

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

CUSTOMER: \_\_\_\_\_  
SO: \_\_\_\_\_  
MODEL NO: SDLVA-1G20G-55-12-SFF  
SERIAL NO: PL53232/2525

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	± 2.10 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	4.265:1	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	50.04 mV/dB	Pass
10	Log Video Output Rise Time	5 ns Typ (Pin = -20 dBm @ 10% to 90%)	7 nS	Pass
11	Log Video Output Fall Time	20 ns Typ (Pin = -20 dBm @ 90% to 10%)	10.4 nS	Pass
12	Log Video Recovery Time	28 ns Typ (Pin = -50 dBm to 0 dBm)	26.6 nS	Pass
13	Log Video Propagation Delay	15 ns Typ	By Design	Pass
14	TSS	-58dBm Typ	-58.9 dBm	Pass
15	Power Supply	+8V to +15V @ 130mA Typ	110mA	Pass

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

Date: 6-17-25



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LOG TRANSFER WITH FREQUENCY  
 MODEL: SDLVA-1G20G-55-12-SFF  
 TESTED BY: Joshua Monley  
 DATE: 6/12/2025  
 SERIAL NO: PL53232  
 Test Temp: +25C

Output Offset(V)= 0.172

Frequency

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	2827	52.3	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
1 GHz	2827	52.3	210	282	438	674	946	1219	1500	1773	2040	2309	2561	2802	2925			Measured Value (mV)
			257	67	-38	-63	-52	-41	-21	-9	-3	4	-5	-25	-163			Error (mV)
			4.91	1.29	-0.72	-1.21	-1.00	-0.78	-0.40	-0.17	-0.06	0.08	-0.09	-0.48	-3.13			LINEARITY ERROR (dB)
4.17 GHz	2881	52.5	217	301	476	727	1012	1286	1566	1832	2097	2362	2619	2839	2927			Measured Value (mV)
			225	46	-41	-53	-30	-19	-2	2	4	7	1	-42	-216			Error (mV)
			4.28	0.88	-0.79	-1.01	-0.58	-0.36	-0.03	0.03	0.08	0.13	0.02	-0.79	-4.11			LINEARITY ERROR (dB)
7.33 GHz	2930	51.5	225	319	505	762	1042	1301	1574	1838	2096	2357	2604	2824	2893			Measured Value (mV)
			130	-33	-105	-106	-84	-82	-67	-61	-61	-57	-68	-106	-294			Error (mV)
			2.53	-0.65	-2.04	-2.05	-1.62	-1.60	-1.30	-1.18	-1.17	-1.11	-1.32	-2.05	-5.71			LINEARITY ERROR (dB)
10.5 GHz	2860	50.4	242	360	564	820	1091	1344	1609	1866	2114	2369	2624	2808	2861			Measured Value (mV)
			151	17	-30	-26	-7	13	9	12	15	15	-52	-251				Error (mV)
			3.00	0.34	-0.60	-0.52	-0.14	-0.11	0.15	0.25	0.18	0.24	0.31	-1.04	-4.99			LINEARITY ERROR (dB)
13.66 GHz	2838	48.5	266	414	635	883	1145	1382	1643	1887	2124	2370	2609	2786	2848			Measured Value (mV)
			96	1	-20	-15	5	-1	17	19	13	17	13	-52	-233			Error (mV)
			1.97	0.02	-0.42	-0.31	0.09	-0.02	0.36	0.39	0.28	0.35	0.27	-1.08	-4.80			LINEARITY ERROR (dB)
16.83 GHz	2816	47.7	277	436	647	889	1160	1386	1650	1879	2101	2350	2574	2786	2911			Measured Value (mV)
			83	3	-24	-20	12	0	26	16	0	11	-4	-30	-143			Error (mV)
			1.73	0.07	-0.50	-0.43	0.26	0.00	0.54	0.34	0.00	0.23	-0.08	-0.63	-3.01			LINEARITY ERROR (dB)
20 GHz	2792	47.4	273	426	635	871	1140	1367	1638	1853	2078	2328	2539	2774	2904			Measured Value (mV)
			90	6	-22	-23	8	-2	32	10	-2	11	-16	-18	-125			Error (mV)
			1.90	0.12	-0.47	-0.49	0.18	-0.04	0.68	0.21	-0.05	0.22	-0.33	-0.38	-2.63			LINEARITY ERROR (dB)
			0.7	1.5	2.1	2.1	2.1	1.7	1.5	1.1	0.8	0.6	0.8	0.6	0.8			FLATNESS ERROR (dB)

Slope Avg(mv/dB) 50.0

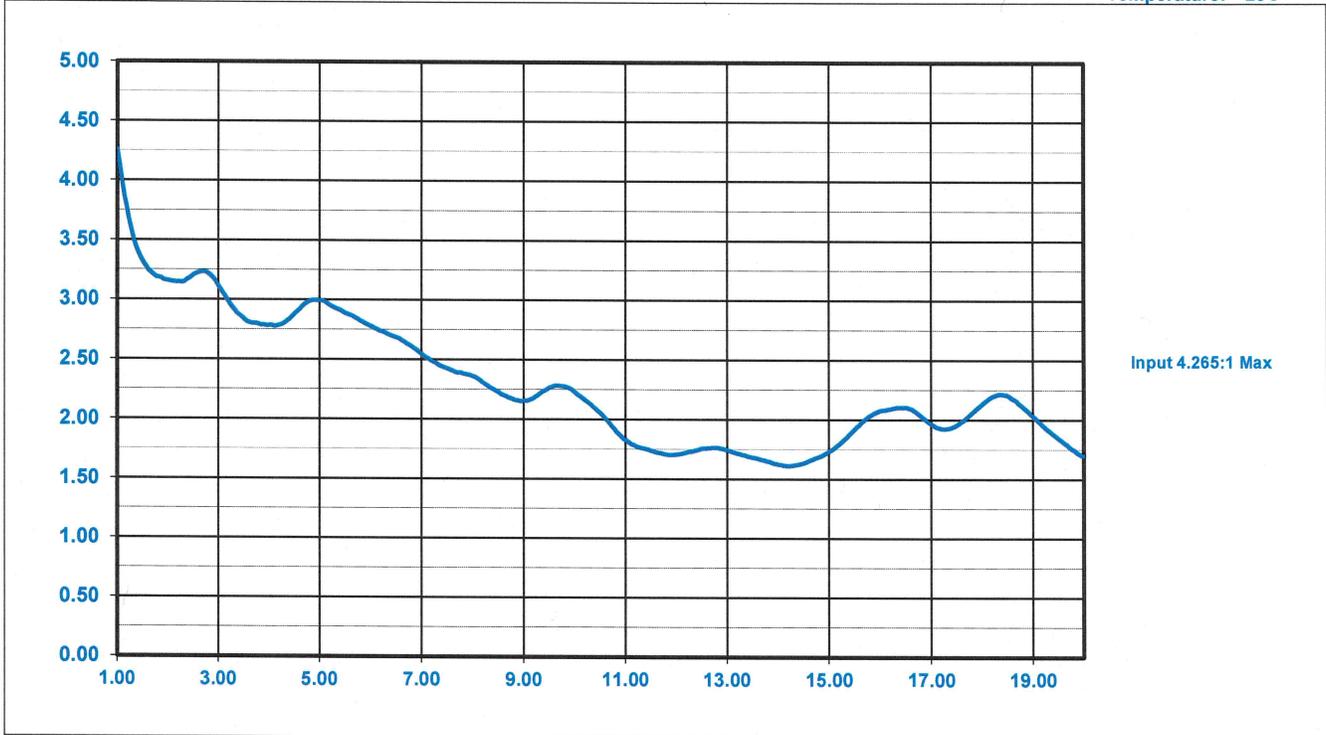




**SUMMARY TEST DATA  
ON  
SDLVA-1G20G-55-12-SFF**

Model Number: SDLVA-1G20G-55-12-SFF  
Serial Number: PL53232

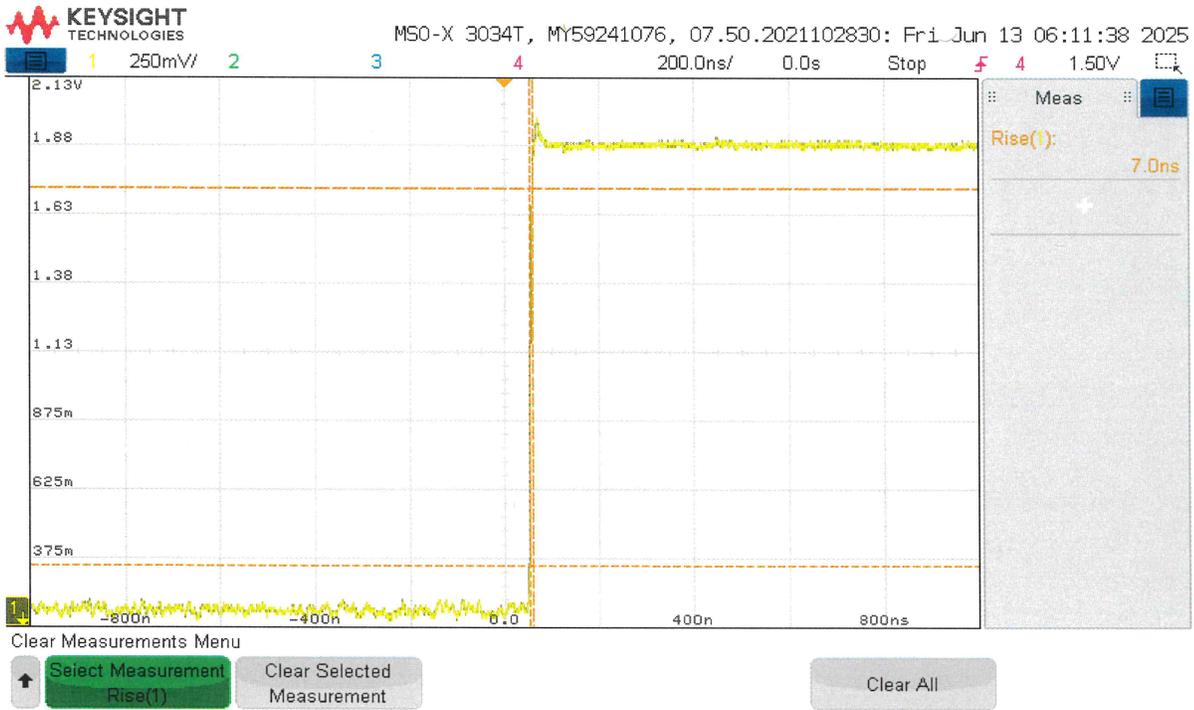
Temperature: +25C





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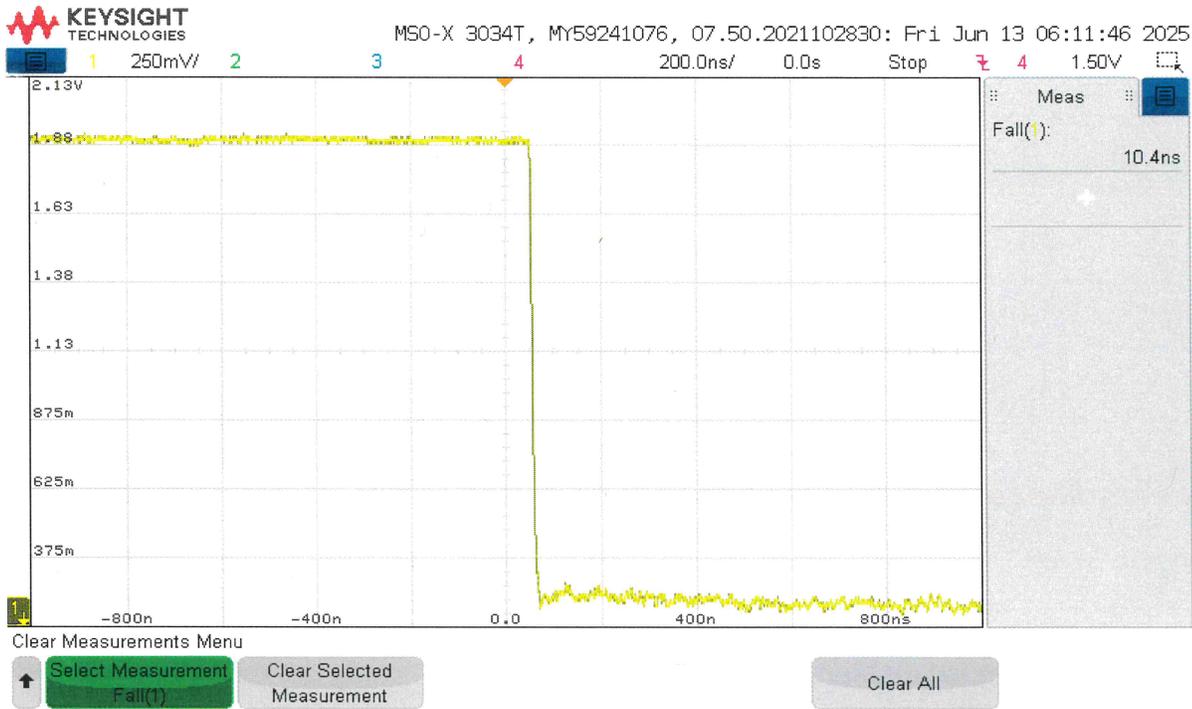
Rise Time = 7 ns





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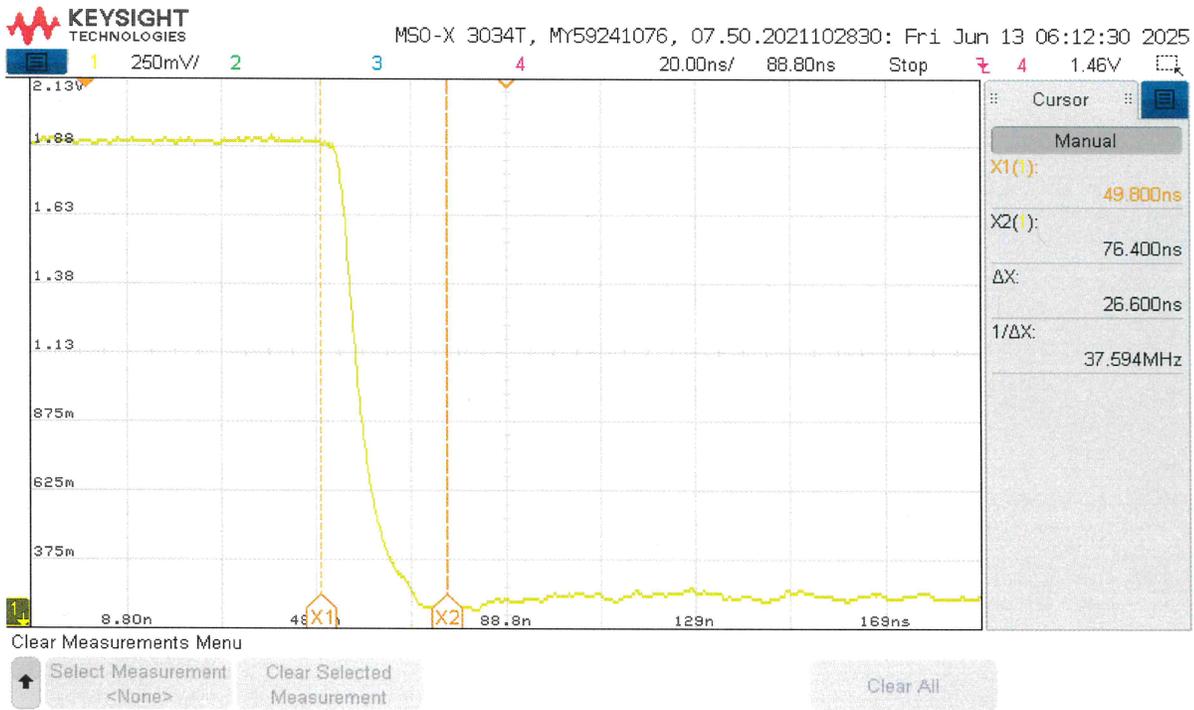
Fall Time = 10.4 ns





**SUMMARY TEST DATA  
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Recovery Time = 26.6 ns





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TSS = -58.9 dBm

