



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

Customer: _____ Tested By: DA
SO No: _____ Temperature: +25°C
Model No: SDLVA-18G40G-65-CD-292FF-OPHS Date: 01/21/25
Serial No: PL50078/2504 Drawing No: 27637200

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	18.0 to 40.0GHz	18.0 to 40.0GHz	PMI QA3
2	TSS	-65 dBm @25°C	-69dBm	
3	Input Power Handling	+10dBm Max.	+10dBm	
4	Video Log Range:	-63dBm to +2dBm	-63dBm to +2dBm	
5	Video Log Linearity:	± 2.0 dB @25°C ±3.0 dB over temp.	±0.96dB	
6	Video Log Slope:	25 mV/dB Nom.	24.5mV/dB	
7	Video Log Intercepts: Video Output:	At 2 dBm 1940 mV Max. 1476 mV Min. At -63 dBm 280 mV Max. 65 mV Min.	1709mV 1686mV 158mV 76mV	
8	Video Frequency Flatness:	±2.5dB Max. @ 25°	1.90dB	
9	Pulse Width Range:	25 ns to CW	Pass	
10	Video Rise Time:	11ns (8 ns Typ.)	6.8ns	
11	Recovery Time:	60ns (40 ns Typ.)	Pass	
12	Delay Time:	15 ns (5 ns Typ.) 7 ns over temp. Typ.	Pass	
13	Video Output Impedance:	50 Ω	50 Ω	
14	Input VSWR (50Ω):	2.5:1	1.88:1	
15	DC Power Supply:	+12V @ 400mA -12V @ 200mA	+12V@ 374mA -12V@ 158mA	

QA/QC Approval: K. Klammer Date: 1-22-25



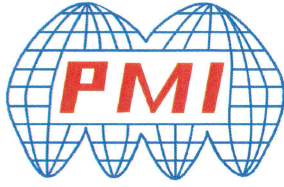
SUMMARY TEST DATA ON SDLVA-18G40G-65-CD-292FF- OPHS

Model: SDLVA-18G40G-65-CD-292FF-OPHS Serial Number: PL49578

Graph #1

Log Transfer vs Frequency @+25C

MODEL: SDLVA-18G40G-65-CD-292FF-OTPHS SERIAL NO: PL50078 DATE: 01/21/25 TESTED BY: DA Test Temp: +25C															 PLANAR MONOLITHICS INDUSTRIES 4921 Robert J. Mathews Parkway Suit 1 El Dorado Hills, CA 95762 TEL: 916-542-1401 FAX: 916-265-2597 EMAIL: SALES@PMI-RF.COM			
GRAPH #1																		
Frequency																		
RF Input Power (dBm)																		
18 GHz	INTERCEPT (mV)	1653	100	215	337	465	601	724	850	977	1107	1222	1324	1444	1570	1696	Measured Value (mV)	Error(dB)
	SLOPE (mV/dB)	24.6	-2	-10	-11	-6	6	6	9	13	20	12	-9	-12	-9	-6	Error (mV)	MAX MIN
			-0.09	-0.42	-0.46	-0.26	0.26	0.26	0.38	0.53	0.82	0.49	-0.37	-0.50	-0.38	-0.26	LINEARITY ERROR (dB)	0.82 -0.50
23.5 GHz	INTERCEPT (mV)	1645	95	208	330	458	563	673	797	924	1057	1215	1326	1450	1570	1708	Measured Value (mV)	Error(dB)
	SLOPE (mV/dB)	24.9	21	9	7	10	-10	-24	-25	-23	-15	19	5	4	9	13	Error (mV)	MAX MIN
			0.85	0.38	0.27	0.40	-0.39	-0.98	-1.01	-0.92	-0.58	0.75	0.20	0.17	0.34	0.52	LINEARITY ERROR (dB)	0.85 -1.01
29 GHz	INTERCEPT (mV)	1666	78	187	307	436	576	692	818	949	1085	1232	1340	1459	1585	1709	Measured Value (mV)	Error(dB)
	SLOPE (mV/dB)	25.4	14	-3	-10	-8	-5	-7	-8	-4	5	25	5	-3	-4	-7	Error (mV)	MAX MIN
			0.54	-0.10	-0.38	-0.32	0.19	-0.26	-0.30	-0.16	0.19	0.96	0.21	-0.11	-0.16	-0.29	LINEARITY ERROR (dB)	0.96 -0.38
34.5 GHz	INTERCEPT (mV)	1627	158	279	396	508	610	726	849	976	1108	1206	1308	1432	1559	1686	Measured Value (mV)	Error(dB)
	SLOPE (mV/dB)	23.3	3	7	7	2	-12	-13	-7	3	19	0	-15	-8	3	13	Error (mV)	MAX MIN
			0.11	0.29	0.30	0.10	-0.53	-0.57	-0.30	0.14	0.79	-0.01	-0.64	-0.33	0.11	0.55	LINEARITY ERROR (dB)	0.79 -0.64
40 GHz	INTERCEPT (mV)	1632	126	245	369	501	593	704	835	965	1094	1212	1311	1435	1561	1686	Measured Value (mV)	Error(dB)
	SLOPE (mV/dB)	23.9	1	0	5	17	-11	-19	-8	3	12	10	-10	-6	1	6	Error (mV)	MAX MIN
			0.03	0.01	0.19	0.71	-0.45	-0.80	-0.33	0.11	0.50	0.43	-0.43	-0.24	0.02	0.25	LINEARITY ERROR (dB)	0.71 -0.80
Flatness +/- dB			1.70	1.90	1.80	1.50	1.00	1.10	1.10	1.10	1.00	0.50	0.70	0.60	0.50	0.50		
Max Video Output Volts			0.16	0.28	0.40	0.51	0.61	0.73	0.85	0.98	1.11	1.23	1.34	1.46	1.59	1.71		
Min Video Output Volts			0.08	0.19	0.31	0.44	0.56	0.67	0.80	0.92	1.06	1.21	1.31	1.43	1.56	1.69		
Nominal Log Slope mV/dB																24.5		
Log Slope Variation: ± mV/dB																1.05		
Video Output @ -63dBm																		
Min(V)=			76.0													65		
Max(V)=			158.0													280		
Video Output @ +2dBm																		
Min(V)=			1686.0													1476		
Max(V)=			1709.0													1940		

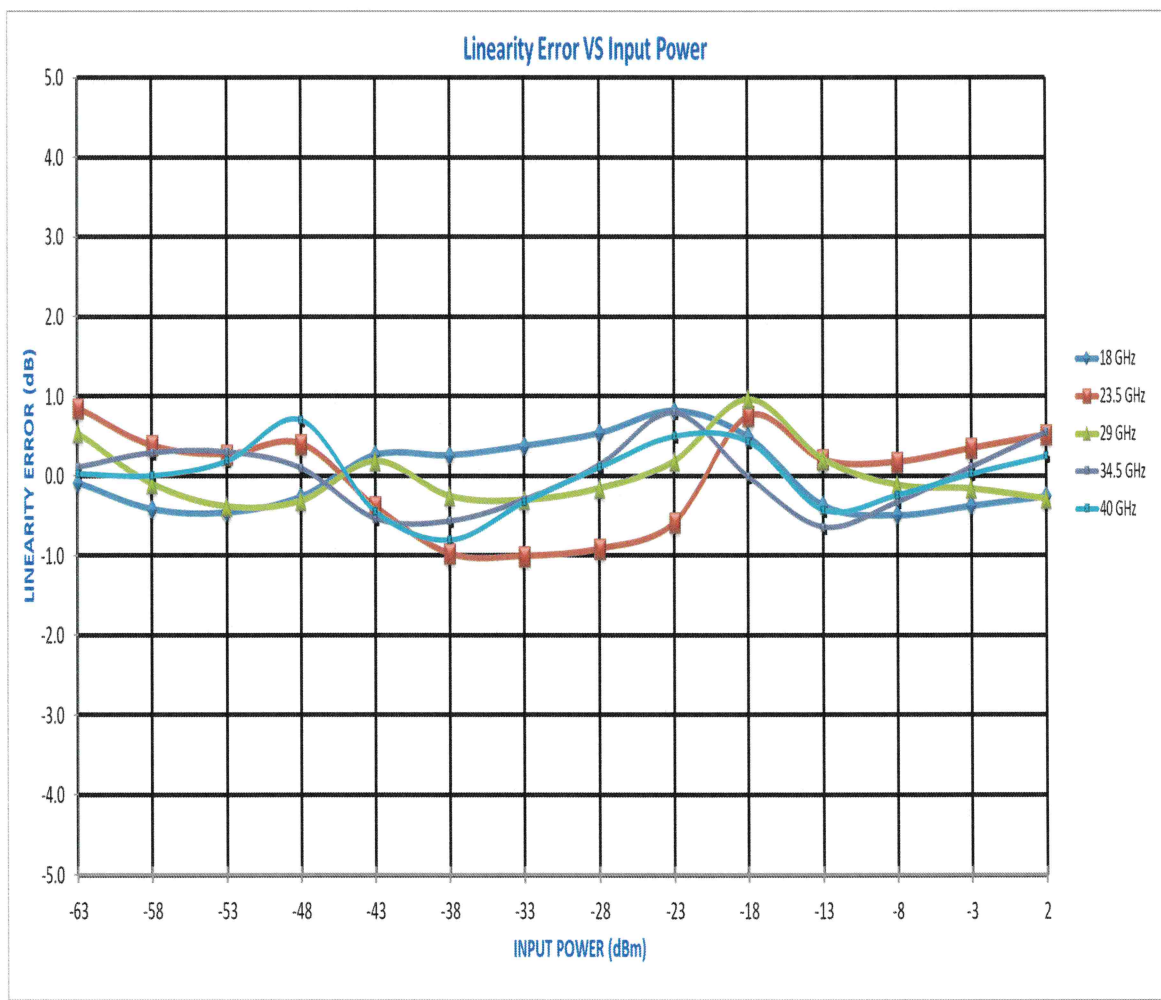


**SUMMARY TEST DATA
ON
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Model: SDLVA-18G40G-65-CD-292FF-OPHS Serial Number:PL49578

Graph #1 (cont.)

Log Transfer vs Frequency @+25C





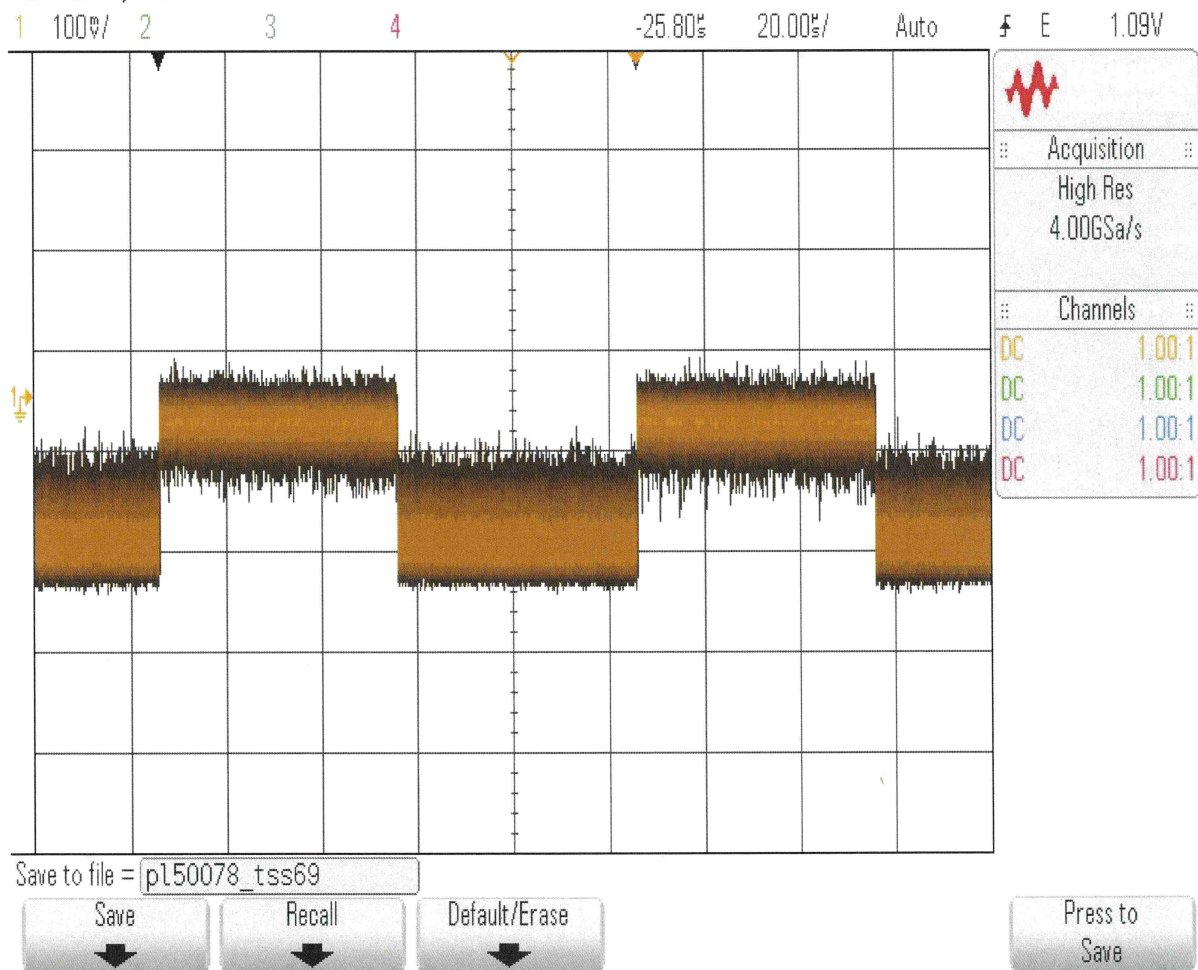
**SUMMARY TEST DATA
ON
SDLVA-18G40G-65-CD-292FF-
OPTHS**

Model: SDLVA-18G40G-65-CD-292FF-OPTHS Serial Number:PL49578

Graph #2

TSS-69dBm @+25C

MSO-X 3054A, MY53400180: Mon Jan 20 10:13:19 2025





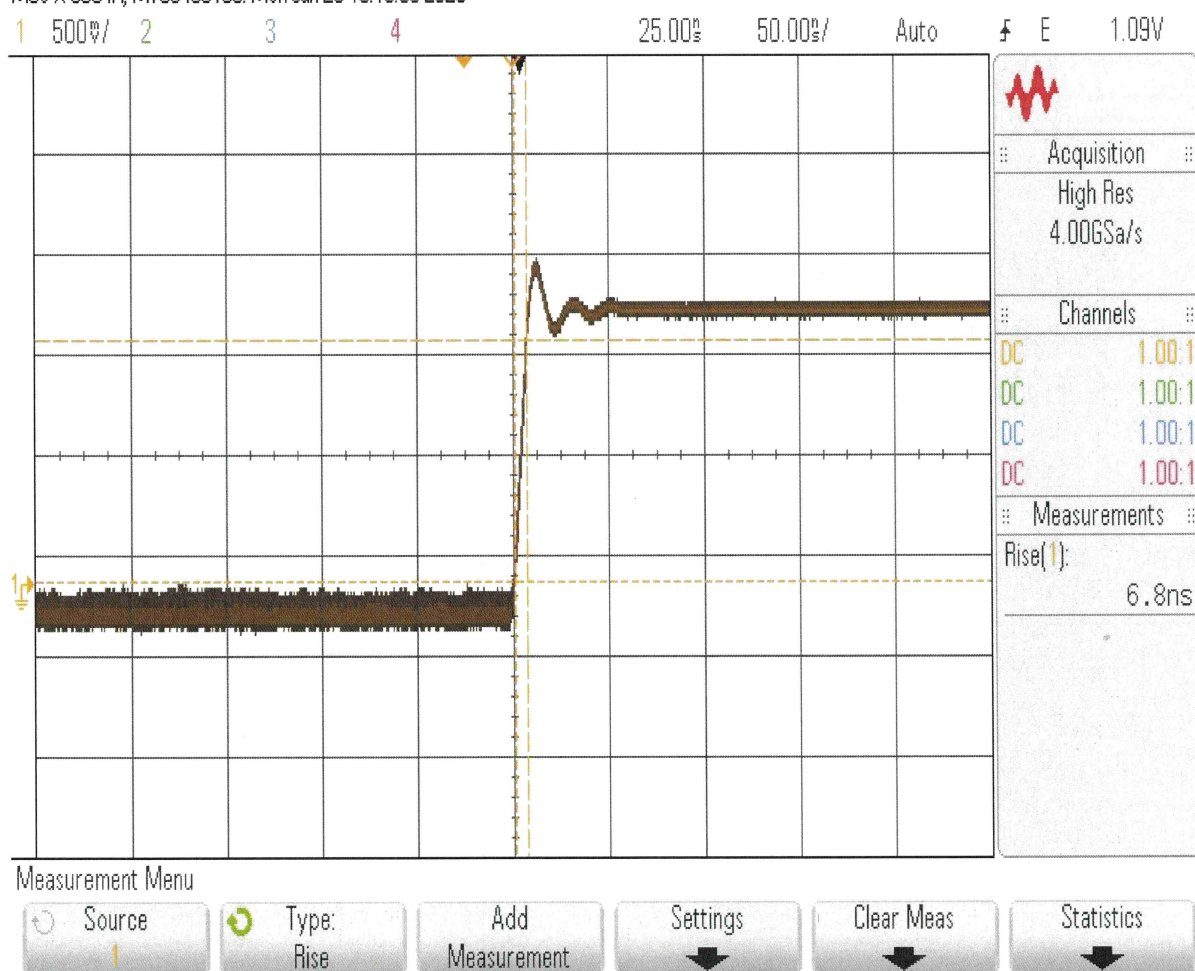
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OPHS**

Model: SDLVA-18G40G-65-CD-292FF-OPHS **Serial Number:PL49578**

Graph#3

Rise Time 6.8ns @+25C & +2dBm

MSO-X 3054A, MY53400180: Mon Jan 20 10:15:06 2025





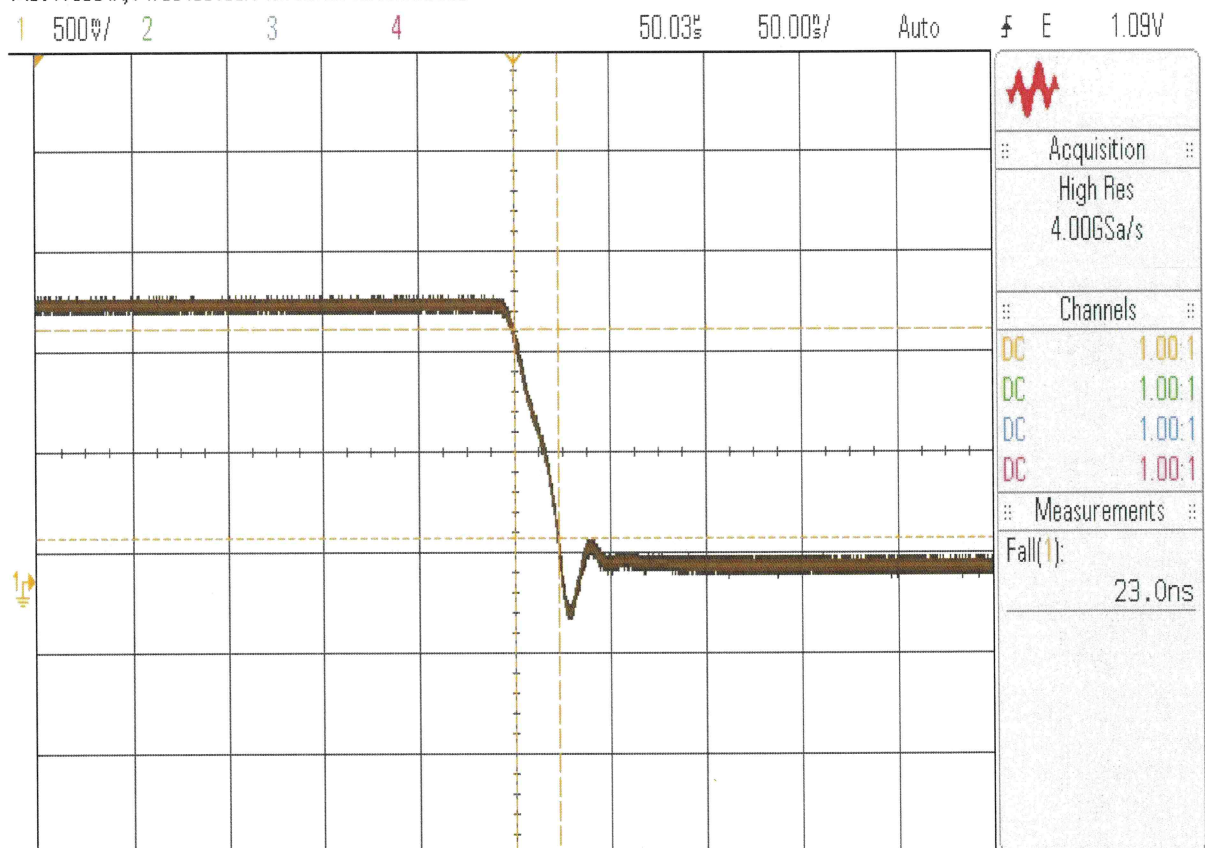
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Graph#4

Fall Time 23.0ns @+25C & +2dBm

MSO-X 3054A, MY53400180: Mon Jan 20 10:16:00 2025



Measurement Menu

Source
1

Type:
Fall

Add
Measurement

Settings
 $\downarrow$

Clear Meas
 $\downarrow$

Statistics
 $\downarrow$



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Graph #5

VSWR 1.88:1 @+25C & -20dBm

