



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

PL50946/2504

Customer: _____	Tested By: <u>DA</u>
SO No: _____	Temperature: <u>+25°C</u>
Model No: <u>SDLVA-18G40G-65-CD-292FF</u>	Date: <u>01/22/25</u>
Serial No: <u>PL50946/2504</u>	Drawing No: <u>ETD000046</u> REV: <u>A2</u>

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC PMI QA3
1	Frequency Range:	18.0 to 40.0GHz	Pass	<div style="border-left: 1px solid black; border-right: 1px solid black; height: 100%;"></div>
2	TSS (See Graph #2)	-65 dBm Max.	-70dBm	
3	Power Handling	+10dBm Max.	Pass	
4	Dynamic Range:	-63dBm to +2dBm	Pass	
5	Log Linearity: @+25C (See Graph #1)	± 2.0 dB Max.	+0.77dB -1.07dB	
6	Log Slope: (See Graph #1)	25 mV/dB Nom.	24.50mV/dB	
7	Log Slope Variation: (See Graph #1)	±2.0 mV/dB Max.	±0.59mV/dB	
8	Frequency Flatness: @+25C (See Graph #1)	±2.5dB Max.	±1.70dB	
9	Pulse Width Range:	30ns to CW	Pass	
10	Rise Time: (See Graph #3)	11ns Max. (8 ns Typ.)	7.5ns	
11	Recovery Time: (See Graph #4)	60ns Max. (40 ns Typ.)	23.0ns	
12	Delay Time:	60ns Max.	<60ns by design	
13	Input VSWR: (See Graph #5)	2.5:1 Max.	2.25:1	
14	Power Supply	+12V @ 500mA Max. -12V @ 200mA Max.	+12V @ 372mA -12V @ 157mA	

QA/QC Approval: *K. Klauze*      Date: 1-28-25



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Graph #1

Log Transfer vs Frequency @+25C

<p>MODEL: SDLVA-18G40G-65-CD-292FF          SERIAL NO: PL50946          DATE: 01-22-25          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)																				
Frequency		-63	-58	-53	-48	-43	-38	-33	-28	-23	-18	-13	-8	-3	2					
18 GHz	INTERCEPT (mV)	1700														Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	24.9	141	249	369	494	638	763	888	1010	1129	1256	1370	1494	1622	1750	Error (mV)		MAX	MIN
			0.34	-0.32	-0.49	-0.47	0.32	0.35	0.37	0.28	0.06	0.17	-0.25	-0.26	-0.12	0.03	LINEARITY ERROR (dB)		0.37	-0.49
23.5 GHz	INTERCEPT (mV)	1728														Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	24.8	176	294	419	550	645	766	892	1016	1141	1290	1408	1534	1662	1787	Error (mV)		MAX	MIN
			0.53	0.28	0.32	0.59	-0.58	-0.71	-0.64	-0.65	-0.62	0.38	0.13	0.21	0.36	0.39	LINEARITY ERROR (dB)		0.59	-0.71
29 GHz	INTERCEPT (mV)	1660														Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	23.7	167	286	410	540	629	748	873	998	1117	1238	1342	1463	1591	1720	Error (mV)		MAX	MIN
			0.00	0.02	0.25	0.74	-0.51	-0.49	-0.21	0.06	0.08	0.19	-0.42	-0.32	0.09	0.53	LINEARITY ERROR (dB)		0.74	-0.51
34.5 GHz	INTERCEPT (mV)	1667														Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	24.4	140	252	367	471	614	746	875	1003	1125	1239	1335	1457	1586	1718	Error (mV)		MAX	MIN
			0.35	-0.05	-0.33	-1.07	-0.20	0.22	0.51	0.77	0.77	0.45	-0.61	-0.60	-0.31	0.11	LINEARITY ERROR (dB)		0.77	-1.07
40 GHz	INTERCEPT (mV)	1729														Measured Value (mV)		Error (dB)		
	SLOPE (mV/dB)	24.7	162	280	405	553	685	803	929	1049	1168	1281	1391	1522	1651	1778	Error (mV)		MAX	MIN
			-0.43	-0.65	-0.59	0.40	0.74	0.52	0.62	0.48	0.29	-0.13	-0.68	-0.38	-0.16	-0.02	LINEARITY ERROR (dB)		0.74	-0.68
Flatness +/- dB		0.70	0.90	1.10	1.70	1.40	1.20	1.10	1.00	1.00	1.10	1.50	1.60	1.60	1.40					
Max. Video Output (V)		0.18	0.29	0.42	0.55	0.69	0.80	0.93	1.05	1.17	1.29	1.41	1.53	1.66	1.79					
Min. Video Output (V)		0.14	0.25	0.37	0.47	0.61	0.75	0.87	1.00	1.12	1.24	1.34	1.46	1.59	1.72					
Nominal Log Slope mV/dB		24.50														Video Output @ -63dBm		Video Output @ +2dBm		
Log Slope Variation: ± mV/dB		0.59														Min(V)= 140.0		Min(V)= 1718.0		
																Max(V)= 176.0		Max(V)= 1787.0		

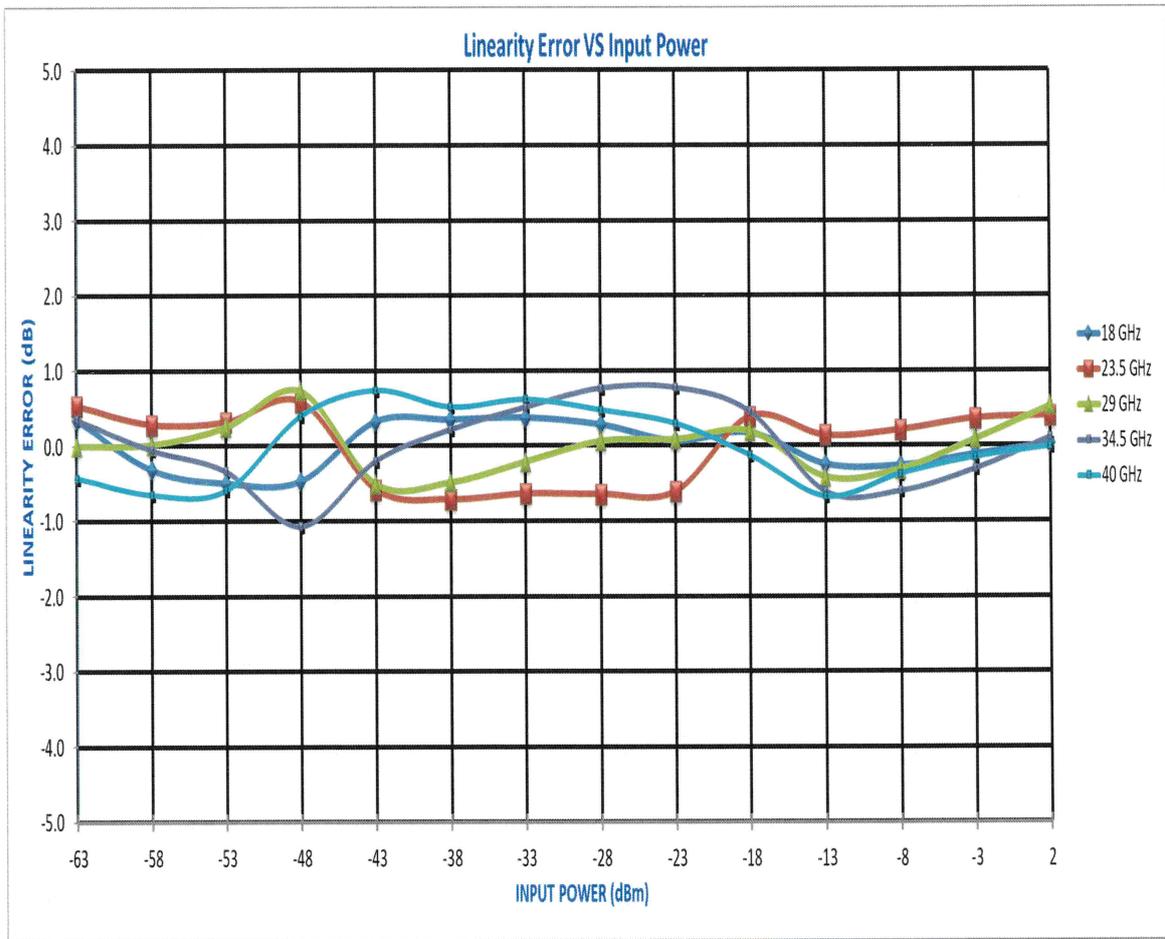


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**Graph #1 (cont.)**

**Log Transfer vs Frequency @+25C**





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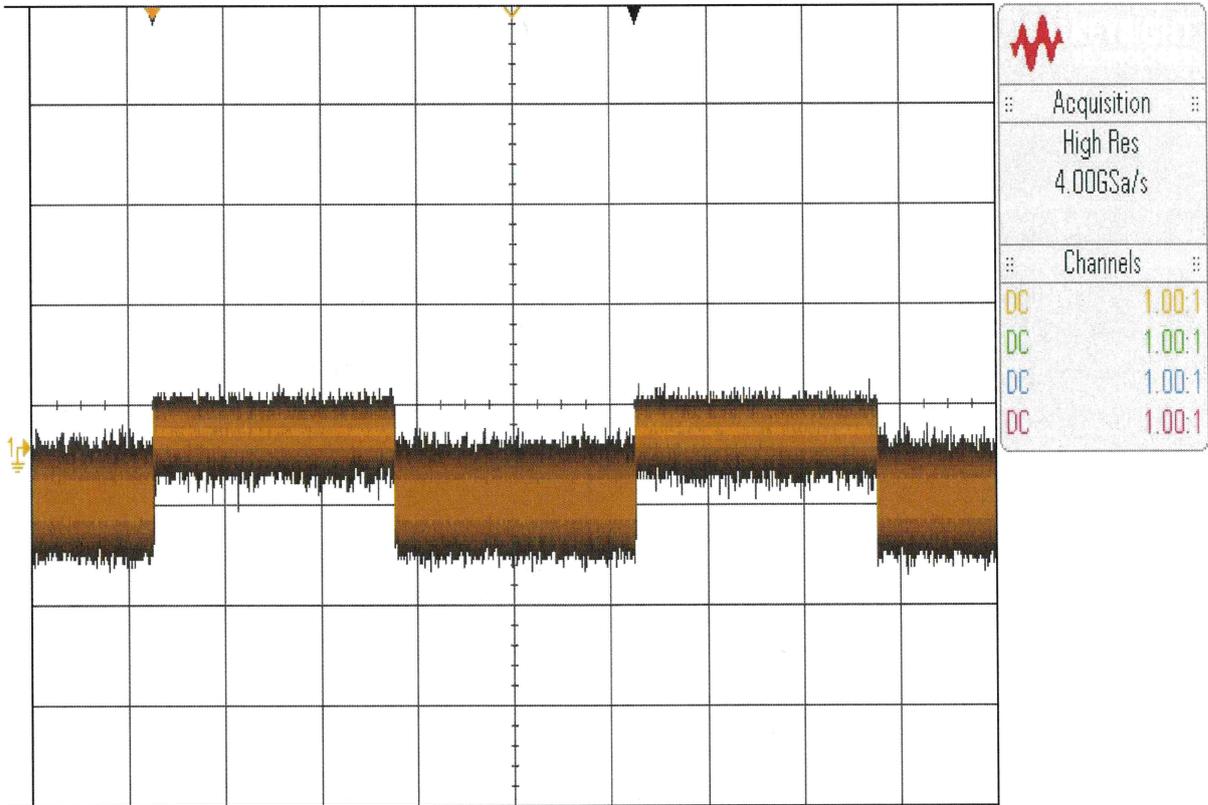
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**Graph #2**

**TSS -70dBm @+25C**

MSO-X 3054A, MY53400180: Mon Jan 20 12:22:52 2025

1 100% / 2 3 4 74.80% 20.00% / Auto f E 1.09V



Measurement Menu

Source | Type: Fall | Add Measurement | Settings | Clear Meas | Statistics



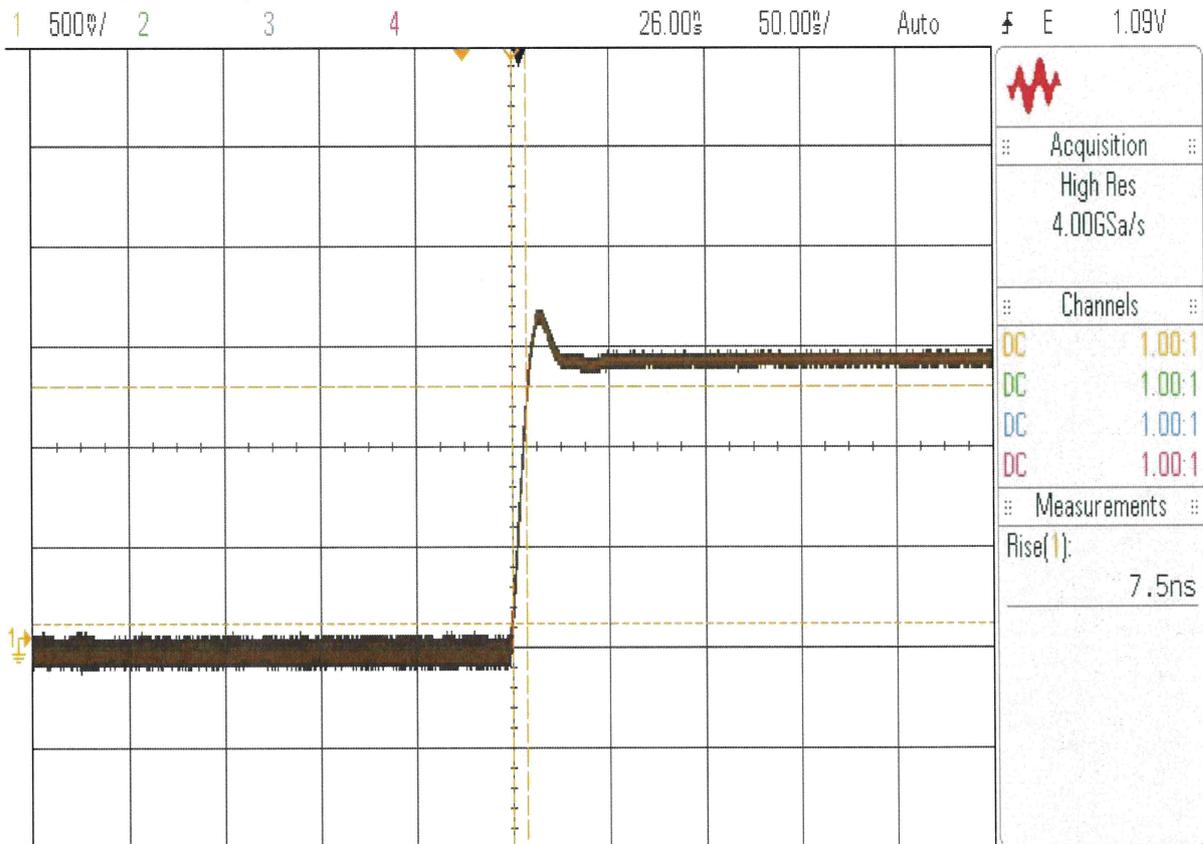
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**Graph #3**

**Rise Time 7.5nS**

MSO-X 3054A, MY53400180: Mon Jan 20 12:20:16 2025



Measurement Menu

Source 1 Type: Rise Add Measurement Settings Clear Meas Statistics



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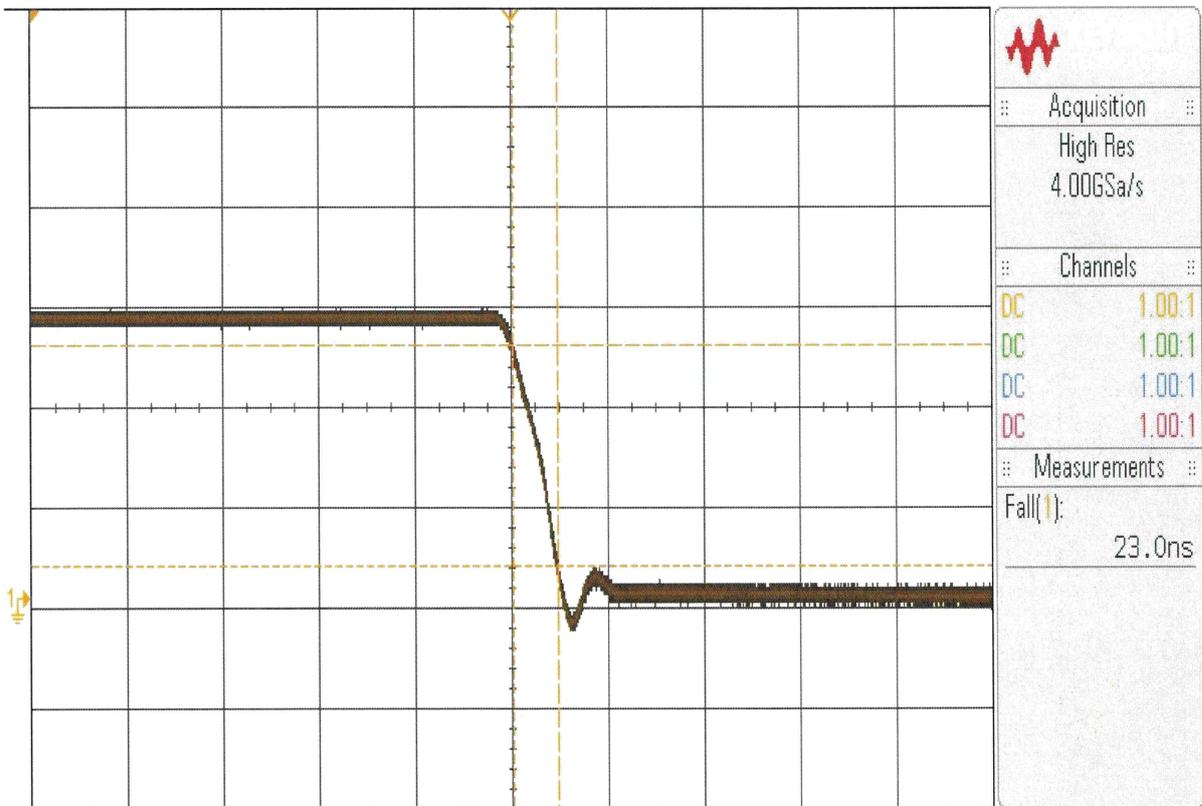
PL50946/2504

**Graph #4**

**Recovery Time 23.0nS**

MSO-X 3054A, MY53400180: Mon Jan 20 12:21:29 2025

1 500%/ 2 3 4 50.03% 50.00%/ Auto f E 1.09V



Measurement Menu

Source | Type: Fall | Add Measurement | Settings | Clear Meas | Statistics



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**Graph #5**

**VSWR 2.25:1 @+25C & -20dBm**

