



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

PL52145/2517

Customer:	_____	Tested By:	DA
SO No:	_____	Temperature:	+25°C
Model No:	SDLVA-18G40G-65-CD-292FF	Date:	04/24/25
Serial No:	PL52145/2517	Drawing No:	ETD000046
		REV:	A2

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC PMI QAS
1	Frequency Range:	18.0 to 40.0GHz	Pass	
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.	+1.64dB -1.58dB	
6	Log Slope: (See Graph #1)	25 mV/dB Nom.	25.58mV/dB	
7	Log Slope Variation: (See Graph #1)	±2.0 mV/dB Max.	1.28mV/dB	
8	Frequency Flatness: @+25C (See Graph #1)	±2.5dB Max.	±1.80dB	
9	Pulse Width Range:	30ns to CW	Pass	
10	Rise Time: (See Graph #3)	11ns Max. (8 ns Typ.)	7.8ns	
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.	2.30:1	
14	Power Supply	+12V @ 500mA Max. -12V @ 200mA Max.	+12V @ 496mA -12V @ 162mA	

QA/QC Approval: K.K. Lanning Date: 4-24-25



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Graph #1

Log Transfer vs Frequency @+25C

MODEL: SDLVA-18G40G-65-CD-292FF SERIAL NO: PL52145 DATE: 04-23-25 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			-63	-58	-53	-48	-43	-38	-33	-28	-23	-18	-13	-8	-3	2	RF Input Power (dBm)		
18 GHz	INTERCEPT (mV)	1814	198	302	438	592	707	834	966	1098	1229	1352	1457	1502	1737	1893	Measured Value (mV)	Error (dB)	
	SLOPE (mV/dB)	25.8	9	-16	-9	16	2	0	3	6	8	2	-22	-16	0	17	Error (mV)	MAX MIN	
			0.34	-0.63	-0.36	0.61	0.07	0.00	0.12	0.23	0.31	0.08	-0.85	-0.61	0.01	0.67	LINEARITY ERROR (dB)	0.67 -0.85	
23.5 GHz	INTERCEPT (mV)	1799	193	297	439	592	681	798	928	1063	1197	1344	1451	1585	1731	1879	Measured Value (mV)	Error (dB)	
	SLOPE (mV/dB)	25.8	18	-7	6	31	-9	-21	-20	-14	-9	9	-13	-8	9	28	Error (mV)	MAX MIN	
			0.71	-0.25	0.25	1.19	-0.36	-0.83	-0.79	-0.55	-0.35	0.35	-0.50	-0.31	0.35	1.09	LINEARITY ERROR (dB)	1.19 -0.83	
29 GHz	INTERCEPT (mV)	1811	155	250	386	545	666	780	912	1050	1191	1346	1456	1588	1734	1884	Measured Value (mV)	Error (dB)	
	SLOPE (mV/dB)	26.7	27	-11	-9	17	4	-10	-17	-13	-5	16	-7	-8	3	20	Error (mV)	MAX MIN	
			1.02	-0.43	-0.33	0.62	0.15	-0.58	-0.64	-0.48	-0.20	0.61	-0.28	-0.33	0.13	0.75	LINEARITY ERROR (dB)	1.02 -0.64	
34.5 GHz	INTERCEPT (mV)	1801	185	292	438	603	716	845	982	1120	1257	1340	1436	1568	1711	1861	Measured Value (mV)	Error (dB)	
	SLOPE (mV/dB)	25.4	-13	-33	-15	23	9	11	20	31	41	-3	-35	-30	-14	9	Error (mV)	MAX MIN	
			-0.52	-1.32	-0.58	0.91	0.35	0.42	0.80	1.22	1.61	-0.13	-1.36	-1.17	-0.55	0.34	LINEARITY ERROR (dB)	1.61 -1.36	
40 GHz	INTERCEPT (mV)	1720	205	320	468	594	663	764	895	1032	1163	1303	1392	1507	1652	1808	Measured Value (mV)	Error (dB)	
	SLOPE (mV/dB)	24.2	7	1	28	33	-18	-38	-28	-12	-1	18	-14	-20	4	40	Error (mV)	MAX MIN	
			0.29	0.05	1.17	1.39	-0.76	-1.58	-1.15	-0.48	-0.06	0.73	-0.58	-0.82	0.18	1.64	LINEARITY ERROR (dB)	1.64 -1.58	
Flatness +/- dB		1.00	1.40	1.60	1.10	1.00	1.60	1.70	1.70	1.80	1.00	1.30	1.70	1.70	1.50				
Max. Video Output (V)		0.21	0.32	0.47	0.60	0.72	0.85	0.98	1.12	1.26	1.35	1.46	1.59	1.74	1.88				
Min. Video Output (V)		0.16	0.25	0.39	0.55	0.66	0.76	0.90	1.03	1.16	1.30	1.39	1.51	1.65	1.81				
Nominal Log Slope mV/dB	25.58	Video Output @ -63dBm															Video Output @ +2dBm		
Log Slope Variation: ± mV/dB	1.28	Min(V)= 155.0															Min(V)= 1808.0		
		Max(V)= 205.0															Max(V)= 1884.0		

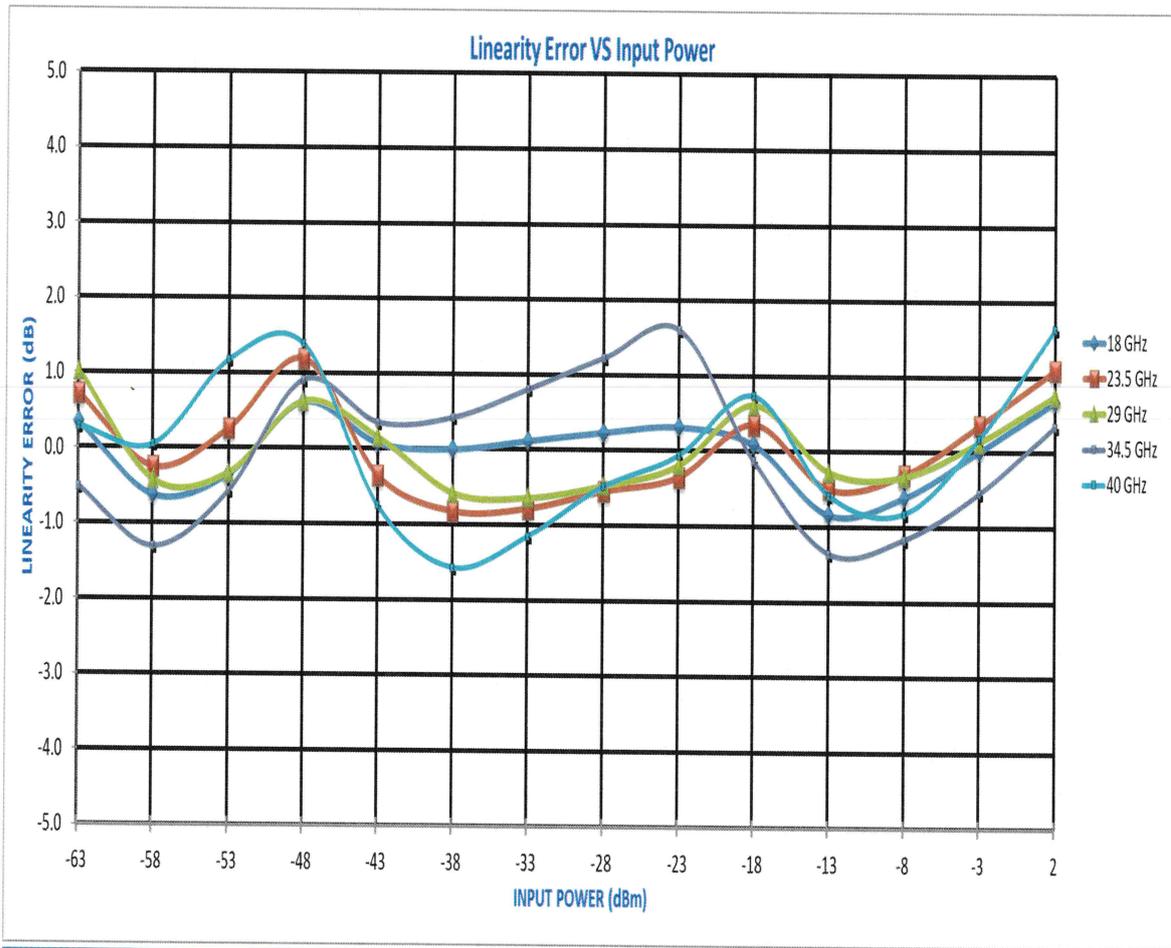


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Graph #1 (cont.)

Log Transfer vs Frequency @+25C





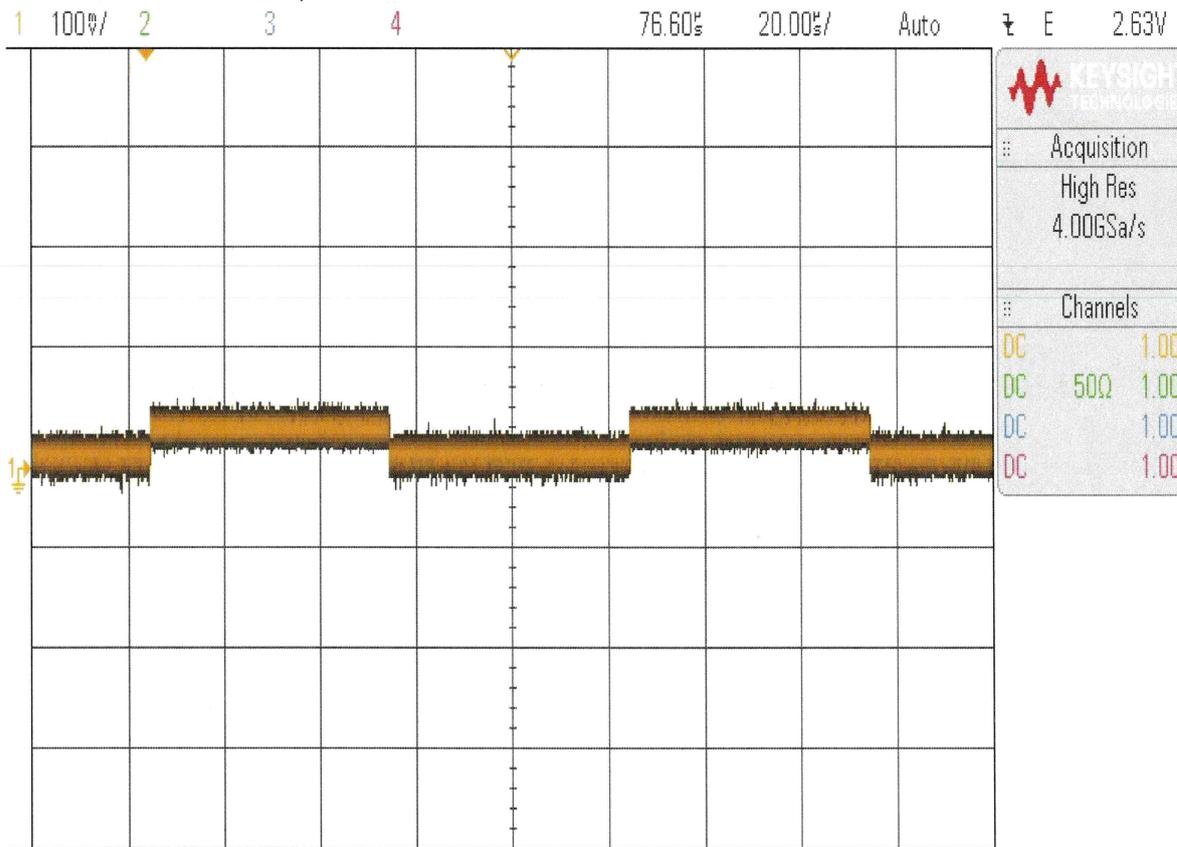
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Graph #2

TSS -70dBm @+25C

DSO-X 3024A, MY54490369: Wed Apr 23 09:56:27 2025



Save to file = pl52145_tss_70

Save

Recall

Default/Erase

Press to
Save



**SUMMARY TEST DATA
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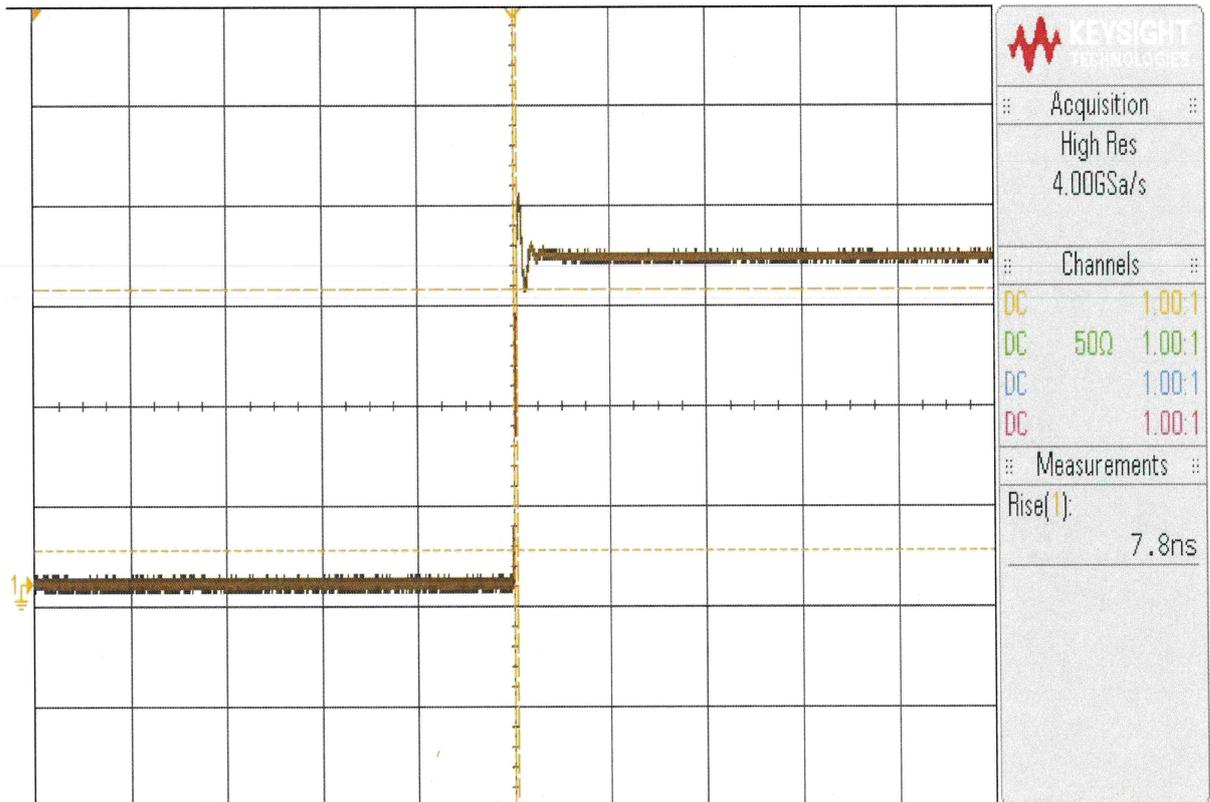
PL52145/2517

Graph #3

Rise Time 7.8nS

DSO-X 3024A, MY54490369: Wed Apr 23 09:57:41 2025

1 500V/ 2 3 4 101.0% 200.0% Auto E 2.63V



Measurement Menu

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



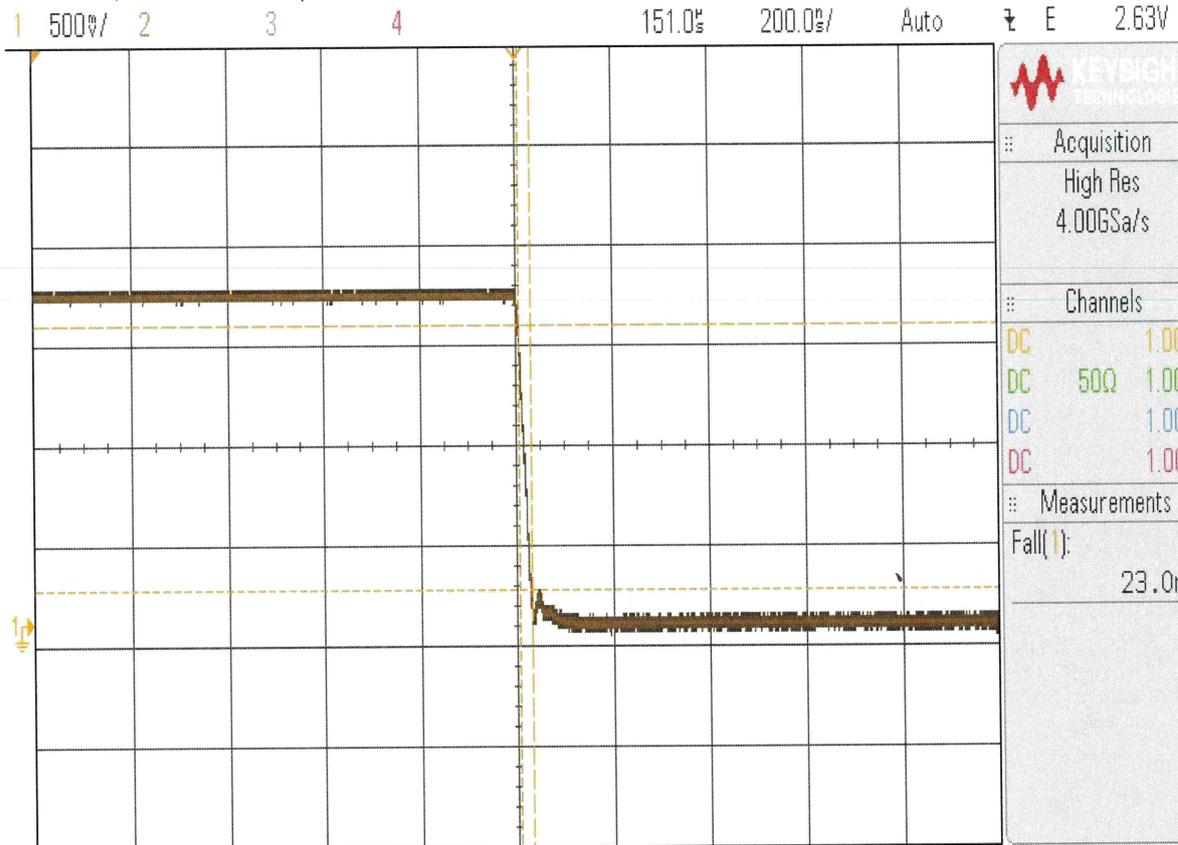
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Graph #4

Recovery Time 23.0nS

DSO-X 3024A, MY54490369: Wed Apr 23 09:58:59 2025





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Graph #5

VSWR 2.30:1 @+25C & -20dBm

