



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

PL45159/2413

Customer: _____ Tested By: DA
SO No: _____ Temperature: +25°C
Model No: SDLVA-18G40G-65-CD-292FF Date: 03/28/24
Serial No: PL44159/2413 Drawing No: ETD000046 REV: A2

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	18.0 to 40.0GHz	Pass	
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.	+1.09 dB -1.10 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.	0.95mV/dB	
8	Frequency Flatness: @+25C (See Graph #1)	±2.5dB Max.	±2.3dB	
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.)	29.5 ns	
12	Delay Time:	60ns Max.	<60ns 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 @ 360mA -12V @ 158mA	

QA/QC Approval: Date: 4-2-24



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Graph #1

Log Transfer vs Frequency @+25C

<p>MODEL: SDLVA-18G40G-65-CD-292FF SERIAL NO: PL45159 DATE: 03-27-2024 TESTED BY: DA Test Temp: +25°C</p>															 PLANAR MONOLITHICS INDUSTRIES 4921 Robert J. Mathews Parkway Suite 1 El Dorado Hills, CA 95762 TEL: 916-542-1401 FAX: 916-265-2597 EMAIL: SALES@PMI-RF.COM					
RF Input Power (dBm) <input type="text"/>																				
Frequency		-63	-58	-53	-48	-43	-38	-33	-28	-23	-18	-13	-8	-3	2					
18 GHz	INTERCEPT (mV)	192	304	424	549	698	812	931	1056	1182	1348	1469	1588	1710	1829	Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	16	0	-7	-10	11	-3	-12	-14	-16	22	-15	6	1	-8	Error (mV)		MAX	MIN	
		0.63	0.01	-0.29	-0.40	0.43	-0.11	-0.46	-0.57	-0.64	0.86	0.59	0.25	0.02	-0.32	LINEARITY ERROR (dB)		0.86	-0.64	
23.5 GHz	INTERCEPT (mV)	223	342	466	596	684	795	915	1039	1163	1308	1425	1546	1671	1796	Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	10	8	12	21	-12	-22	-22	-19	-16	8	5	5	9	-13	Error (mV)		MAX	MIN	
		0.42	0.34	0.48	0.86	-0.49	-0.90	-0.93	-0.79	-0.66	0.35	0.19	0.20	0.38	0.55	LINEARITY ERROR (dB)		0.86	-0.93	
29 GHz	INTERCEPT (mV)	173	280	402	525	655	765	886	1013	1138	1287	1419	1549	1673	1798	Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	25	5	1	-2	2	-14	-20	-10	-20	3	8	12	10	9	Error (mV)		MAX	MIN	
		0.98	0.22	0.05	-0.08	0.07	-0.57	-0.78	-0.75	-0.80	0.10	0.33	0.48	0.39	0.35	LINEARITY ERROR (dB)		0.98	-0.80	
34.5 GHz	INTERCEPT (mV)	244	358	483	606	683	795	915	1040	1157	1276	1407	1540	1667	1792	Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	15	11	18	23	-19	-25	-23	-16	-18	-17	-4	10	19	26	Error (mV)		MAX	MIN	
		0.65	0.47	0.76	0.96	-0.79	-1.05	-0.98	-0.70	-0.75	-0.72	-0.18	0.44	0.81	1.09	LINEARITY ERROR (dB)		1.09	-1.05	
40 GHz	INTERCEPT (mV)	198	310	434	560	671	787	907	1030	1141	1237	1369	1500	1628	1756	Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	3	-3	2	9	2	-1	0	4	-3	-26	-13	-1	9	18	Error (mV)		MAX	MIN	
		0.15	-0.14	0.08	0.39	0.07	-0.05	0.00	0.18	-0.14	-1.10	-0.54	-0.02	0.37	0.76	LINEARITY ERROR (dB)		0.76	-1.10	
Flatness +/- dB		1.50	1.60	1.70	1.70	0.90	1.00	0.90	0.90	0.90	2.30	2.00	1.80	1.70	1.50					
Max. Video Output (V)		0.24	0.36	0.48	0.61	0.70	0.81	0.93	1.06	1.18	1.35	1.47	1.59	1.71	1.83					
Min. Video Output (V)		0.17	0.28	0.40	0.53	0.66	0.77	0.89	1.01	1.14	1.24	1.37	1.50	1.63	1.76					
Nominal Log Slope mV/dB		24.47																		
Log Slope Variation: ± mV/dB		0.95																		
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">Video Output @ -63dBm</td> <td style="width: 50%; border: none;">Video Output @ +2dBm</td> </tr> <tr> <td style="border: none;">Min(V)= 173.0</td> <td style="border: none;">Min(V)= 1756.0</td> </tr> <tr> <td style="border: none;">Max(V)= 244.0</td> <td style="border: none;">Max(V)= 1829.0</td> </tr> </table>															Video Output @ -63dBm	Video Output @ +2dBm	Min(V)= 173.0	Min(V)= 1756.0	Max(V)= 244.0	Max(V)= 1829.0
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Min(V)= 173.0	Min(V)= 1756.0																			
Max(V)= 244.0	Max(V)= 1829.0																			

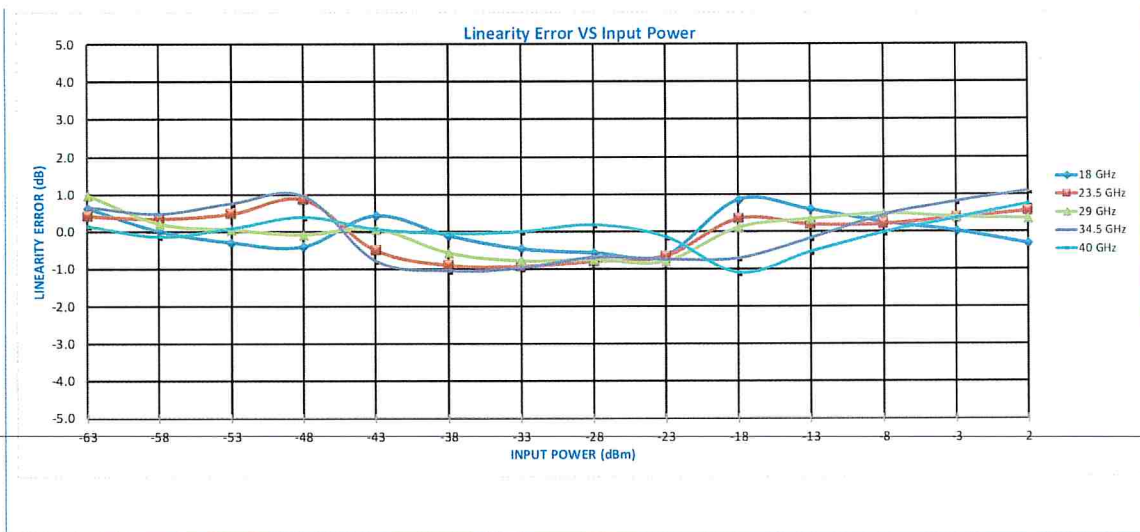


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Graph #1 (cont.)

Log Transfer vs Frequency @+25C





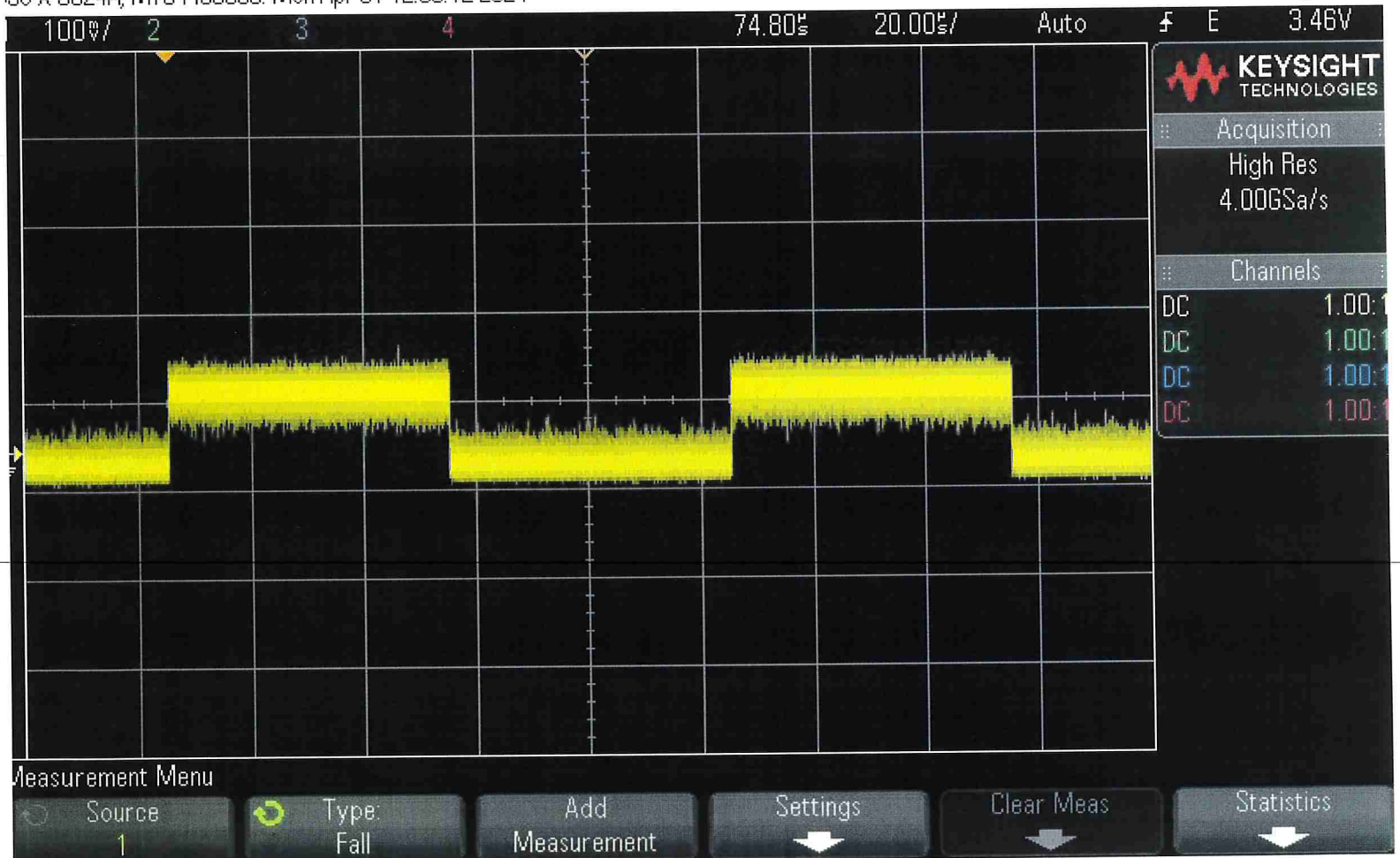
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Graph #2

TSS-68.0 dBm @+25C

ISO-X 3024A, MY54490369: Mon Apr 01 12:53:12 2024



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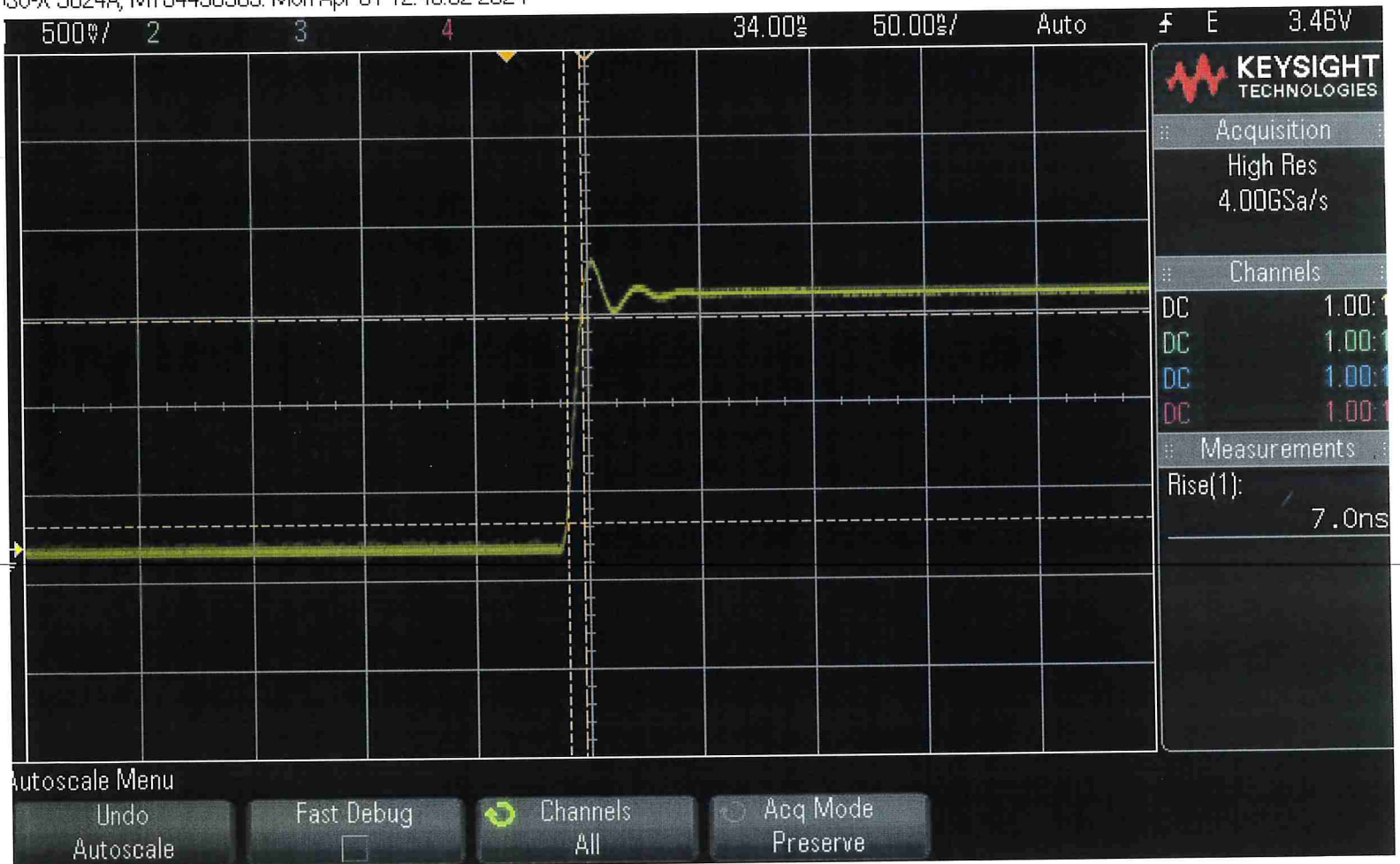
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Graph#3

Rise Time 7.0 ns

ISO-X 3024A, MY54490369: Mon Apr 01 12:49:32 2024



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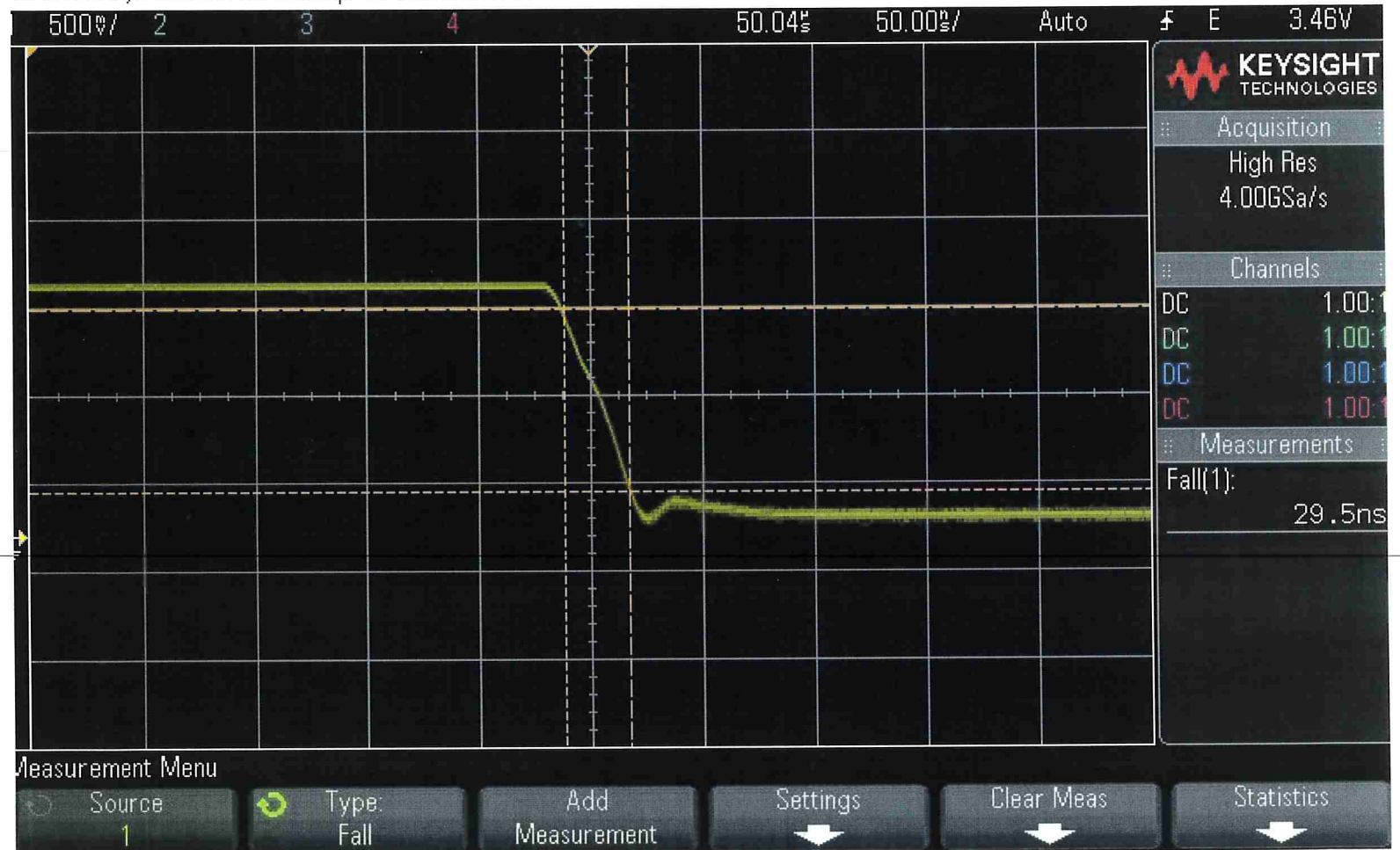
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Graph#4

Recovery Time 29.5 ns

ISO-X 3024A, MY54490369: Mon Apr 01 12:51:35 2024



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Graph 5

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

