

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

CUSTOMER: _____
SO: _____
MODEL NO: SDLVA-1G20G-55-12-SFF
SERIAL NO: PL53493/2526

TESTED BY: Jeremy Walker
TEMPERATURE: +25°C (Unless Otherwise Specified)
DATE: 6/25/2025
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	± 2.50 dB See Plot	Pass
3	Log Linearity	±1.5 dB Typ (-50 to 0dBm)	± 2.40 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	1.871:1	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	51.04 mV/dB	Pass
10	Log Video Output Rise Time	5 ns Typ (Pin = -20 dBm @ 10% to 90%)	8 nS	Pass
11	Log Video Output Fall Time	20 ns Typ (Pin = -20 dBm @ 90% to 10%)	11 nS	Pass
12	Log Video Recovery Time	28 ns Typ (Pin = -50 dBm to 0 dBm)	31 nS	Pass
13	Log Video Propagation Delay	15 ns Typ	By Design	Pass
14	TSS	-58dBm Typ	-57 dBm	Pass
15	Power Supply	+8V to +15V @ 130mA Typ	130mA	Pass

QA/QC Approval  _____

Date: 6-25-25



PLANAR MONOLITHICS INDUSTRIES
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 Email: sales@pmi-rf.com/www.pmi-rf.com

LOG TRANSFER WITH FREQUENCY
 MODEL: SDLVA-1G20G-55-12-SFF
 TESTED BY: Jeremy Walker
 DATE: 6/25/2025
 SERIAL NO: PL53493
 Test Temp: +25C

Output Offset(V)= 0.151

Frequency

1 GHz	INTERCEPT (mV)	2763
	SLOPE (mV/dB)	52.8

4.17 GHz	INTERCEPT (mV)	2834
	SLOPE (mV/dB)	53.3

7.33 GHz	INTERCEPT (mV)	2889
	SLOPE (mV/dB)	52.5

10.5 GHz	INTERCEPT (mV)	2820
	SLOPE (mV/dB)	51.4

13.66 GHz	INTERCEPT (mV)	2798
	SLOPE (mV/dB)	49.8

16.83 GHz	INTERCEPT (mV)	2784
	SLOPE (mV/dB)	49.0

20 GHz	INTERCEPT (mV)	2733
	SLOPE (mV/dB)	48.4

Flatness +/-dB

Slope Avg(mv/dB) | 51.0

RF Input Power (dBm)

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	
	-1.70 1.92

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	
	-1.40 1.35

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	
	-2.40 -0.17

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	
	-0.73 0.59

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	
	-0.61 0.39

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	
	-0.36 0.40

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	
	-0.49 0.67

+/- 2.50 FLATNESS ERROR (dB)

Output Offset(V)= 0.151

	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
175	223	342	560	835	1122	1396	1681	1955	2225	2488	2758	2970	
318	101	-44	-90	-79	-56	-46	-25	-15	-10	-11	-5	-57	
6.01	1.92	-0.83	-1.70	-1.49	-1.06	-0.87	-0.48	-0.29	-0.18	-0.20	-0.09	-1.08	

184	243	387	629	918	1212	1484	1765	2029	2295	2553	2815	2992	
279	72	-50	-75	-52	-24	-19	-4	-6	-7	-15	-19	-109	
5.25	1.35	-0.94	-1.40	-0.97	-0.45	-0.35	-0.07	-0.12	-0.12	-0.28	-0.36	-2.04	

189	253	409	661	948	1227	1493	1770	2029	2291	2545	2805	2987	
190	-9	-115	-126	-102	-86	-82	-68	-72	-72	-81	-84	-165	
3.62	-0.17	-2.20	-2.40	-1.94	-1.63	-1.57	-1.29	-1.37	-1.38	-1.54	-1.60	-3.13	

199	282	471	734	1010	1274	1531	1796	2052	2305	2551	2806	2940	
204	31	-37	-31	-12	-5	-5	3	2	-2	-13	-14	-137	
3.98	0.59	-0.73	-0.61	-0.24	-0.10	-0.10	0.06	0.04	-0.03	-0.25	-0.28	-2.67	

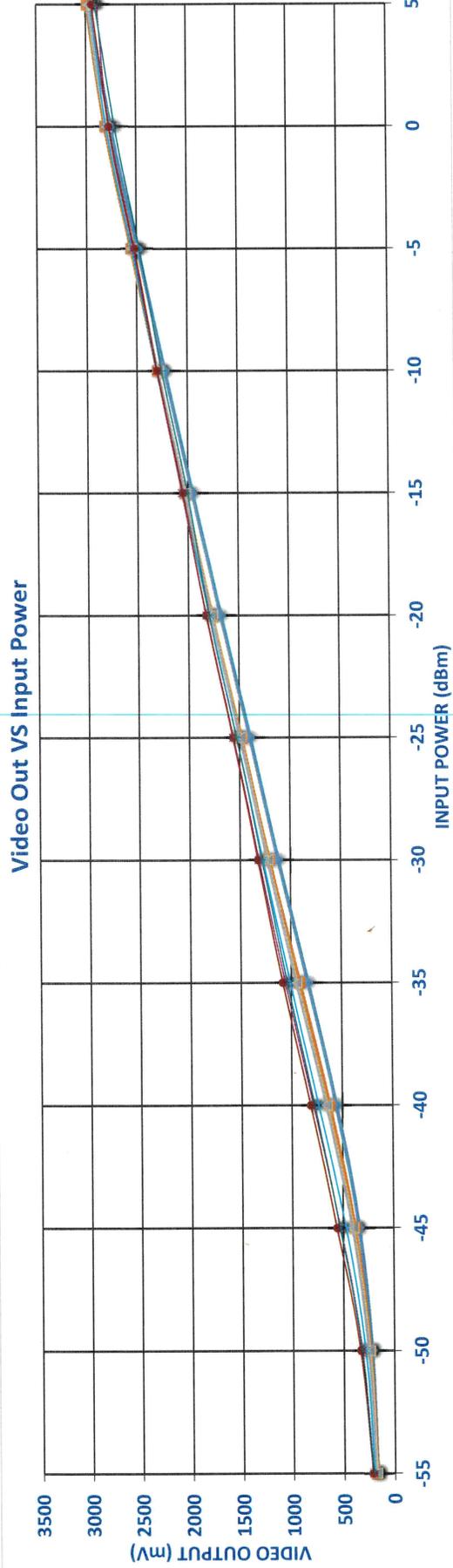
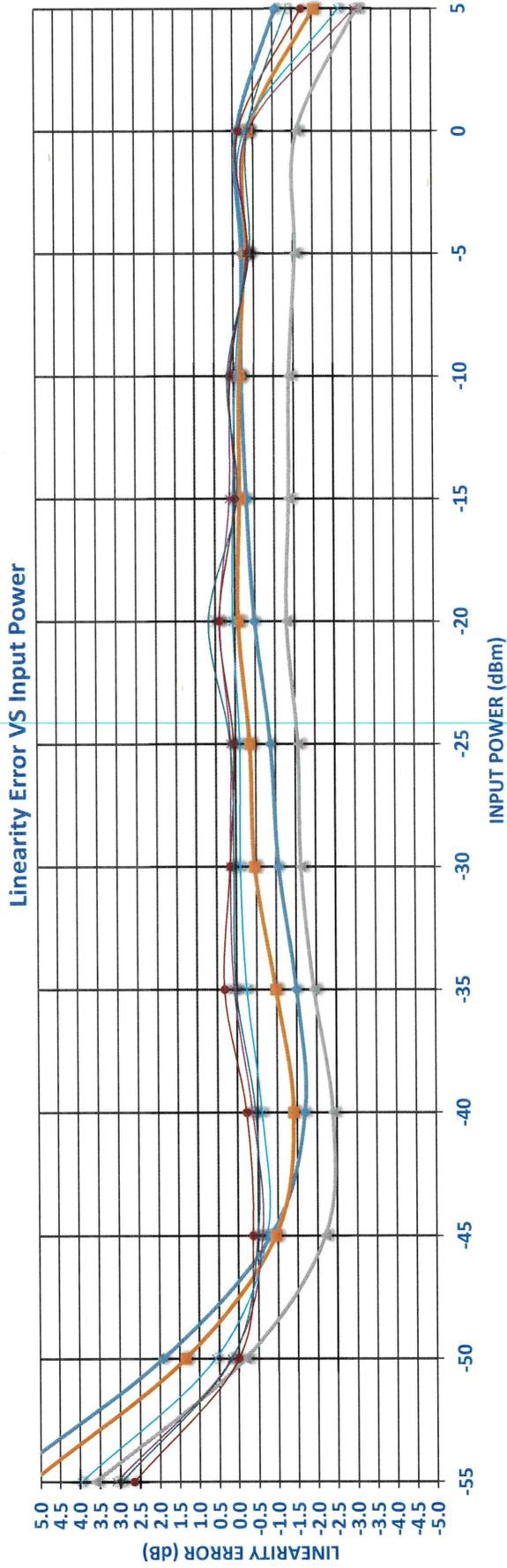
213	317	526	787	1058	1311	1559	1821	2057	2304	2532	2779	2894	
155	10	-30	-18	4	8	6	19	6	4	-17	-19	-153	
3.11	0.19	-0.61	-0.37	0.07	0.15	0.13	0.39	0.13	0.09	-0.33	-0.37	-3.07	

220	335	562	814	1085	1322	1562	1824	2049	2300	2522	2778	2945	
130	0	-18	-11	15	8	3	20	0	6	-17	-6	-84	
2.66	0.01	-0.36	-0.22	0.32	0.15	0.05	0.40	-0.01	0.12	-0.35	-0.12	-1.72	

213	320	530	774	1039	1283	1529	1797	2004	2257	2472	2716	2910	
144	9	-24	-22	1	3	7	33	-3	8	-19	-17	-65	
2.97	0.18	-0.49	-0.45	0.02	0.06	0.14	0.67	-0.05	0.17	-0.39	-0.36	-1.35	

0.4 1.1 2.2 2.5 2.4 2.0 1.6 1.4 1.0 0.8 0.8 1.0 1.0 1.0

LOG TRANSFER WITH FREQUENCY
 MODEL: SDLVA-1G20G-55-12-SFF
 SERIAL NO: PL53493
 Test Temp: +25C

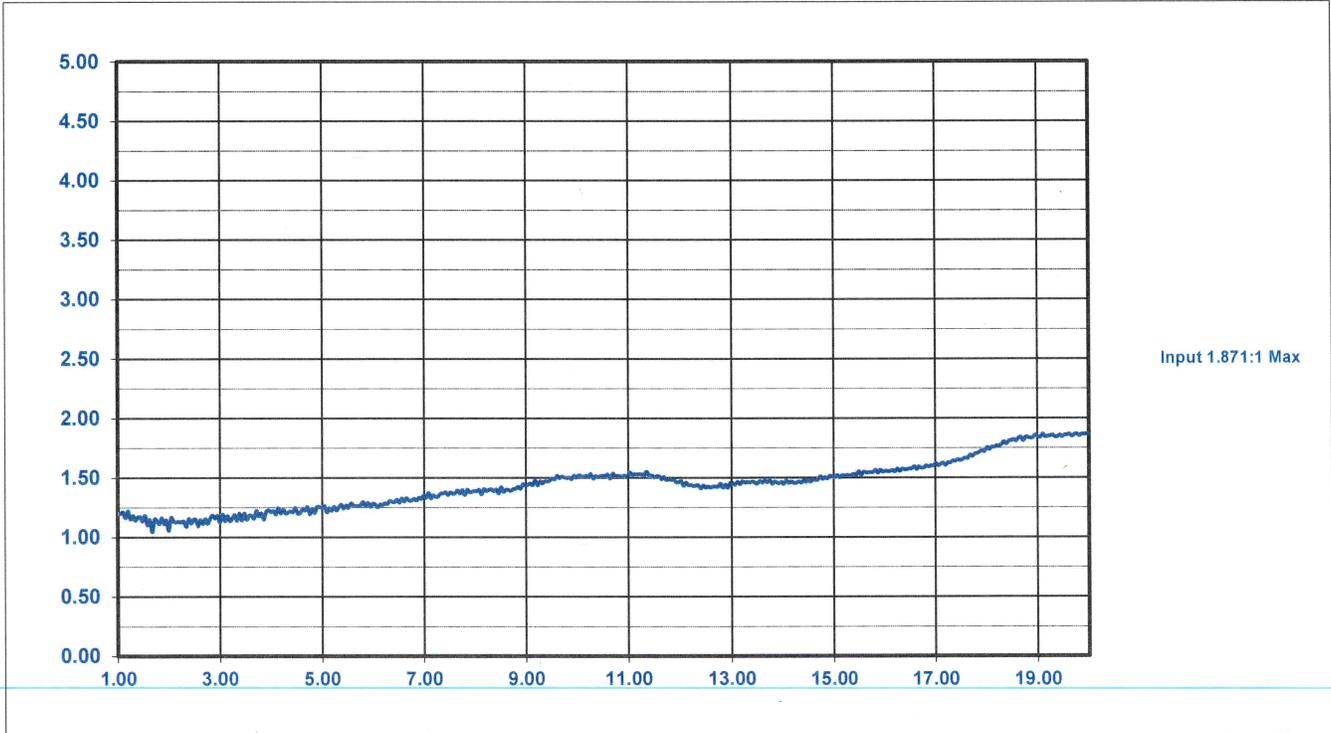




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ON
SDLVA-1G20G-55-12-SFF**

Model Number: SDLVA-1G20G-55-12-SFF
Serial Number: PL53493

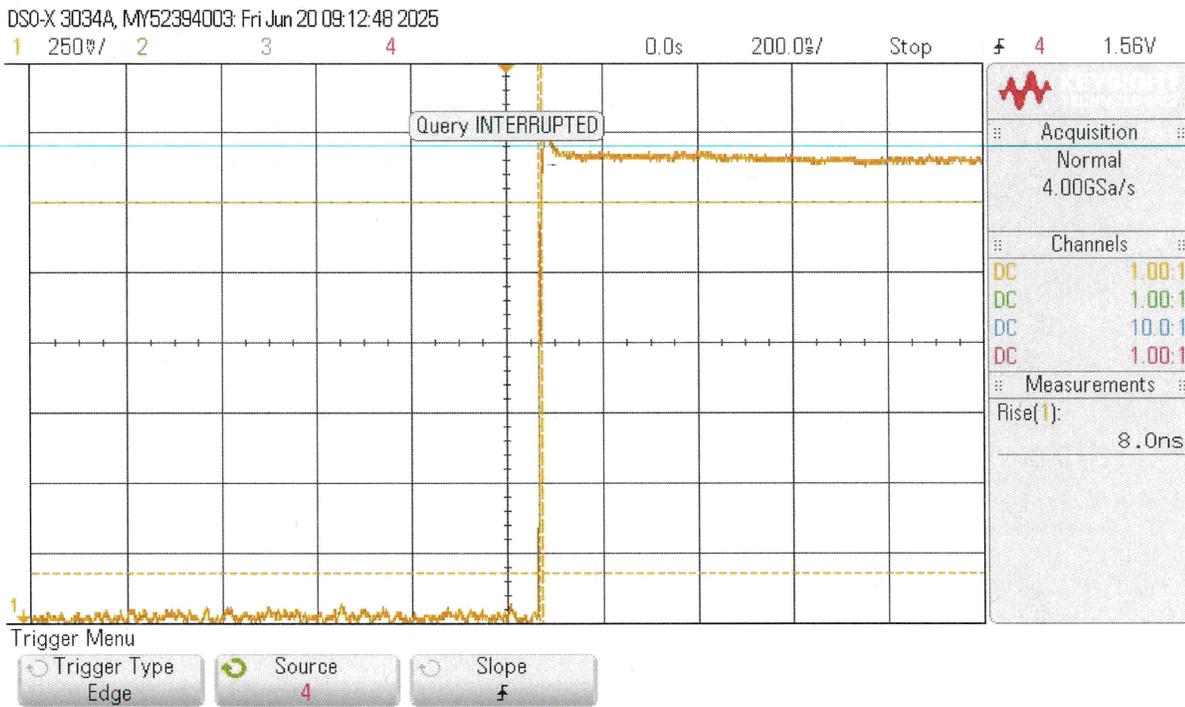
Temperature: +25C





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

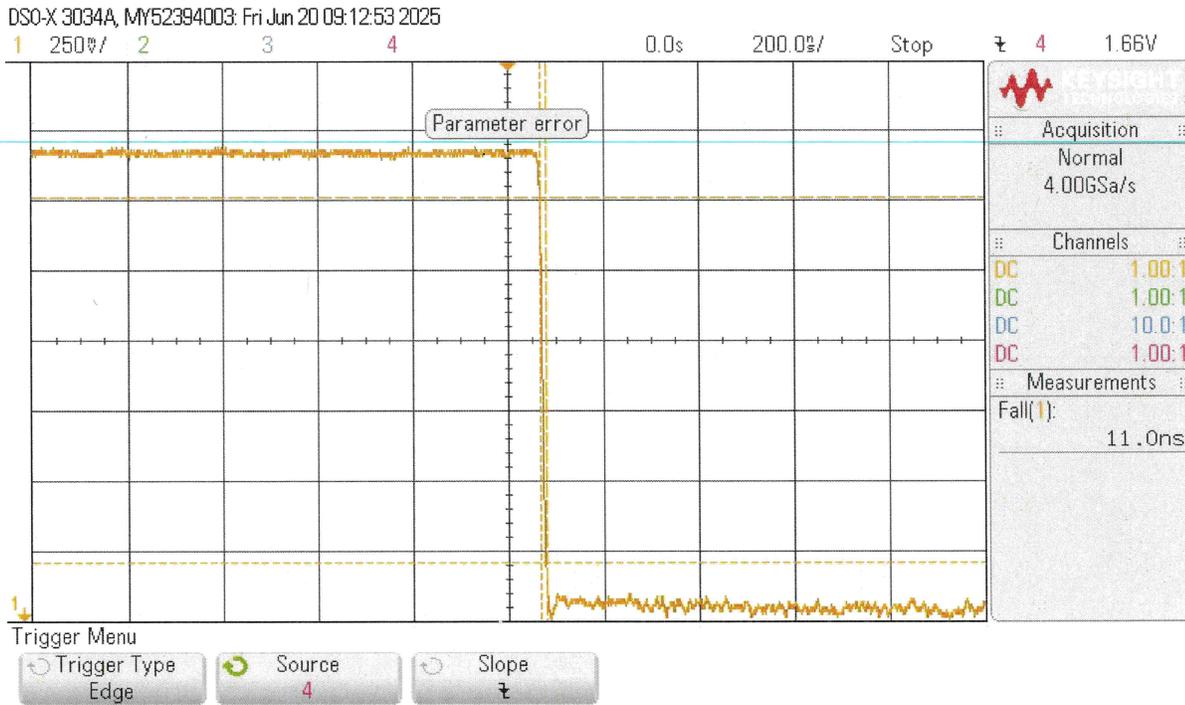
Rise Time = 8 ns





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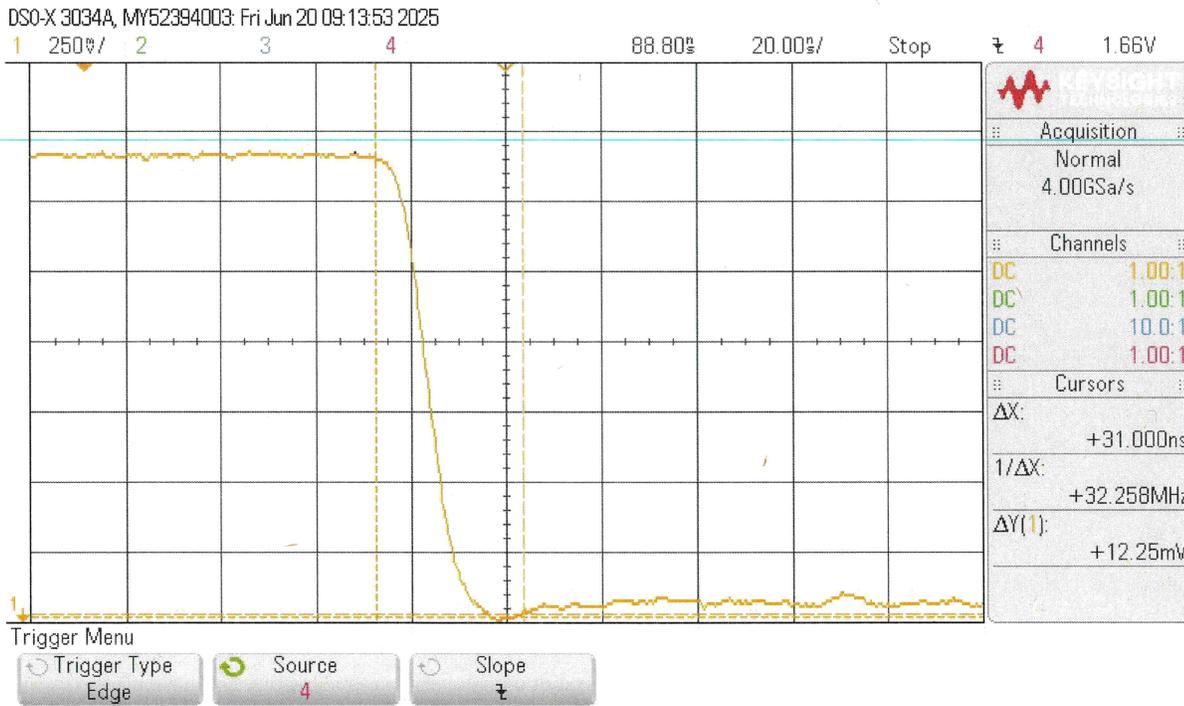
Fall Time = 11 ns





**SUMMARY TEST DATA
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Recovery Time = 31 ns

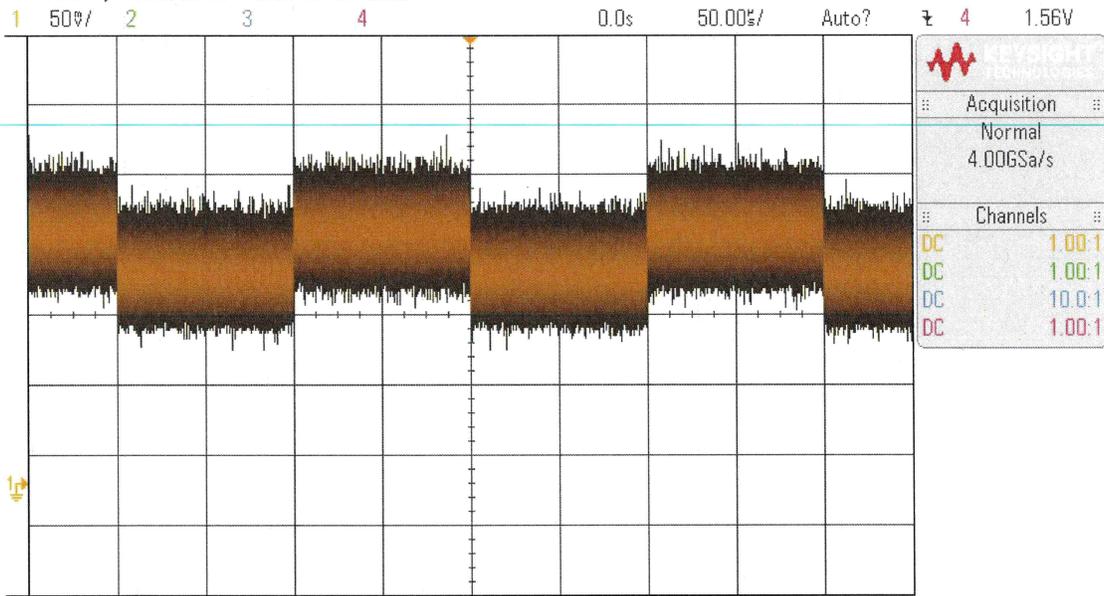




**SUMMARY TEST DATA
ON
SDLVA-1G20G-55-12-SFF**

TSS = -57 dBm

DSO-X 3034A, MY52394003: Fri Jun 20 09:13:07 2025



Trigger Menu

Trigger Type: Edge
Source: 4
Slope: ∇