

SUMMARY TEST DATA ON SDLVA-1G20G-55-12-SFF

CUSTOMER: _____
SO: _____
MODEL NO: SDLVA-1G20G-55-12-SFF
SERIAL NO: PL53538/2526

TESTED BY: Jeremy Walker
TEMPERATURE: +25°C (Unless Otherwise Specified)
DATE: 6/24/2025
DRAWING NO: 27637600 **REV:** A1

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	Frequency Range	1 GHz – 20 GHz	1 GHz – 20 GHz	Pass
2	Frequency Flatness	±2.0 dB Typ	± 1.90 dB See Plot	Pass
3	Log Linearity	±1.5 dB Typ (-50 to 0dBm)	± 2.05 dB See Plot	Pass
4	Log Linearity Over Temp	±2.0 dB Typ (-50 to 0dBm) (@ -55°C to +85°C)	By Design	Pass
5	Logging Range	-55 to +5 dBm	PASS	Pass
6	Video Load	50 OHMS	50 OHMS	Pass
7	Input VSWR	2.8:1 Typ	4.44:1	Pass
8	Log Video Output Voltage	0.1 V to 2.5V Typ	See Plot	Pass
9	Log Video Output Slope	50 mV / dB Typ	50.42 mV/dB	Pass
10	Log Video Output Rise Time	5 ns Typ (Pin = -20 dBm @ 10% to 90%)	7.8 nS	Pass
11	Log Video Output Fall Time	20 ns Typ (Pin = -20 dBm @ 90% to 10%)	13.8 nS	Pass
12	Log Video Recovery Time	28 ns Typ (Pin = -50 dBm to 0 dBm)	25.4 nS	Pass
13	Log Video Propagation Delay	15 ns Typ	By Design	Pass
14	TSS	-58dBm Typ	-57.4 dBm	Pass
15	Power Supply	+8V to +15V @ 130mA Typ	119mA	Pass

QA/QC Approval:  **PMI**
 QAS K. Manning

Date: 6-25-25



PLANAR MONOLITHICS INDUSTRIES
 4921 Robert J. Mathews Parkway, Suite 1
 El Dorado Hills, CA 95762
 Phone: 916-542-1401 Fax: 301-662-1731
 Email: sales@pmi-rf.com/www.pmi-rf.com

LOG TRANSFER WITH FREQUENCY
 MODEL: SDLVA-1G20G-55-12-SFF
 TESTED BY: Jeremy Walker
 DATE: 6/24/2025
 SERIAL NO: PL53538
 Test Temp: +25C

Output Offset(V)= 0.230

Frequency

1 GHz	INTERCEPT (mV)	2861
	SLOPE (mV/dB)	52.5

4.17 GHz	INTERCEPT (mV)	2912
	SLOPE (mV/dB)	52.9

7.33 GHz	INTERCEPT (mV)	2952
	SLOPE (mV/dB)	52.1

10.5 GHz	INTERCEPT (mV)	2865
	SLOPE (mV/dB)	50.6

13.66 GHz	INTERCEPT (mV)	2844
	SLOPE (mV/dB)	48.9

16.83 GHz	INTERCEPT (mV)	2813
	SLOPE (mV/dB)	48.2

20 GHz	INTERCEPT (mV)	2768
	SLOPE (mV/dB)	47.9

Flatness +/-dB

Slope Avg(mv/dB) 50.4

	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
258	312	447	681	966	1255	1534	1812	2077	2340	2584	2825	2939	
284	75	-52	-81	-58	-32	-15	0	3	4	-15	-36	-185	
5.40	1.43	-1.00	-1.54	-1.11	-0.60	-0.29	0.01	0.06	0.07	-0.28	-0.69	-3.52	
261	322	477	731	1027	1320	1592	1863	2126	2386	2644	2862	2930	
256	53	-56	-67	-35	-6	1	8	7	3	-4	-50	-246	
4.85	1.00	-1.06	-1.26	-0.66	-0.12	0.03	0.15	0.13	0.05	-0.07	-0.95	-4.66	
266	333	502	763	1052	1331	1599	1867	2129	2383	2631	2847	2893	
178	-15	-107	-106	-77	-59	-51	-43	-42	-48	-60	-105	-319	
3.42	-0.30	-2.05	-2.04	-1.49	-1.13	-0.98	-0.83	-0.80	-0.92	-1.16	-2.01	-6.13	
274	355	547	811	1086	1355	1611	1869	2126	2373	2612	2809	2861	
190	19	-42	-31	-9	7	11	16	20	14	0	-56	-256	
3.77	0.37	-0.83	-0.61	-0.17	0.15	0.21	0.31	0.39	0.28	0.01	-1.10	-5.07	
291	400	613	870	1141	1392	1646	1894	2130	2368	2605	2788	2846	
135	0	-32	-19	7	14	24	27	19	13	5	-56	-243	
2.76	-0.01	-0.65	-0.39	0.15	0.29	0.48	0.56	0.39	0.26	0.10	-1.15	-4.96	
292	402	619	868	1137	1378	1625	1870	2106	2347	2565	2773	2901	
130	-1	-25	-17	11	11	17	21	16	16	-7	-40	-153	
2.69	-0.02	-0.52	-0.35	0.23	0.23	0.35	0.44	0.34	0.34	-0.14	-0.82	-3.17	
286	385	587	826	1092	1333	1590	1833	2056	2304	2511	2740	2890	
151	11	-27	-27	-1	1	19	22	6	14	-18	-28	-118	
3.15	0.22	-0.56	-0.57	-0.01	0.02	0.39	0.46	0.12	0.30	-0.38	-0.59	-2.46	
0.3	0.9	1.7	1.9	1.7	1.4	1.1	0.8	0.7	0.8	1.3	1.2	0.9	

RF Input Power (dBm)

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-1.54 1.43

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-1.26 1.00

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-2.05 -0.30

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-1.10 0.39

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-1.15 0.56

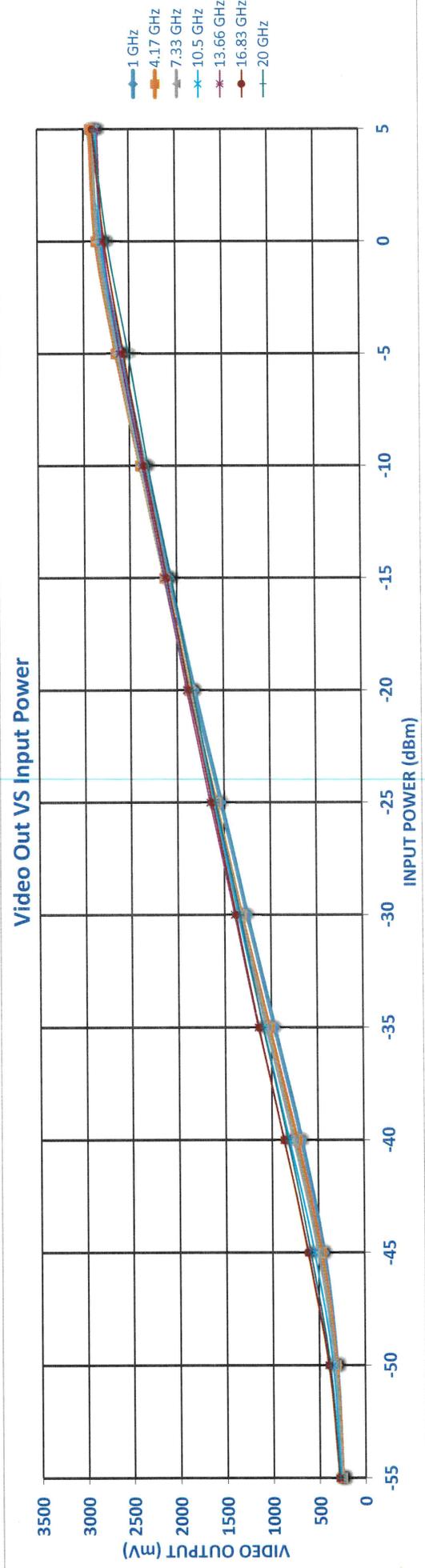
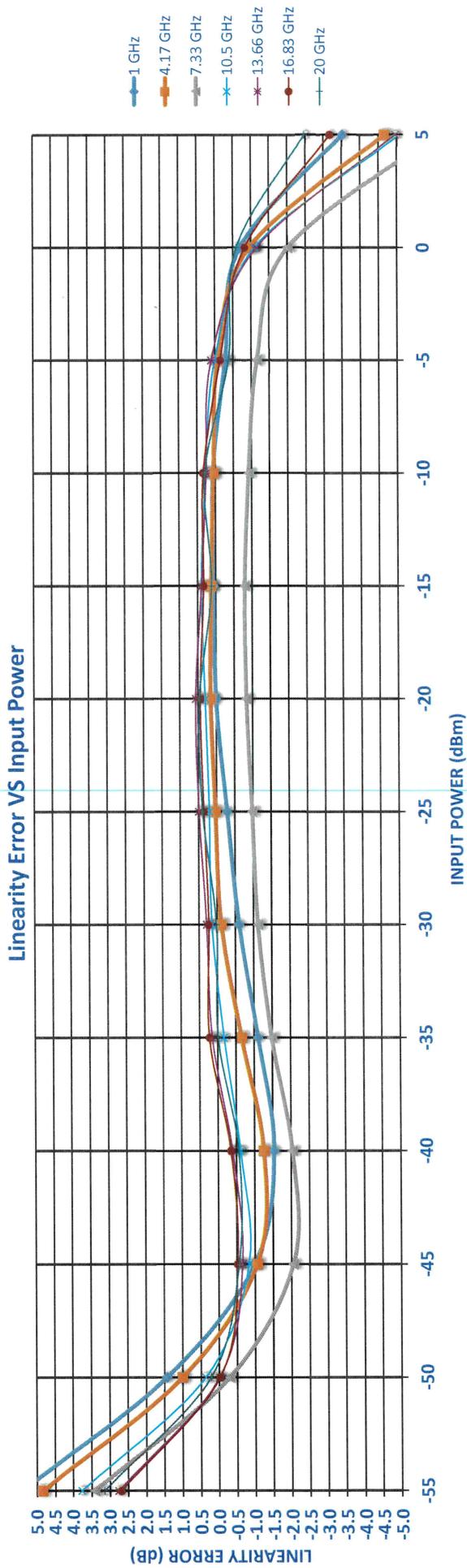
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.82 0.44

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.59 0.46

Flatness ERROR (dB)

+/- 1.90

LOG TRANSFER WITH FREQUENCY
 MODEL: SDLVA-1G20G-55-12-SFF
 SERIAL NO: PL53538
 Test Temp: +25C

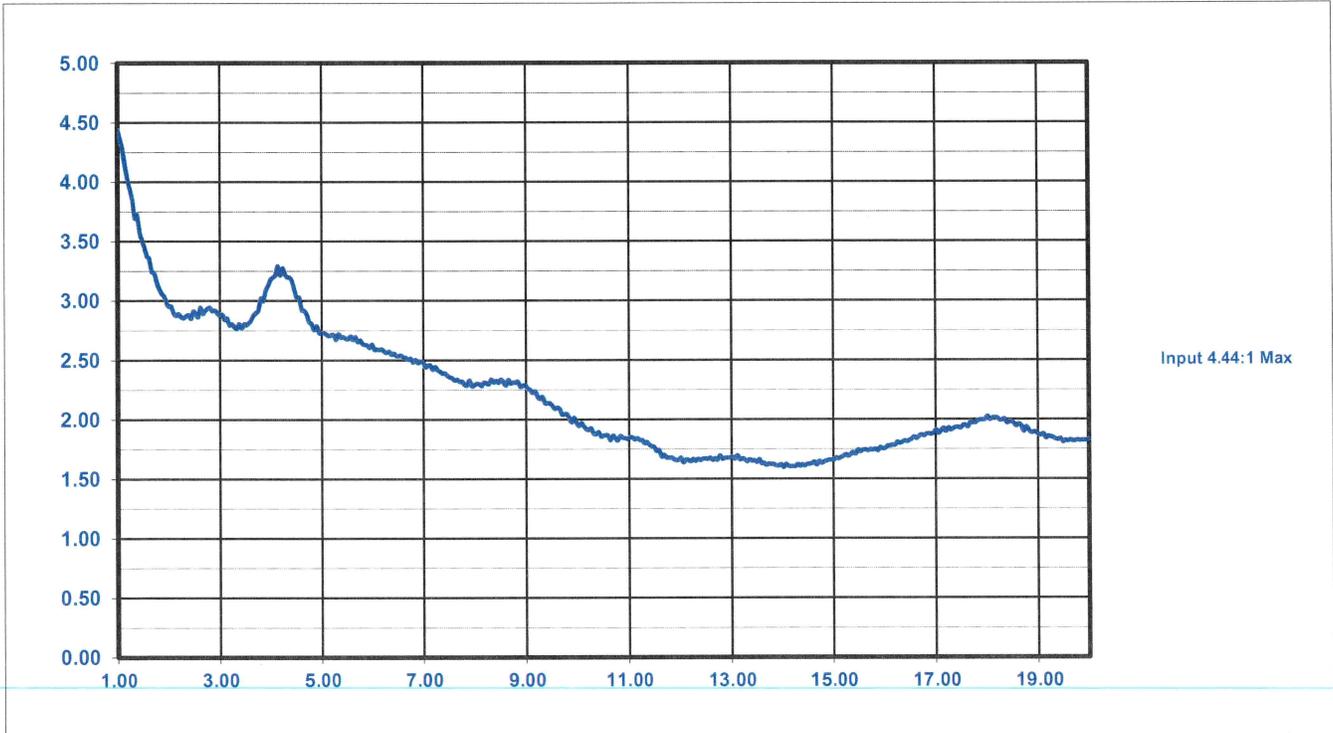




**SUMMARY TEST DATA
ON
SDLVA-1G20G-55-12-SFF**

Model Number: SDLVA-1G20G-55-12-SFF
Serial Number: PL53538

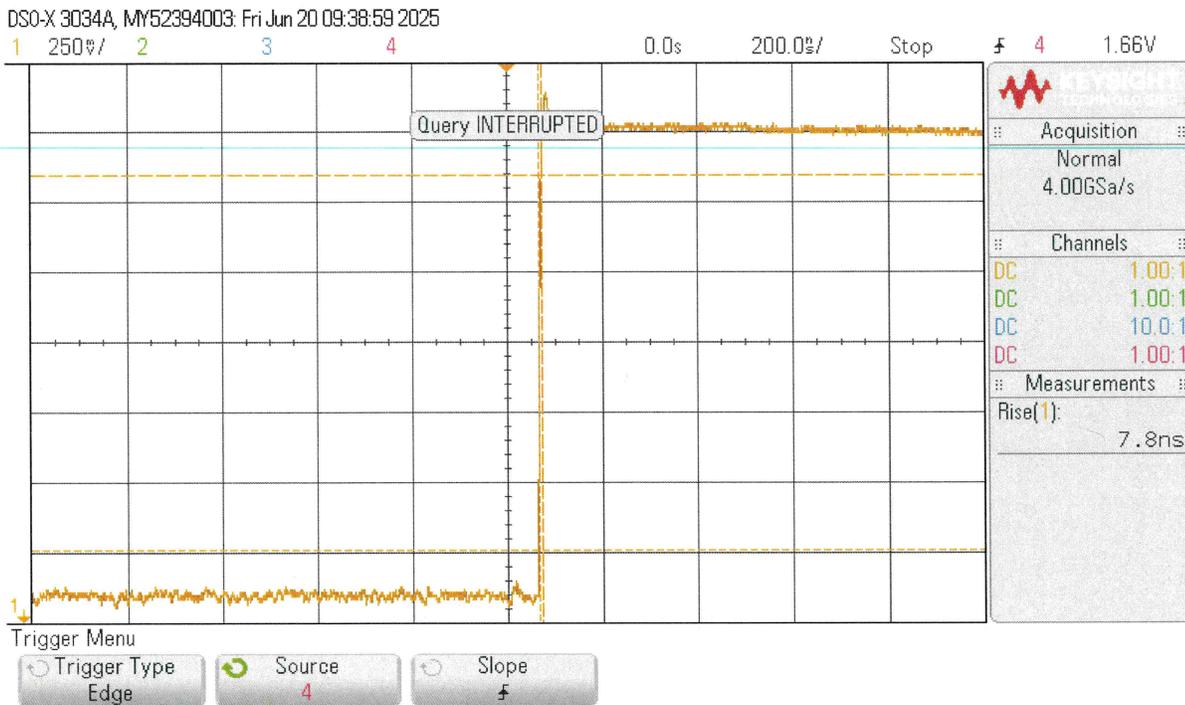
Temperature: +25C





**SUMMARY TEST DATA
ON
SDLVA-1G20G-55-12-SFF**

Rise Time = 7.8 ns





**SUMMARY TEST DATA
ON
SDLVA-1G20G-55-12-SFF**

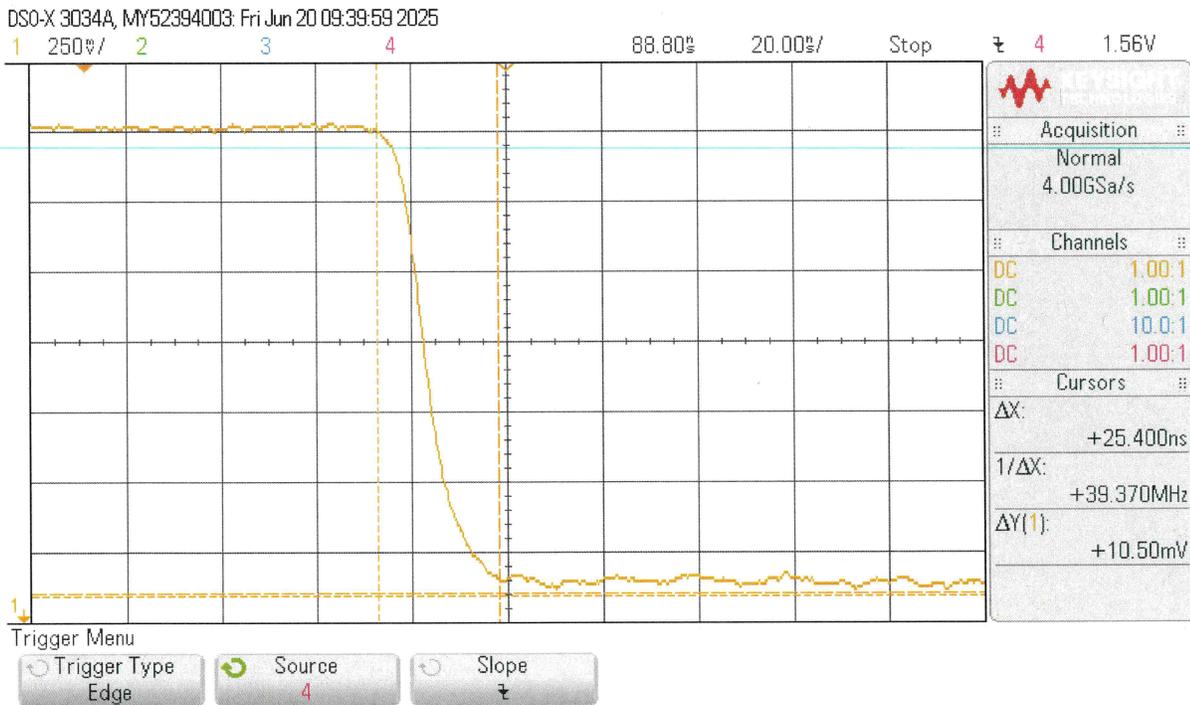
Fall Time = 13.8 ns





**SUMMARY TEST DATA
ON
SDLVA-1G20G-55-12-SFF**

Recovery Time = 25.4 ns





**SUMMARY TEST DATA
ON
SDLVA-1G20G-55-12-SFF**

TSS = -57.4 dBm

