



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

PL45161/2413

Customer: _____ Tested By: DA
SO No: _____ Temperature: +25°C
Model No: SDLVA-18G40G-65-CD-292FF Date: 03/28/24
Serial No: PL45161/2413 Drawing No: ETD000046 REV: A2

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA
1	Frequency Range:	18.0 to 40.0GHz	Pass	QA
2	TSS (See Graph #2)	-65 dBm Max.	-70 dBm	QA
3	Power Handling	+10dBm Max.	Pass	QA
4	Dynamic Range:	-63dBm to +2dBm	Pass	QA
5	Log Linearity: @+25C (See Graph #1)	± 2.0 dB Max.	+1.41 dB -1.53 dB	QA
6	Log Slope: (See Graph #1)	25 mV/dB Nom.	25.55 mV/dB	QA
7	Log Slope Variation: (See Graph #1)	±2.0 mV/dB Max.	0.61mV/dB	QA
8	Frequency Flatness: @+25C (See Graph #1)	±2.5dB Max.	±1.5dB	QA
9	Pulse Width Range:	30ns to CW	Pass	QA
10	Rise Time: (See Graph #3)	11ns Max. (8 ns Typ.)	7.3 ns	QA
11	Recovery Time: (See Graph #4)	60ns Max. (40 ns Typ.)	27.3 ns	QA
12	Delay Time:	60ns Max.	<60ns by design	QA
13	Input VSWR: (See Graph #5)	2.5:1 Max.	2.3:1	QA
14	Power Supply	+12V @ 500mA Max. -12V @ 200mA Max.	+12V @ 387mA -12V @ 160mA	QA

QA/QC Approval: K. Lester Date: 4-2-24




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Graph #1

Log Transfer vs Frequency @+25C

MODEL: SDLVA-18G40G-65-CD-292FF SERIAL NO: PL45161 DATE: 03-28-2024 TESTED BY: DA Test Temp: +25°C													 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							
Frequency																RF Input Power (dBm)				
18 GHz	INTERCEPT (mV)	1751	150	256	371	480	642	778	909	1041	1169	1301	1417	1545	1672	1792	Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	25.7	25	-4	-17	-28	-4	4	6	10	9	13	0	-1	-2	-11		Error (mV)	MAX	MIN
			0.96	-0.15	-0.68	-1.09	-0.14	0.15	0.24	0.38	0.35	0.49	0.00	-0.02	-0.09	-0.42		LINEARITY ERROR (dB)	0.96	-1.09
23.5 GHz	INTERCEPT (mV)	1755	173	279	395	511	638	764	895	1027	1158	1301	1427	1559	1688	1809	Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	25.6	32	10	-2	-14	-15	-17	-14	-10	-7	8	6	9	10	3		Error (mV)	MAX	MIN
			1.27	0.41	-0.07	-0.54	-0.58	-0.66	-0.55	-0.40	-0.28	0.30	0.22	0.37	0.40	0.13		LINEARITY ERROR (dB)	1.27	-0.66
29 GHz	INTERCEPT (mV)	1771	151	255	373	491	643	787	919	1056	1187	1314	1433	1560	1688	1809	Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	26.1	22	-4	-17	-29	-7	8	8	15	15	12	1	-2	-5	-16		Error (mV)	MAX	MIN
			0.84	-0.17	-0.64	-1.12	-0.28	0.24	0.31	0.56	0.59	0.46	0.03	-0.10	-0.18	-0.54		LINEARITY ERROR (dB)	0.84	-1.12
34.5 GHz	INTERCEPT (mV)	1708	170	273	392	503	615	743	875	1013	1150	1280	1377	1508	1637	1761	Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	24.8	28	7	1	-12	-24	-20	-13	1	14	20	-8	-1	4	4		Error (mV)	MAX	MIN
			1.12	0.26	0.05	-0.48	-0.97	-0.82	-0.51	0.04	0.56	0.79	-0.31	-0.04	0.15	0.14		LINEARITY ERROR (dB)	1.12	-0.97
40 GHz	INTERCEPT (mV)	1703	132	219	338	451	567	733	870	1011	1140	1268	1362	1490	1619	1748	Measured Value (mV)		Error (dB)	
	SLOPE (mV/dB)	25.5	36	-5	-13	-28	-39	-1	9	22	24	24	-9	-9	-7	-6		Error (mV)	MAX	MIN
			1.41	-0.18	-0.51	-1.08	-1.53	-0.02	0.35	0.88	0.94	0.95	-0.36	-0.34	-0.28	-0.22		LINEARITY ERROR (dB)	1.41	-1.53
Flatness +/- dB			0.80	1.20	1.10	1.20	1.50	1.10	1.00	0.90	0.90	0.90	1.40	1.40	1.40	1.20				
Max. Video Output (V)			0.17	0.28	0.40	0.51	0.64	0.79	0.92	1.06	1.19	1.31	1.43	1.56	1.69	1.81				
Min. Video Output (V)			0.13	0.22	0.34	0.45	0.57	0.73	0.87	1.01	1.14	1.27	1.36	1.49	1.62	1.75				
Nominal Log Slope mV/dB			25.55																	
Log Slope Variation: ± mV/dB			0.61																	
Video Output @ -63dBm													Video Output @ +2dBm							
Min(V)= 132.0													Min(V)= 1748.0							
Max(V)= 173.0													Max(V)= 1809.0							

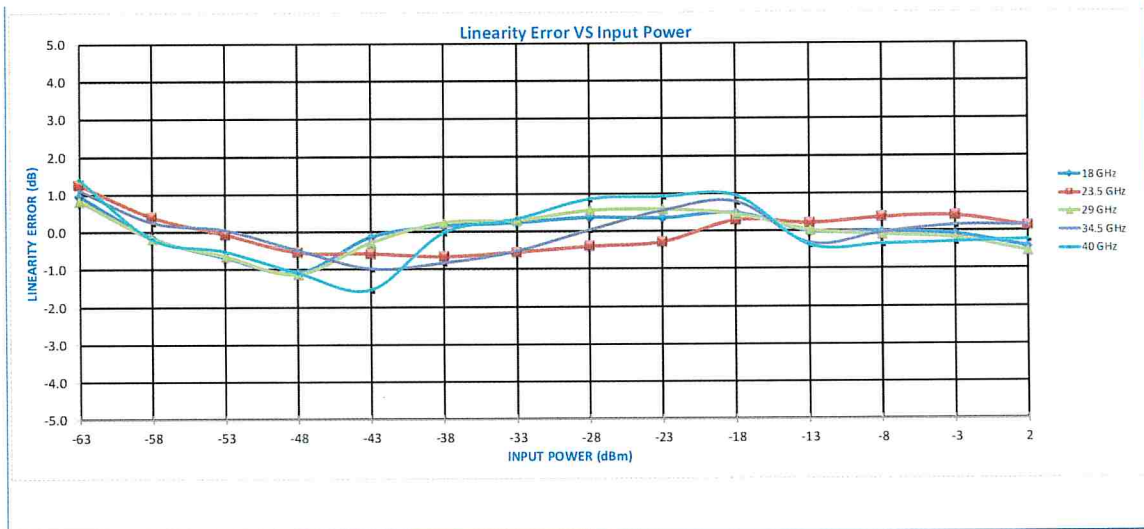


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Graph #1 (cont.)

Log Transfer vs Frequency @+25C





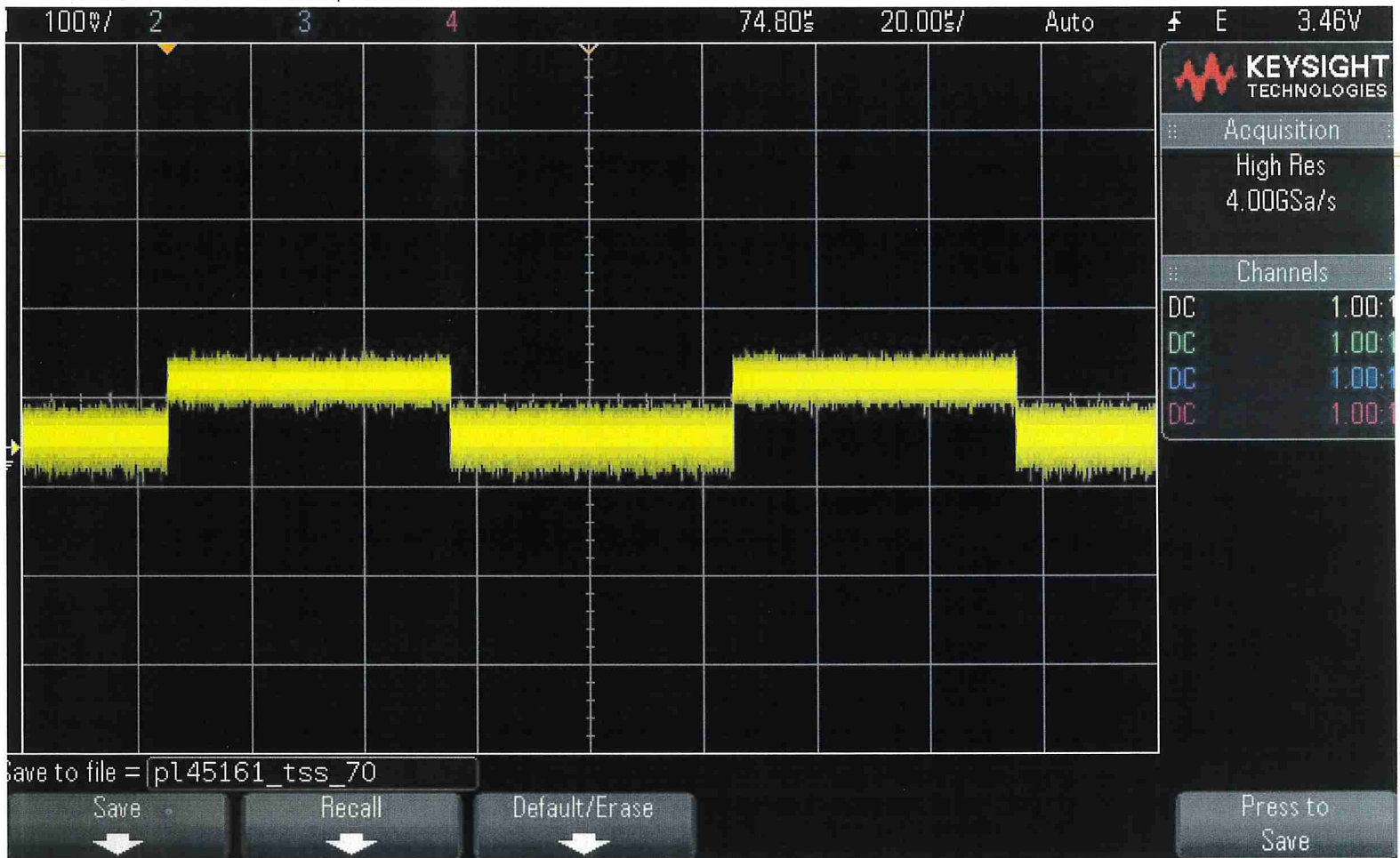
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Graph #2

TSS-70.0 dBm @+25C

ISO-X 3024A, MY54490369: Mon Apr 01 12:55:00 2024



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Email: sales@pmi-rf.com



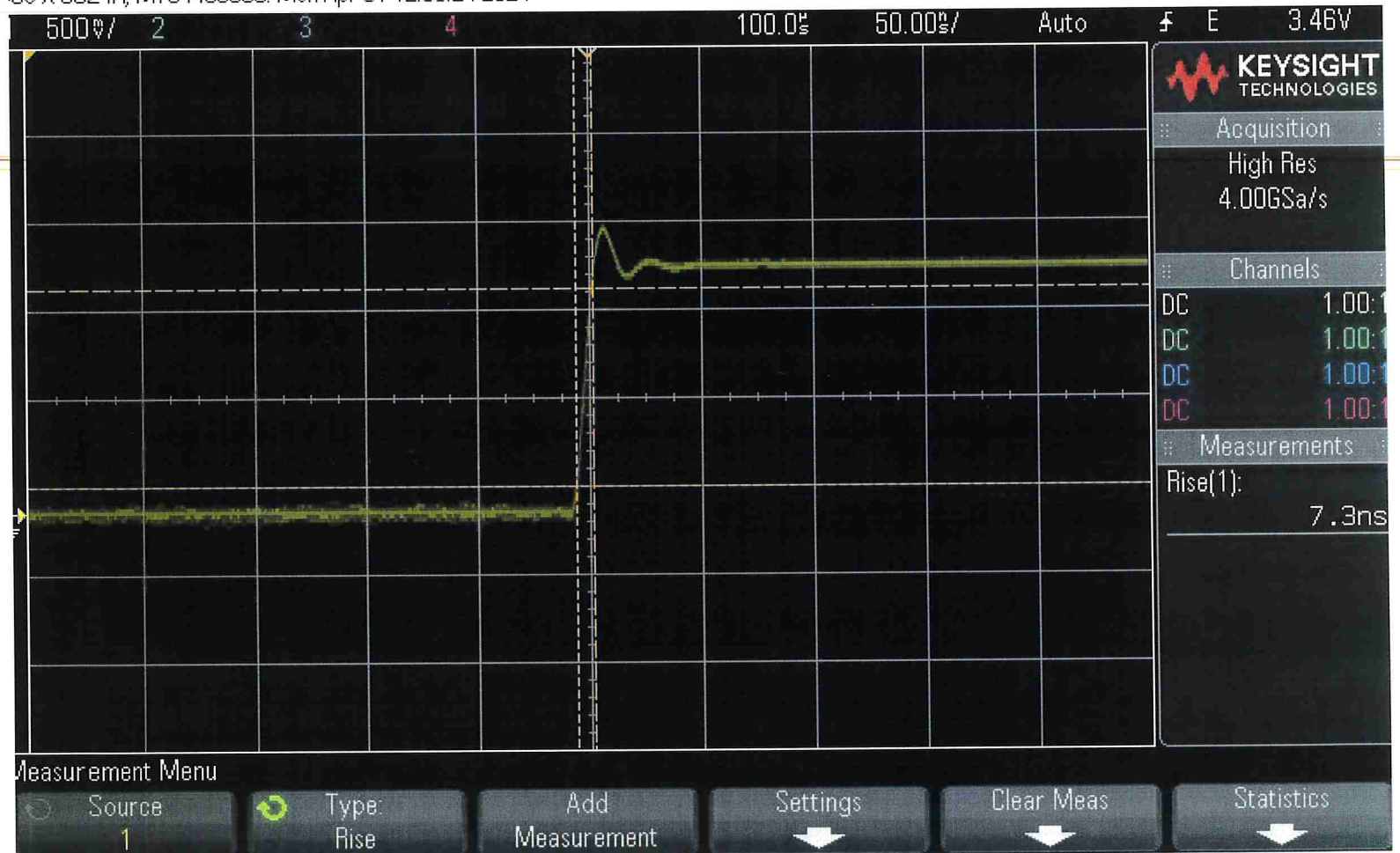
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Graph#3

Rise Time 7.3 ns

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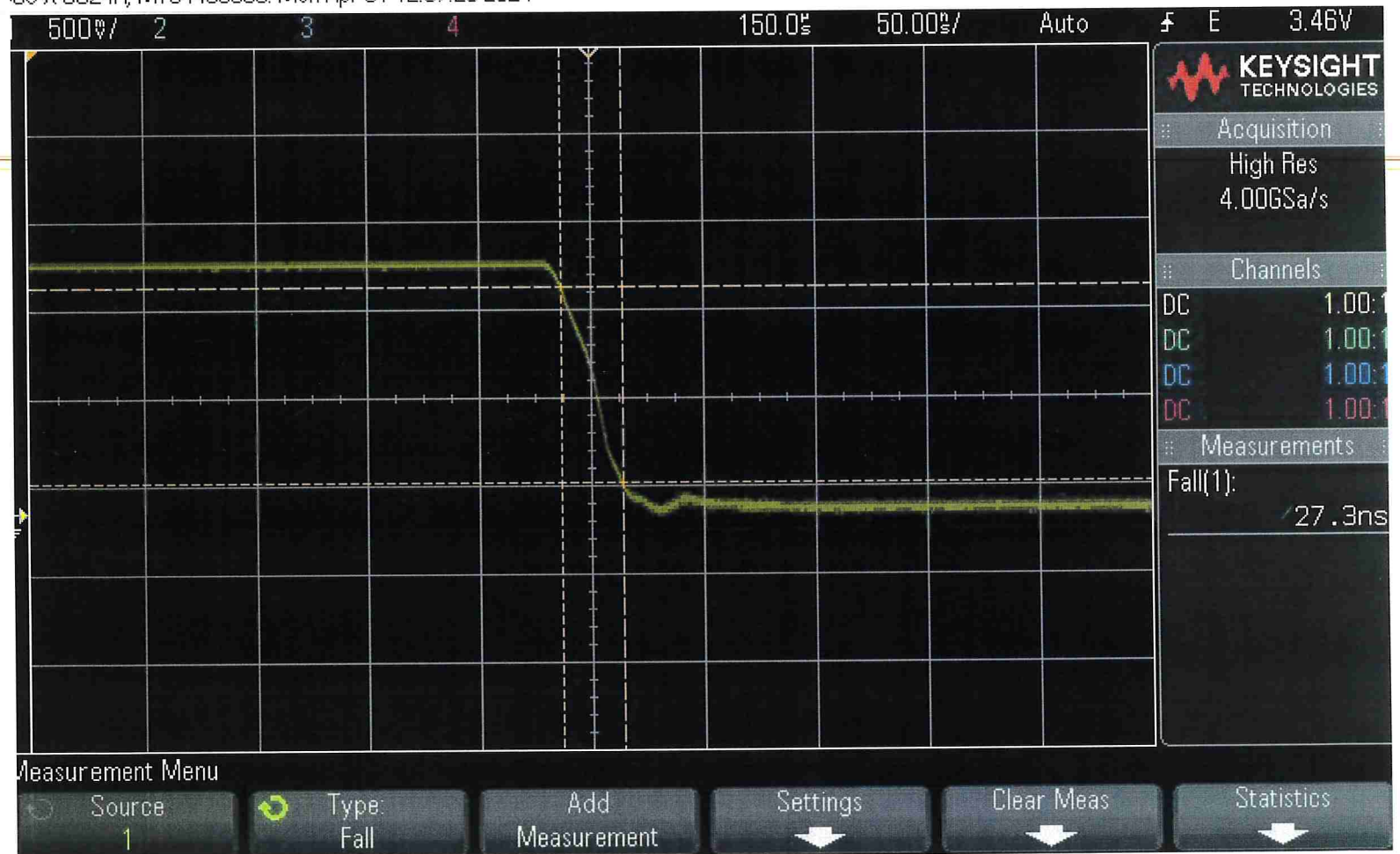
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Graph#4

Recovery Time 27.3 ns

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Graph #5

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

