



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

PL45719/2418

Customer: _____ Tested By: Anton L.
SO No: _____ Temperature: +25°C
Model No: SDLVA-18G40G-65-CD-292FF Date: 05/02/24
Serial No: PL45719/2418 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.	-70 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.	+1.78 dB -1.21 dB	
6	Log Slope: (See Graph #1)	25 mV/dB Nom.	24.62 mV/dB	
7	Log Slope Variation: (See Graph #1)	±2.0 mV/dB Max.	1.21 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.)	8.0 ns	
11	Recovery Time: (See Graph #4)	60ns Max. (40 ns Typ.)	21.3 ns	
12	Delay Time:	15ns Max.	<15ns by design	
13	Input VSWR: (See Graph #5)	2.5:1 Max.	2.05:1	
14	Power Supply	+12V @ 500mA Max. -12V @ 200mA Max.	+12V @ 390mA -12V @ 160mA	

QA/QC Approval: K. Linton 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)	1710															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	25.5	123	220	335	456	614	747	878	1012	1142	1266	1364	1493	1626	1759	Error (mV)	MAX	MIN	
			22	-9	-22	-28	2	7	11	17	19	16	-14	-13	-7	-2	LINEARITY ERROR (dB)	0.85	-1.11	
			0.85	-0.35	-0.84	-1.11	0.08	0.29	0.42	0.67	0.76	0.62	-0.55	-0.49	-0.28	-0.08				
23.5 GHz	INTERCEPT (mV)	1731															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	25	161	274	395	524	664	780	905	1033	1160	1284	1393	1523	1656	1790	Error (mV)	MAX	MIN	
			8	-4	-9	-5	10	1	0	3	5	4	-13	-8	0	9	LINEARITY ERROR (dB)	0.39	-0.50	
			0.31	-0.18	-0.35	-0.20	0.39	0.02	0.01	0.12	0.19	0.14	-0.50	-0.31	0.00	0.35				
29 GHz	INTERCEPT (mV)	1710															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	25.4	136	241	356	474	611	734	869	1006	1139	1268	1372	1497	1633	1768	Error (mV)	MAX	MIN	
			25	3	-9	-18	-8	-12	-4	7	13	15	-8	-10	-1	7	LINEARITY ERROR (dB)	0.97	-0.71	
			0.97	0.11	-0.36	-0.71	-0.31	-0.46	-0.14	0.26	0.50	0.59	-0.32	-0.39	-0.03	0.29				
34.5 GHz	INTERCEPT (mV)	1642															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	23.1	185	303	422	539	627	742	873	1009	1145	1267	1315	1429	1562	1699	Error (mV)	MAX	MIN	
			-1	2	5	6	-21	-22	-6	14	35	41	-26	-28	-10	11	LINEARITY ERROR (dB)	1.78	-1.21	
			-0.04	0.07	0.22	0.28	-0.91	-0.94	-0.27	0.62	1.50	1.78	-1.14	-1.21	-0.45	0.48				
40 GHz	INTERCEPT (mV)	1638															Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	24.1	138	242	355	475	590	712	844	979	1105	1233	1309	1427	1559	1694	Error (mV)	MAX	MIN	
			15	-1	-8	-8	-14	-12	0	14	20	28	-16	-19	-7	8	LINEARITY ERROR (dB)	1.16	-0.78	
			0.64	-0.04	-0.34	-0.35	-0.57	-0.50	-0.01	0.60	0.84	1.16	-0.68	-0.78	-0.29	0.32				
Flatness +/- dB		1.30	1.70	1.80	1.70	1.60	1.40	1.20	1.10	1.10	1.00	1.70	1.90	2.00	1.90					
Max. Video Output (V)		0.19	0.30	0.42	0.54	0.66	0.78	0.91	1.03	1.16	1.28	1.39	1.52	1.66	1.79					
Min. Video Output (V)		0.12	0.22	0.34	0.46	0.59	0.71	0.84	0.98	1.11	1.23	1.31	1.43	1.56	1.69					
Nominal Log Slope mV/dB	24.62															Video Output @ -63dBm		Video Output @ +2dBm		
Log Slope Variation: ± mV/dB	1.21															Min(V)= 123.0		Min(V)= 1694.0		
																Max(V)= 185.0		Max(V)= 1790.0		

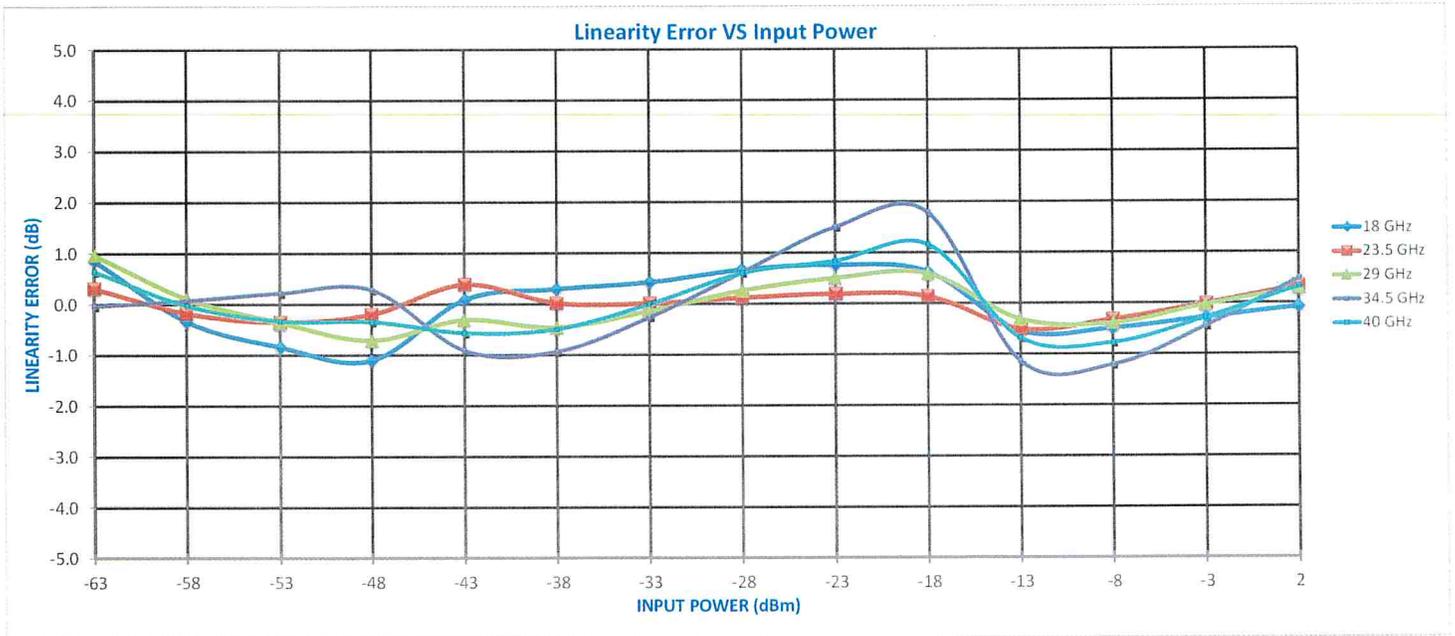


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Graph #1 (cont.)

Log Transfer vs Frequency @+25C





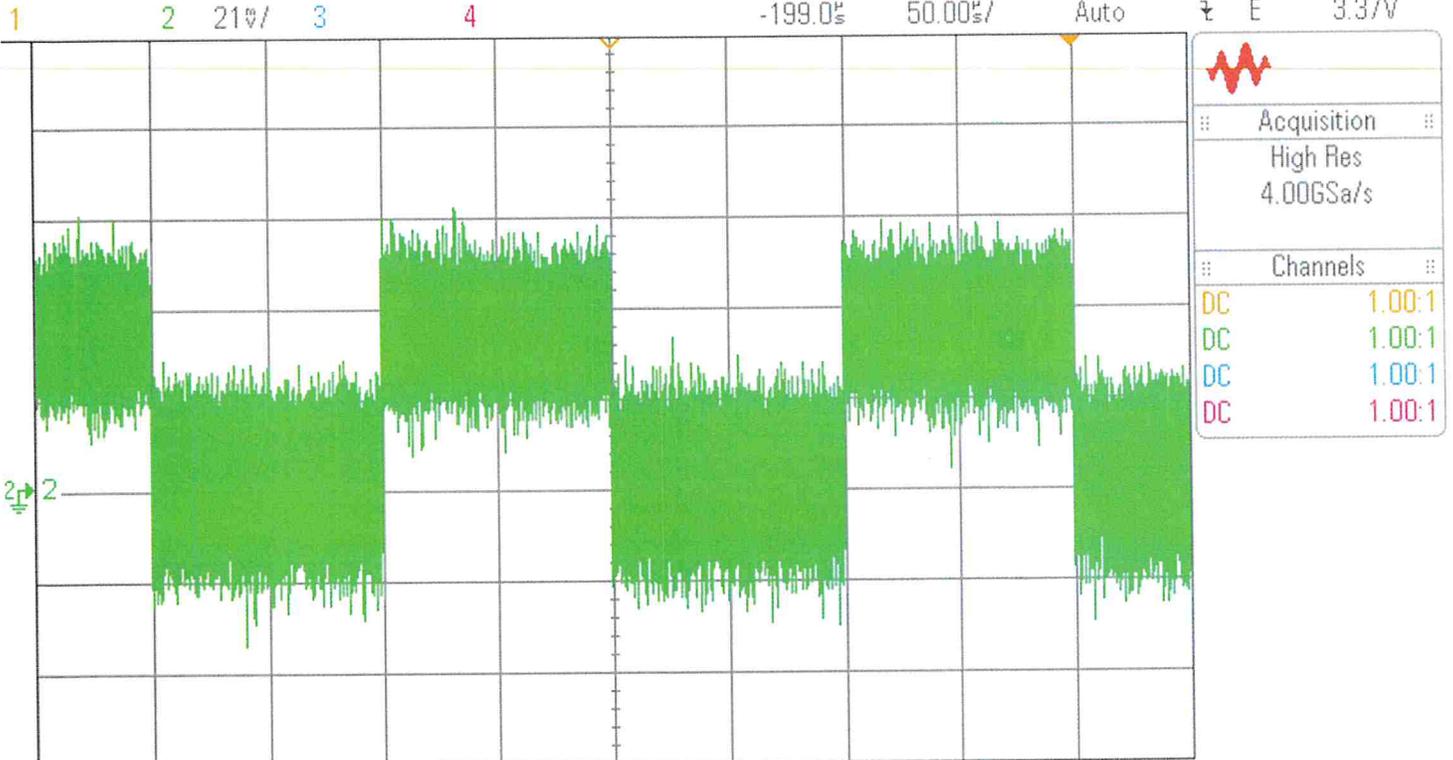
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Graph #2

TSS-70 dBm @+25C

DSO-X 3024A, MY54490369: Tue Apr 30 13:57:37 2024



Acquire Menu

Acq Mode
High Res

Avgs
1

Segmented



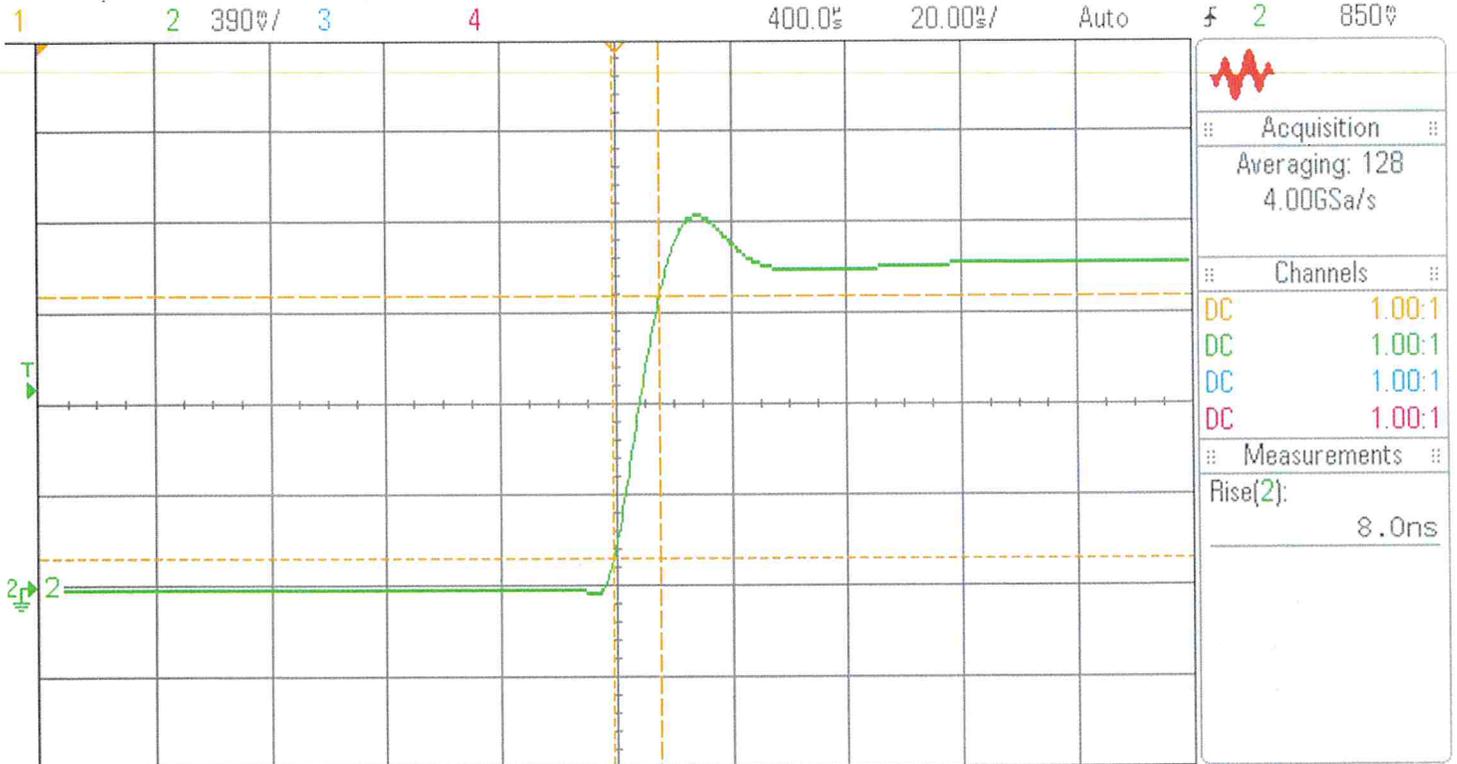
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Graph #3

Rise Time 8.0ns

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



Save to file = 719r

Save Recall Default/Erase

Press to Save



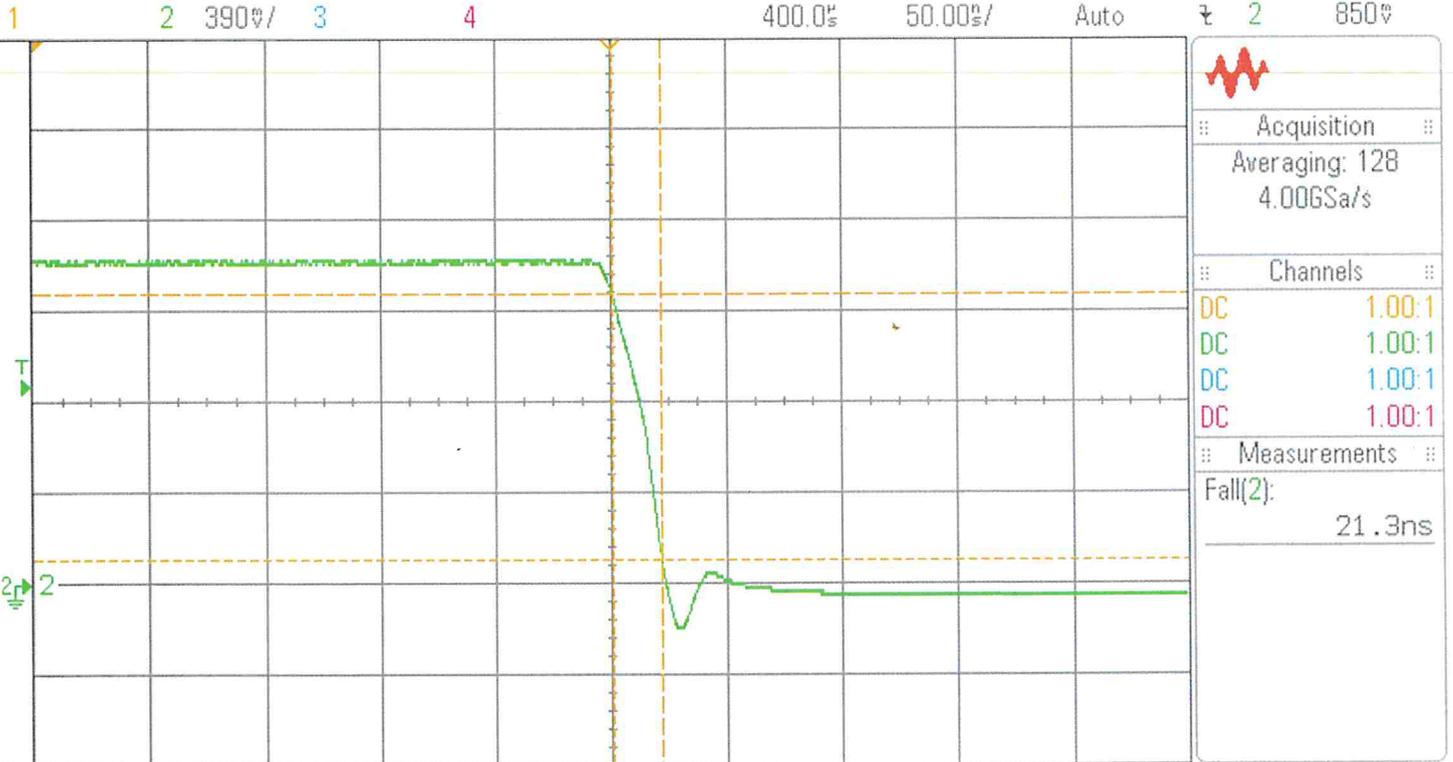
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Graph #4

Recovery Time 21.3ns

DSO-X 3024A, MY54490369, Thu May 02 13:13:37 2024



Trigger Menu



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Graph #5

VSWR 2.05:1 @+25C & -20 dBm

