



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.	±1.51dB	
6	Video Log Slope:	25 mV/dB Nom.	24.7mV/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.	1820mV 1734mV 207mV 120mV	
8	Video Frequency Flatness:	±2.5dB Max. @ 25°	2.20dB	
9	Pulse Width Range:	25 ns to CW	Pass	
10	Video Rise Time:	11ns (8 ns Typ.)	7.8ns	
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	2.04:1	
15	DC Power Supply:	+12V @ 400mA -12V @ 200mA	+12V@ 390mA -12V@ 159mA	

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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: PL50081

DATE: 01/21/25

TESTED BY: DA

Test Temp: +25C

GRAPH #1



PLANAR MONOLITHICS INDUSTRIES

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Frequency		-63	-58	-53	-48	-43	-38	-33	-28	-23	-18	-13	-8	-3	2	RF Input Power (dBm)		
18 GHz	INTERCEPT (mV)	1753	188	308	430	551	709	829	951	1074	1194	1315	1425	1546	1671	1793	Measured Value (mV)	Error(dB)
	SLOPE (mV/dB)	24.7	-7	-11	-12	-15	19	16	14	13	10	7	-7	-9	-8	-10	Error (mV)	MAX MIN
			-0.28	-0.43	-0.50	-0.61	0.78	0.63	0.57	0.54	0.39	0.28	-0.27	-0.38	-0.32	-0.39	LINEARITY ERROR (dB)	0.78 -0.61
23.5 GHz	INTERCEPT (mV)	1772	182	302	426	554	696	809	932	1058	1187	1327	1444	1569	1696	1820	Measured Value (mV)	Error(dB)
	SLOPE (mV/dB)	25.3	4	-2	-5	-3	12	-1	-5	-5	-3	11	1	0	0	-2	Error (mV)	MAX MIN
			0.16	-0.09	-0.19	-0.13	0.48	-0.05	-0.19	-0.21	-0.11	0.42	0.04	-0.02	0.00	-0.10	LINEARITY ERROR (dB)	0.48 -0.21
29 GHz	INTERCEPT (mV)	1713	120	240	363	484	611	747	865	990	1117	1256	1398	1514	1638	1761	Measured Value (mV)	Error(dB)
	SLOPE (mV/dB)	25.5	12	4	0	-6	-7	2	-7	-10	-10	2	16	5	2	-3	Error (mV)	MAX MIN
			0.45	0.17	0.00	-0.25	-0.26	0.08	-0.29	-0.38	-0.39	0.07	0.64	0.20	0.07	-0.10	LINEARITY ERROR (dB)	0.64 -0.39
34.5 GHz	INTERCEPT (mV)	1684	190	312	435	554	666	775	898	1025	1155	1284	1365	1481	1606	1734	Measured Value (mV)	Error(dB)
	SLOPE (mV/dB)	23.6	-5	-1	4	5	-2	-11	-6	3	15	26	-11	-13	-7	3	Error (mV)	MAX MIN
			-0.21	-0.05	0.16	0.20	-0.06	-0.45	-0.24	0.13	0.63	1.09	-0.48	-0.57	-0.28	0.14	LINEARITY ERROR (dB)	1.09 -0.57
40 GHz	INTERCEPT (mV)	1736	207	330	455	592	676	771	891	1019	1145	1299	1430	1552	1677	1804	Measured Value (mV)	Error(dB)
	SLOPE (mV/dB)	24.5	13	14	17	31	-7	-35	-37	-31	-28	4	13	12	15	19	Error (mV)	MAX MIN
			0.54	0.57	0.68	1.27	-0.29	-1.41	-1.51	-1.28	-1.13	0.16	0.51	0.50	0.60	0.79	LINEARITY ERROR (dB)	1.27 -1.51
Flatness +/- dB			1.80	1.80	1.90	2.20	2.00	1.70	1.70	1.70	1.80	1.40	1.60	1.80	1.80	1.70		
Max Video Output Volts			0.21	0.33	0.46	0.59	0.71	0.83	0.95	1.07	1.19	1.33	1.44	1.57	1.70	1.82		
Min Video Output Volts			0.12	0.24	0.36	0.48	0.61	0.75	0.87	0.99	1.12	1.26	1.37	1.48	1.61	1.73		
Nominal Log Slope mV/dB																	24.7	
Log Slope Variation: ± mV/dB																	0.92	
Video Output @ -63dBm																		
Min(V)=			120.0														65	
Max(V)=			207.0														280	
Video Output @ +24dBm																		
Min(V)=			1734.0														1476	
Max(V)=			1820.0														1940	

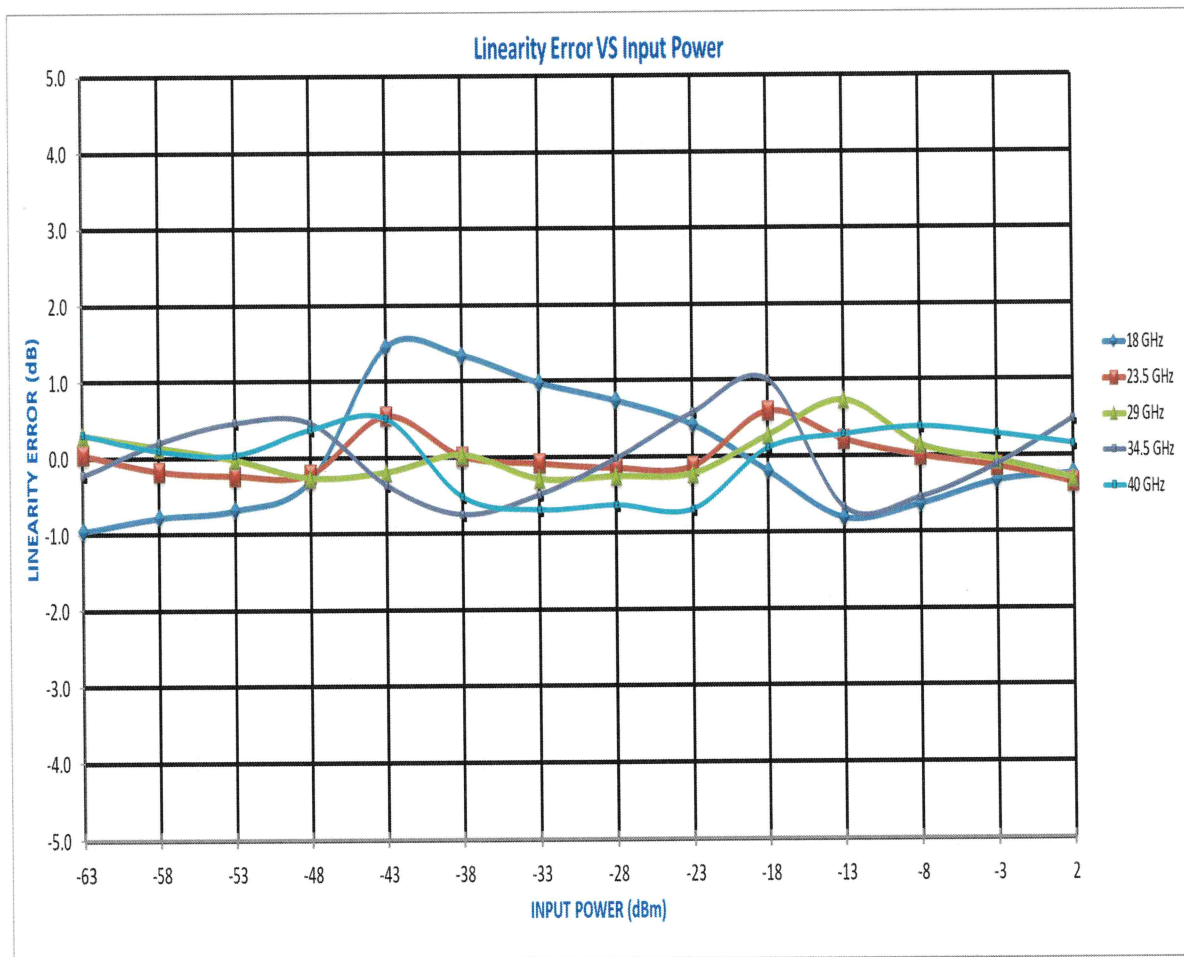


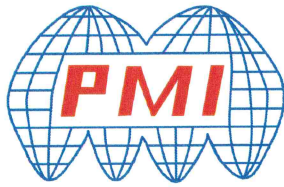
**SUMMARY TEST DATA
ON
SDLVA-18G40G-65-CD-292FF-
OPHS**

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

Graph #1 (cont.)

Log Transfer vs Frequency @+25C





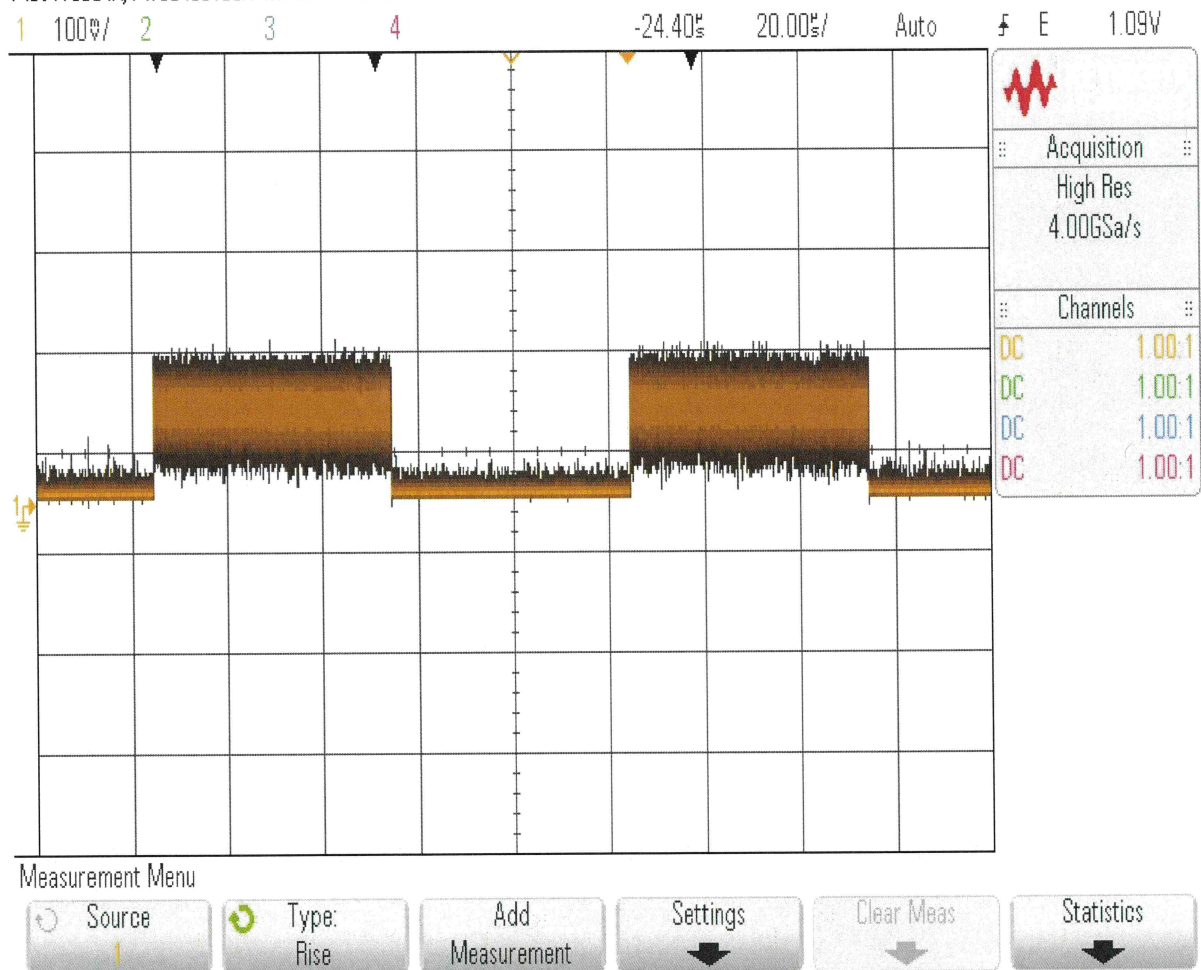
**SUMMARY TEST DATA
ON
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OPHS**

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

Graph #2

TSS-69dBm @+25C

MSO-X 3054A, MY53400180: Mon Jan 20 10:23:59 2025





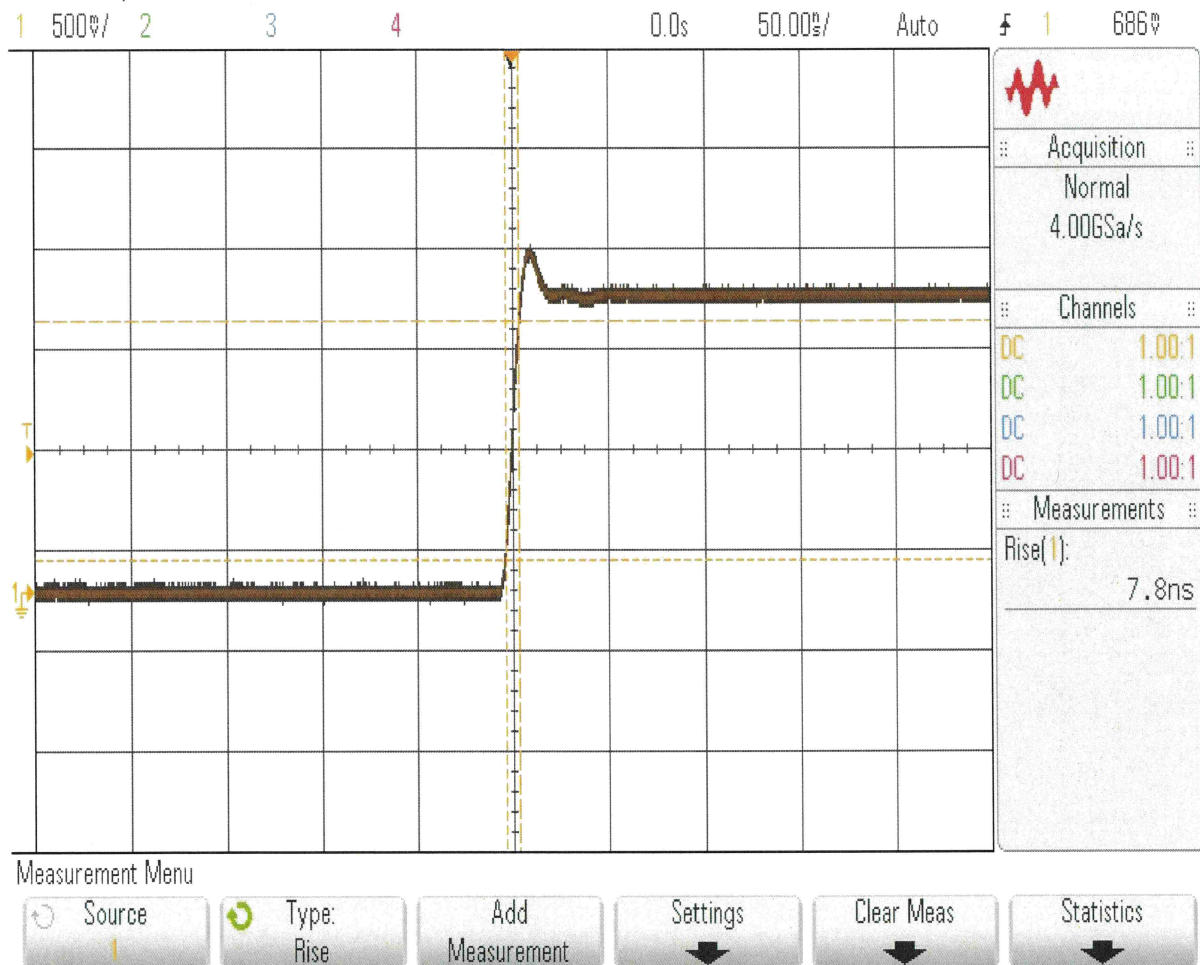
**SUMMARY TEST DATA
ON
SDLVA-18G40G-65-CD-292FF-
OPTHS**

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

Graph#3

Rise Time 7.8ns @+25C & +2dBm

MSO-X 3054A, MY53400180: Mon Jan 20 10:01:59 2025





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

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

Graph#4

Fall Time 25.3ns @+25C & +2dBm

MSO-X 3054A, MY53400180: Mon Jan 20 10:03:06 2025



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**SUMMARY TEST DATA
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Graph #5

VSWR 2.04:1 @+25C & -20dBm

