

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

**CUSTOMER:** \_\_\_\_\_  
**SO:** \_\_\_\_\_  
**MODEL NO:** SDLVA-1G20G-55-12-SFF  
**SERIAL NO:** PL53230/2525

**TESTED BY:** Joshua Monley  
**TEMPERATURE:** +25°C (Unless Otherwise Specified)  
**DATE:** 6/12/2025  
**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	± 2.00 dB See Plot	Pass
3	Log Linearity	±1.5 dB Typ (-50 to 0dBm)	± 1.96 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	4.388:1	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	49.55 mV/dB	Pass
10	Log Video Output Rise Time	5 ns Typ (Pin = -20 dBm @ 10% to 90%)	7.2 nS	Pass
11	Log Video Output Fall Time	20 ns Typ (Pin = -20 dBm @ 90% to 10%)	19 nS	Pass
12	Log Video Recovery Time	28 ns Typ (Pin = -50 dBm to 0 dBm)	45 nS	Pass
13	Log Video Propagation Delay	15 ns Typ	By Design	Pass
14	TSS	-58dBm Typ	-56.3 dBm	Pass
15	Power Supply	+8V to +15V @ 130mA Typ	110mA	Pass

QA/QC Approval:  \_\_\_\_\_

Date: 6-17-25

LOG TRANSFER WITH FREQUENCY  
 MODEL: SDLVA-1G20G-55-12-SFF  
 TESTED BY: Joshua Monley  
 DATE: 6/12/2025  
 SERIAL NO: PL53230  
 Test Temp: +25C

Output Offset(V) = 0.209



PLANAR MONOLITHICS INDUSTRIES  
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Frequency

-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
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RF Input Power (dBm)

1 GHz	INTERCEPT (mV)	2763
	SLOPE (mV/dB)	51.5

229	273	397	623	894	1167	1447	1716	1980	2246	2499	2742	2853
300	87	-47	-79	-65	-50	-28	-16	-10	-2	-6	-21	-168
5.83	1.68	-0.91	-1.53	-1.27	-0.97	-0.54	-0.32	-0.20	-0.03	-0.12	-0.41	-3.25

Measured Value (mV)	2763
Error (mV)	51.5
LINEARITY ERROR (dB)	-1.53

4.17 GHz	INTERCEPT (mV)	2812
	SLOPE (mV/dB)	51.9

230	281	424	672	956	1226	1506	1769	2031	2293	2553	2776	2846
272	64	-53	-64	-40	-29	-9	-5	-3	0	0	-36	-226
5.25	1.23	-1.02	-1.24	-0.77	-0.56	-0.17	-0.10	-0.05	-0.01	0.00	-0.70	-4.35

Measured Value (mV)	2812
Error (mV)	51.9
LINEARITY ERROR (dB)	-1.24

7.33 GHz	INTERCEPT (mV)	2830
	SLOPE (mV/dB)	51.0

234	290	442	691	970	1230	1503	1764	2020	2279	2526	2751	2808
208	9	-94	-100	-76	-71	-52	-46	-45	-41	-49	-79	-277
4.08	0.18	-1.84	-1.96	-1.48	-1.38	-1.03	-0.91	-0.89	-0.81	-0.96	-1.55	-5.43

Measured Value (mV)	2830
Error (mV)	51.0
LINEARITY ERROR (dB)	-1.96

10.5 GHz	INTERCEPT (mV)	2783
	SLOPE (mV/dB)	49.8

246	325	500	751	1023	1276	1543	1794	2041	2293	2546	2731	2773
203	33	-41	-39	-16	-12	5	7	5	8	12	-52	-259
4.07	0.66	-0.83	-0.79	-0.33	-0.25	0.11	0.15	0.11	0.17	0.25	-1.04	-5.19

Measured Value (mV)	2783
Error (mV)	49.8
LINEARITY ERROR (dB)	-0.83

13.66 GHz	INTERCEPT (mV)	2770
	SLOPE (mV/dB)	48.2

264	372	572	818	1083	1320	1585	1822	2059	2299	2538	2720	2769
144	11	-30	-25	-1	-4	20	16	12	11	9	-50	-242
2.99	0.23	-0.62	-0.51	-0.01	-0.09	0.41	0.33	0.25	0.23	0.19	-1.04	-5.02

Measured Value (mV)	2770
Error (mV)	48.2
LINEARITY ERROR (dB)	-0.62

16.83 GHz	INTERCEPT (mV)	2737
	SLOPE (mV/dB)	47.4

270	384	572	814	1086	1314	1581	1802	2026	2267	2490	2713	2836
137	14	-34	-29	6	-3	28	12	-1	3	-11	-24	-138
2.90	0.30	-0.73	-0.62	0.13	-0.06	0.58	0.25	-0.02	0.07	-0.22	-0.51	-2.92

Measured Value (mV)	2737
Error (mV)	47.4
LINEARITY ERROR (dB)	-0.73

20 GHz	INTERCEPT (mV)	2717
	SLOPE (mV/dB)	47.1

270	380	564	800	1068	1300	1572	1777	2005	2247	2460	2708	2826
144	19	-33	-33	0	-4	33	2	-6	1	-22	-9	-127
3.06	0.40	-0.70	-0.69	0.00	-0.08	0.69	0.04	-0.12	0.02	-0.46	-0.20	-2.69

Measured Value (mV)	2717
Error (mV)	47.1
LINEARITY ERROR (dB)	-0.70

0.4	1.1	1.8	2.0	1.9	1.5	1.4	1.1	0.8	0.5	0.9	0.7	0.8
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Measured Value (mV)	2717
Error (mV)	47.1
LINEARITY ERROR (dB)	-0.70

Slope Avg(mv/dB) 49.6

Flatness +/-dB

+/- 2.00 FLATNESS ERROR (dB)

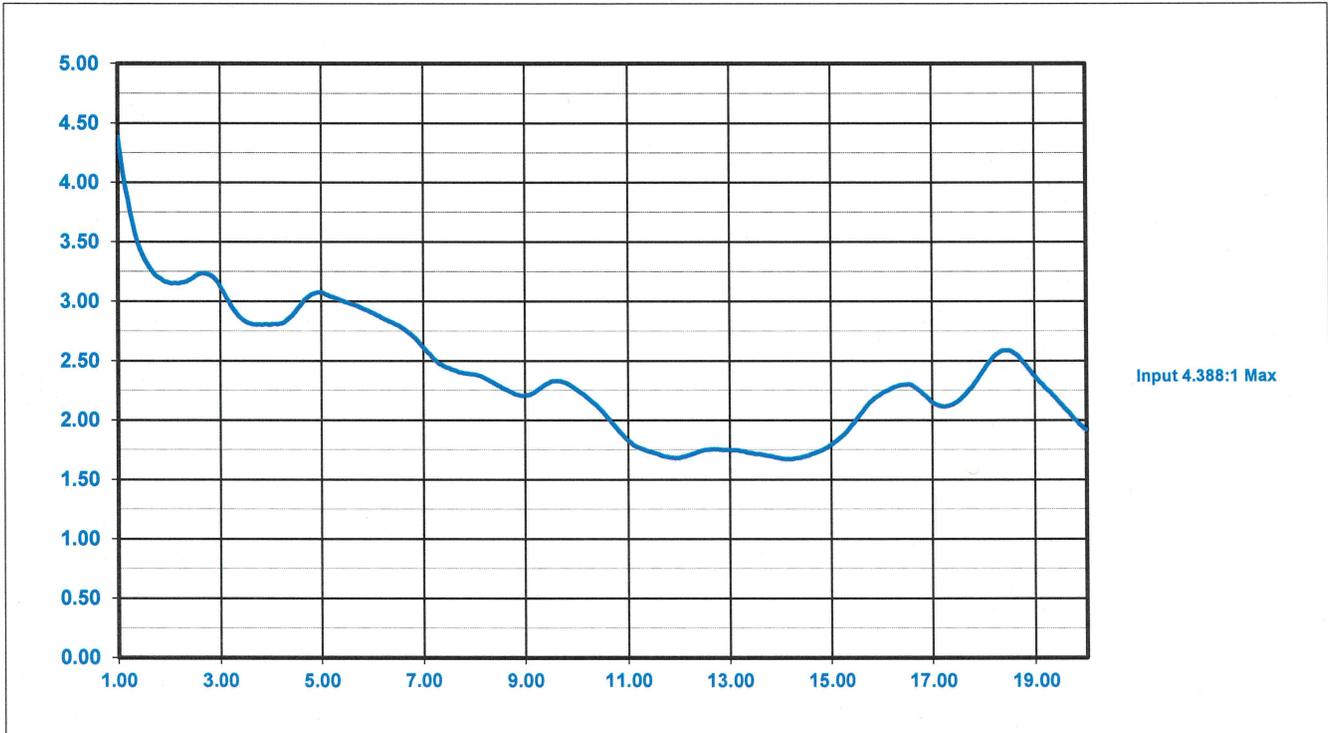




**SUMMARY TEST DATA  
ON  
SDLVA-1G20G-55-12-SFF**

Model Number: SDLVA-1G20G-55-12-SFF  
Serial Number: PL53230

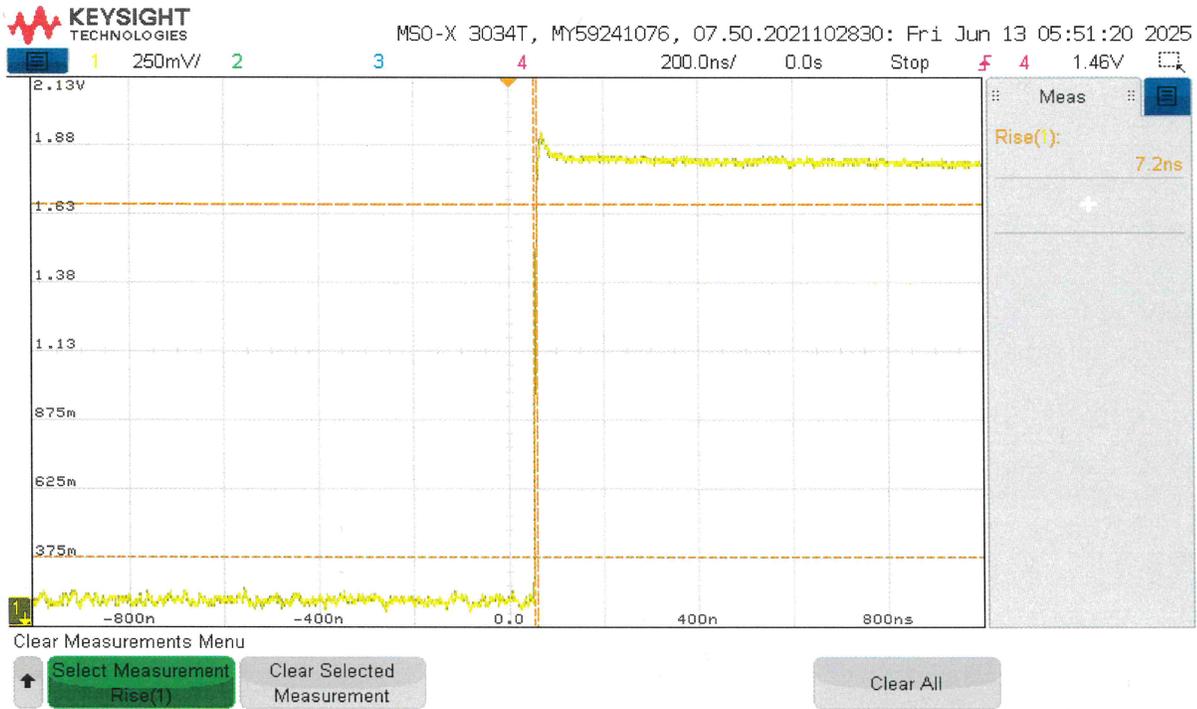
Temperature: +25C





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SDLVA-1G20G-55-12-SFF**

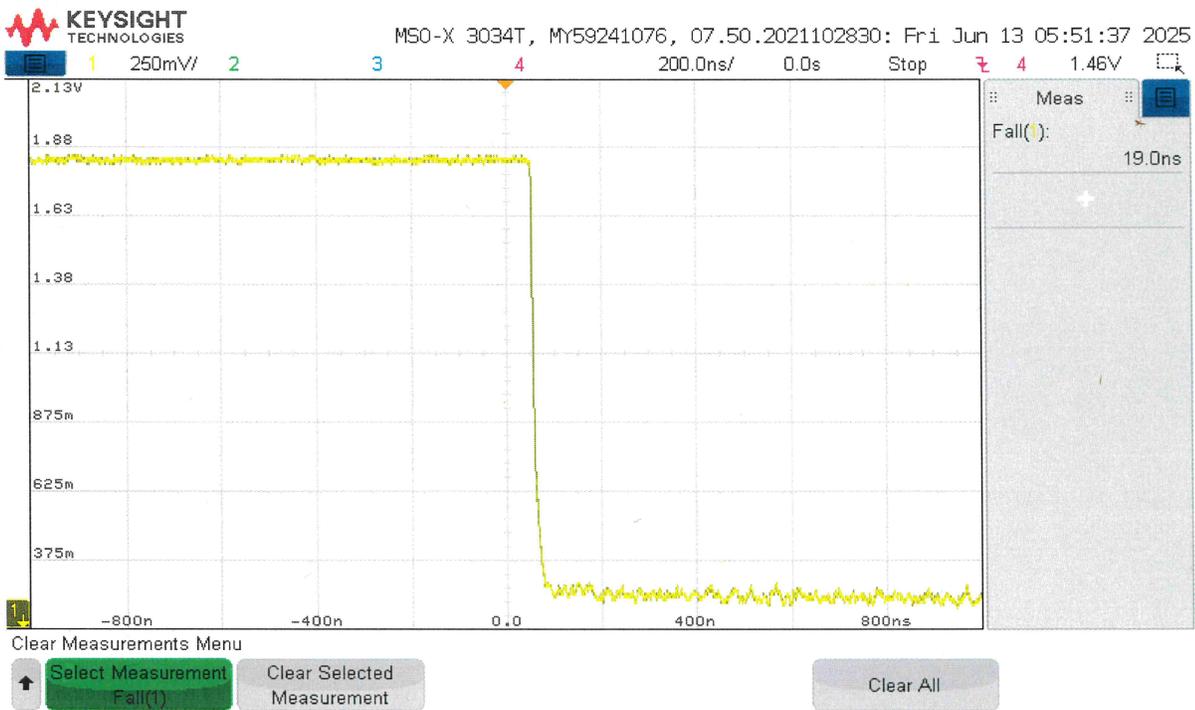
Rise Time = 7.2 ns





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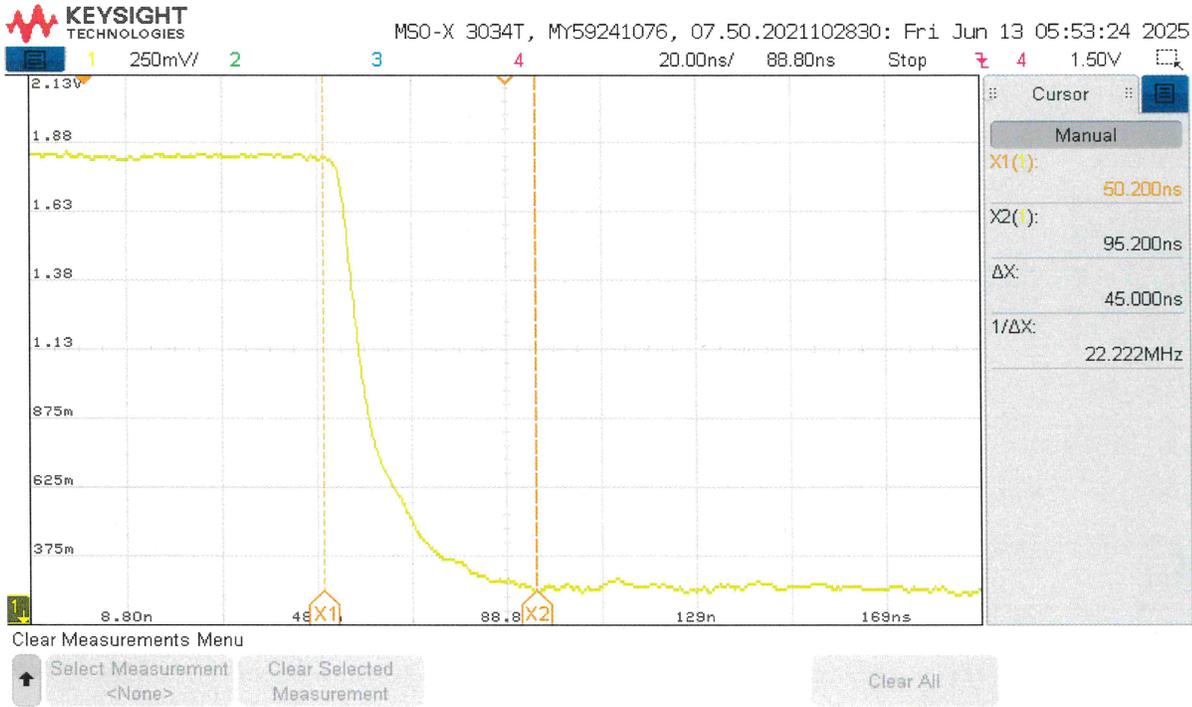
Fall Time = 19 ns





**SUMMARY TEST DATA  
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Recovery Time = 45 ns





**SUMMARY TEST DATA  
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**TSS = -56.3 dBm**

