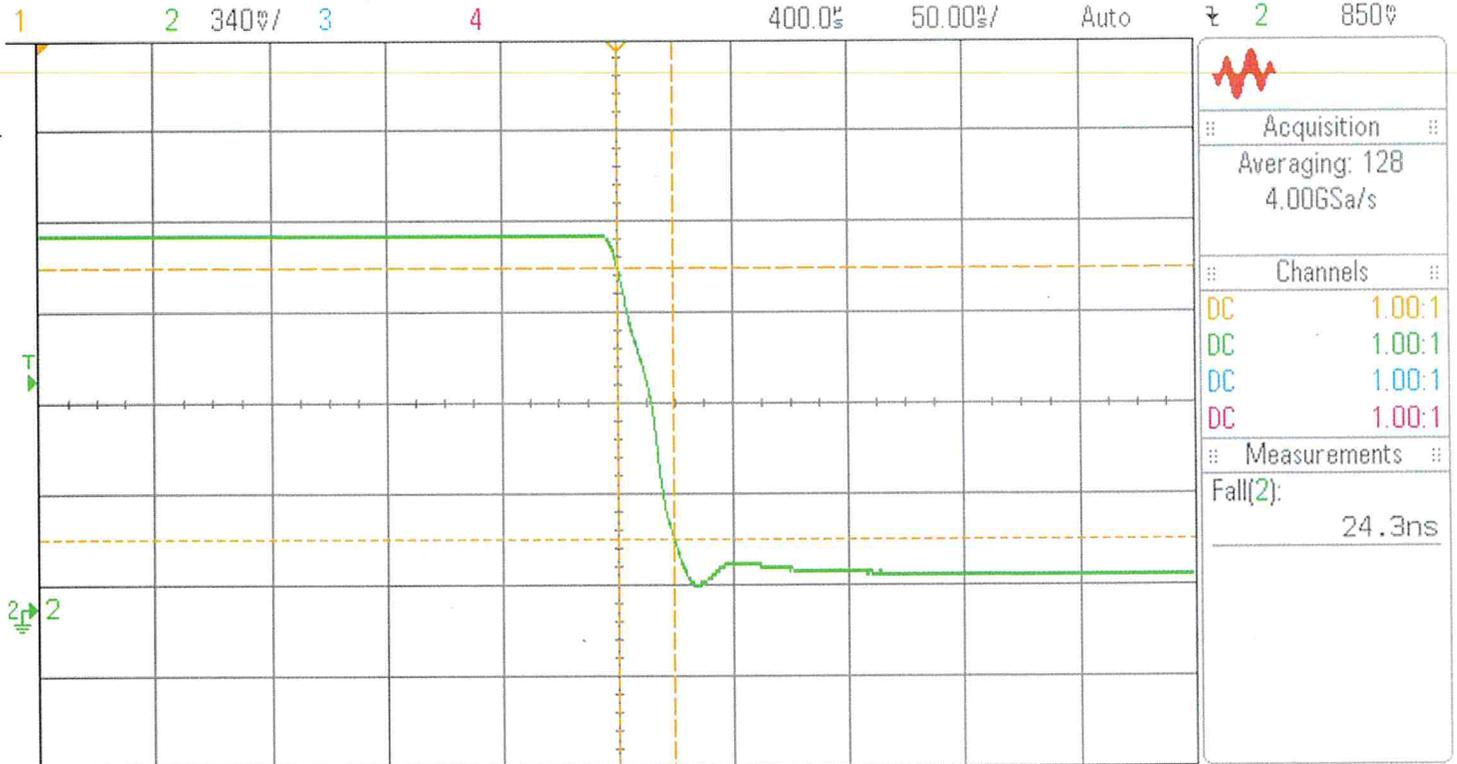
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Graph #4

Recovery Time 24.3ns

DSO-X 3024A, MY54490369: Thu May 02 13:15:12 2024



Trigger Menu

Trigger Type: Edge
Source: 2
Slope: ∇



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Graph #5

VSWR 2.2:1 @+25C & -20 dBm

