



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

PL45160/2413

Customer: _____ Tested By: DA
SO No: _____ Temperature: +25°C
Model No: SDLVA-18G40G-65-CD-292FF Date: 03/28/24
Serial No: PL45160/2413 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.	-69 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.	+1.34 dB -1.03 dB	
6	Log Slope: (See Graph #1)	25 mV/dB Nom.	24.60 mV/dB	
7	Log Slope Variation: (See Graph #1)	±2.0 mV/dB Max.	0.67mV/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.)	18.8 ns	
12	Delay Time:	60ns Max.	<60ns 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 @ 384mA -12V @ 157mA	

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: PL45160 DATE: 03-24-2024 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)	227	340	465	594	736	852	988	1093	1212	1327	1446	1573	1703	1828	Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	0	-10	-8	-2	17	10	3	5	2	-6	-10	-6	1	-4	Error (mV)		MAX	MIN	
		-0.01	-0.41	-0.33	-0.08	0.70	0.42	0.14	0.22	0.06	-0.26	-0.41	-0.25	0.04	0.17	LINEARITY ERROR (dB)		0.70	-0.41	
23.5 GHz	INTERCEPT (mV)	189	297	421	553	696	835	948	1071	1191	1306	1438	1567	1698	1826	Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	7	-11	-13	-8	9	22	9	5	-1	-12	-6	-4	1	3	Error (mV)		MAX	MIN	
		0.28	-0.44	-0.53	-0.31	0.36	0.86	0.34	0.21	-0.04	-0.48	-0.25	-0.15	0.04	0.11	LINEARITY ERROR (dB)		0.86	-0.53	
29 GHz	INTERCEPT (mV)	190	301	427	552	689	838	961	1088	1209	1319	1423	1545	1679	1812	Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	-1	-15	-14	-13	-7	23	21	23	18	5	-18	-19	-10	-2	Error (mV)		MAX	MIN	
		-0.04	-0.59	-0.55	-0.54	-0.05	0.92	0.84	0.93	0.78	0.18	-0.65	-0.76	-0.40	-0.07	LINEARITY ERROR (dB)		0.93	-0.76	
34.5 GHz	INTERCEPT (mV)	187	291	413	527	639	774	901	1027	1151	1265	1361	1473	1605	1740	Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	10	-5	-3	-8	-16	0	7	13	18	12	-11	-19	-7	9	Error (mV)		MAX	MIN	
		0.43	-0.22	-0.12	-0.35	-0.67	-0.02	0.29	0.56	0.74	0.51	-0.48	-0.79	-0.27	0.37	LINEARITY ERROR (dB)		0.74	-0.79	
40 GHz	INTERCEPT (mV)	198	301	426	547	669	811	944	1077	1192	1304	1390	1505	1637	1773	Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	3	-15	-12	-12	-11	9	21	32	26	17	-19	-25	-15	0	Error (mV)		MAX	MIN	
		0.13	-0.63	-0.48	-0.49	-0.47	0.38	0.86	1.34	1.07	0.69	-0.77	-1.03	-0.60	0.00	LINEARITY ERROR (dB)		1.34	-1.03	
Flatness +/- dB		0.89	1.00	1.10	1.40	2.00	1.60	1.40	1.30	1.20	1.30	1.70	2.00	2.00	1.80					
Max. Video Output (V)		0.23	0.34	0.47	0.59	0.74	0.85	0.97	1.09	1.21	1.33	1.45	1.57	1.70	1.83					
Min. Video Output (V)		0.19	0.29	0.41	0.53	0.64	0.77	0.90	1.03	1.15	1.27	1.36	1.47	1.61	1.74					
Nominal Log Slope mV/dB		24.60																		
Log Slope Variation: ± mV/dB		0.67																		
<table style="width: 100%;"> <tr> <td style="width: 50%;">Video Output @ -63dBm</td> <td style="width: 50%;">Video Output @ +2dBm</td> </tr> <tr> <td>Min(V)= 187.0</td> <td>Min(V)= 1740.0</td> </tr> <tr> <td>Max(V)= 227.0</td> <td>Max(V)= 1829.0</td> </tr> </table>															Video Output @ -63dBm	Video Output @ +2dBm	Min(V)= 187.0	Min(V)= 1740.0	Max(V)= 227.0	Max(V)= 1829.0
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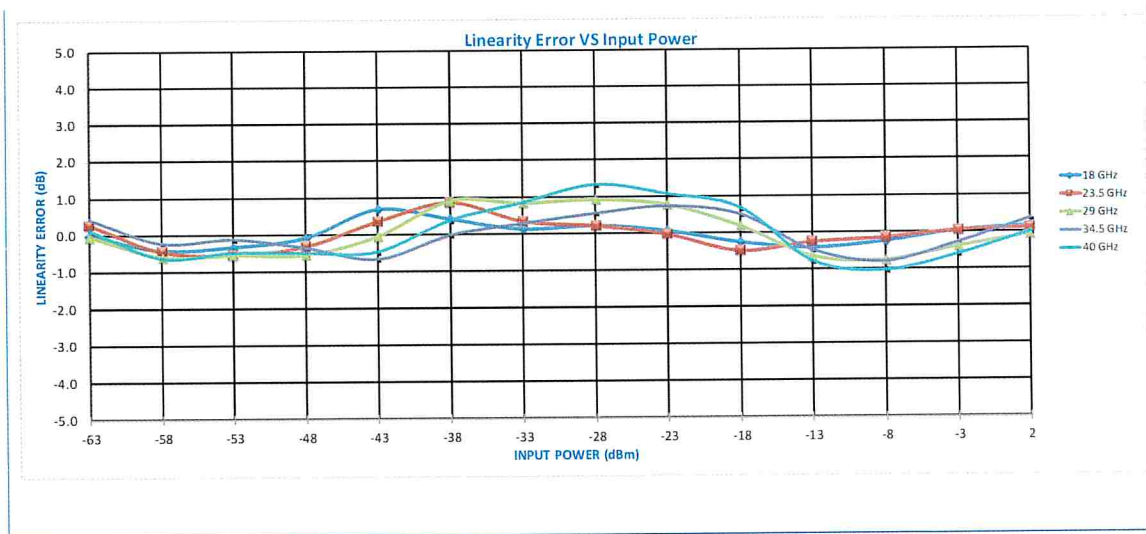


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Graph #1 (cont.)

Log Transfer vs Frequency @+25C





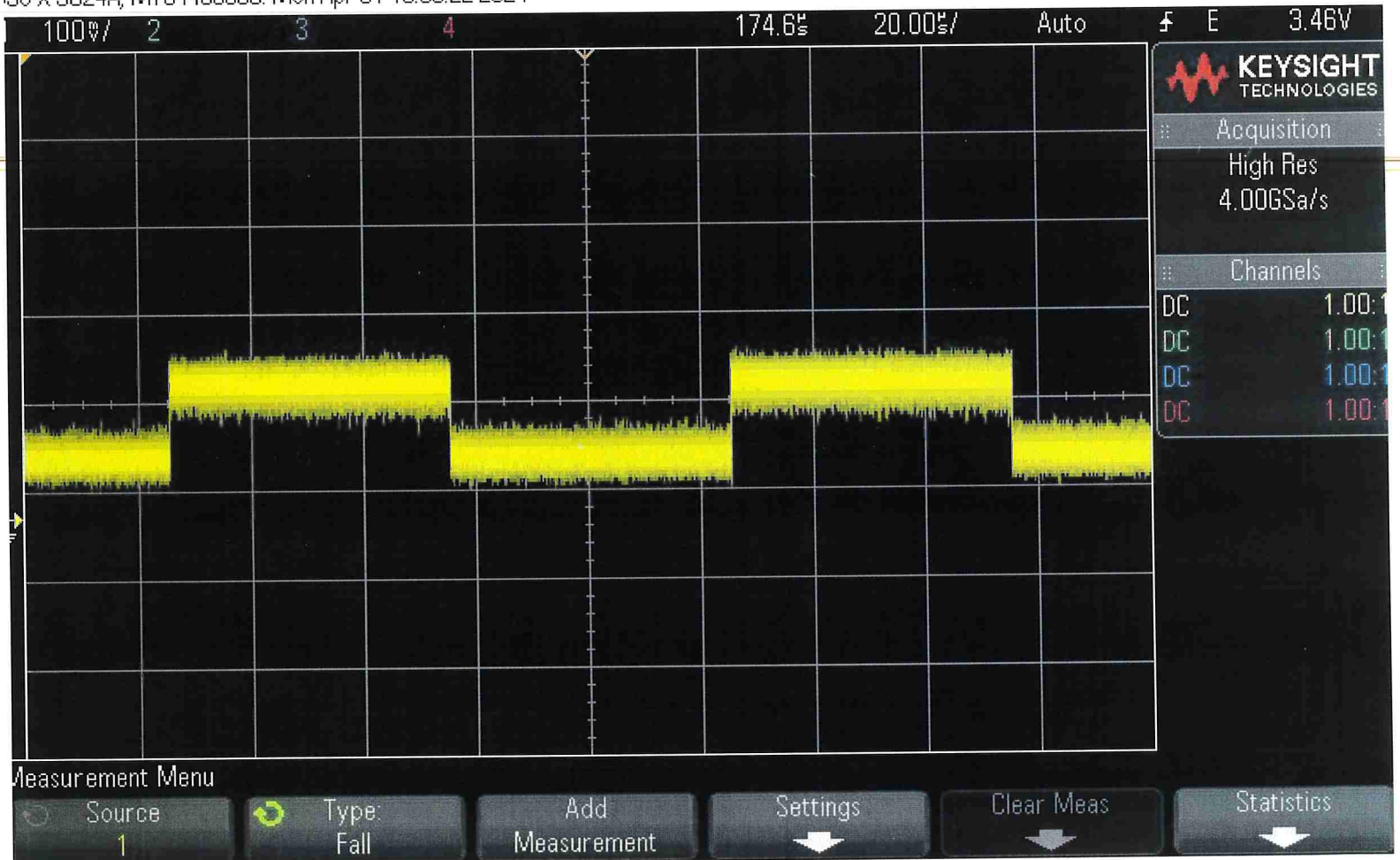
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Graph #2

TSS-69.0 dBm @+25C

ISO-X 3024A, MY54490369: Mon Apr 01 13:03:22 2024



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Email: sales@pmi-rf.com



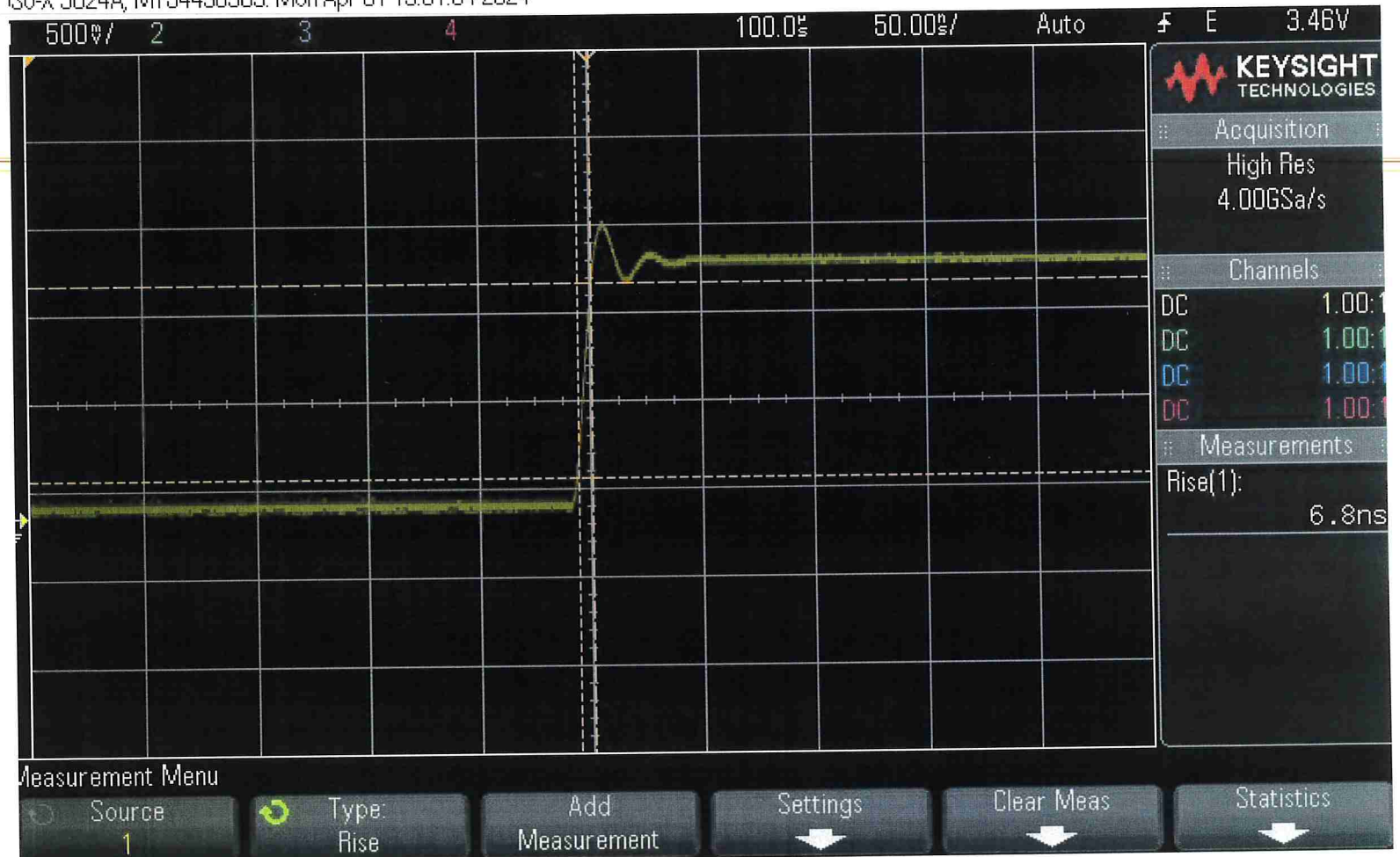
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Graph#3

Rise Time 6.8 ns

ISO-X 3024A, MY54490369: Mon Apr 01 13:01:04 2024



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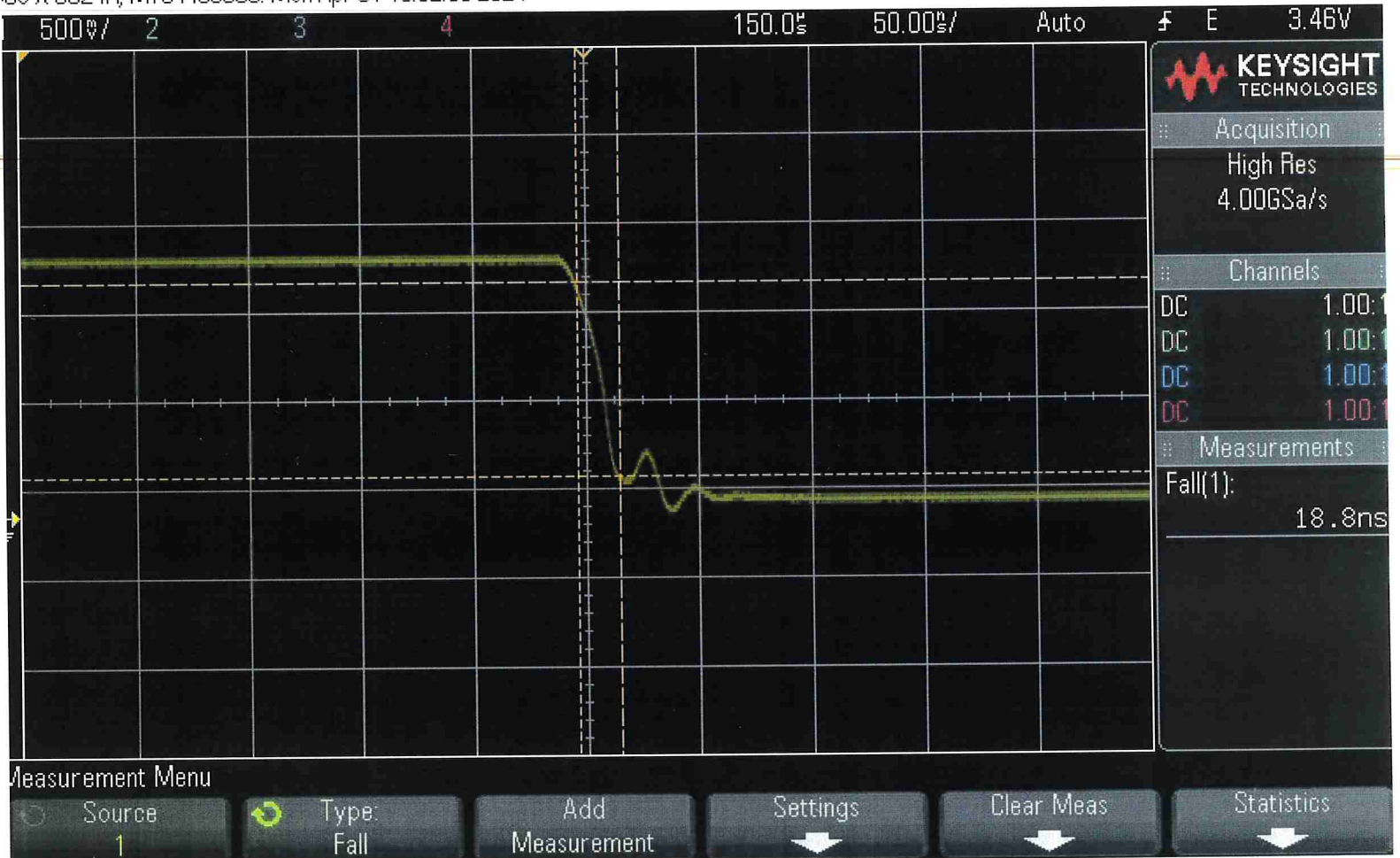
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Graph#4

Recovery Time 18.8 ns

ISO-X 3024A, MY54490369: Mon Apr 01 13:02:05 2024



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Graph #5

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

