



**SUMMARY TEST DATA
ON
SDLVA-1G20G-58-12-SFF**

PL28121/2012

Customer: _____
 SO No: _____
 Model No: SDLVA-1G20G-58-12-SFF
 Serial No: PL28121/2012

Tested By: J WADE Sign: JW
 QA/QC By: ARTHUR Z. Sign: AZ
 Temperature: +25°C
 Date: 03/16/2020
 Drawing No: 27612160 Rev: A2

TEST ITEM	PARAMETERS	SPECIFIED VALUE	TEST MEASUREMENT	TEST RESULT	QA QC	
1	Frequency Range	1 GHz – 20 GHz	1 GHz – 20 GHz	Pass	<i>AZ</i> 3/19/20	
2	Frequency Flatness	±2.0 dB Typ	See Plot	± 1.8 dB	↓	
3	Log Linearity	±1.0 dB Typ	See Plot	Pass		
4	Log Linearity Over Temp	±1.0 dB Typ. (@ -55°C to +85°C)	By Design	Pass		
5	Logging Range	-54 to +5 dBm	See Plot	Pass		
6	Input VSWR	3.0:1 Typ	See Plot	2.60:1		
7	Log Video Output Voltage	0.9 V to 1.5V Typ	See Plot	1.3V		
8	Log Video Output Slope	14 mV / dB Typ	See Plot	13.9 mV		
9	Log Video Output Rise Time	5 ns Typ (Pin = -20 dBm @ 10% to 90%)	See Typical Characteristics	Pass		
10	Log Video Output Fall Time	20 ns Typ (Pin = -20 dBm @ 90% to 10%)	See Typical Characteristics	Pass		
11	Log Video Recovery Time	28 ns Typ (Pin = -50 dBm to 0 dBm)	See Typical Characteristics	Pass		
12	Log Video Propagation Delay	14 ns Typ	See Typical Characteristics	Pass		
13	Power Supply	+12V Typ @ 100mA	96 mA	Pass		<i>AZ</i> 3/19/20

QA/QC Approval: Arthur Zimmerman Date: 3/19/20



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Transfer @ 25C – Data

Page #1

LOG TRANSFER WITH FREQUENCY
MODEL: SDLVA-1G20G-55-12-SFF
TESTED BY: JERRY WADE
DATE: 03/12/20
SERIAL NO: PL28121
Test Temp: +25C



PLANAR MONOLITHICS INDUSTRIES
 4921 Robert J. Mathews Parkway,
 Suite 1
 El Dorado Hills, CA 95762
 Phone: 916-542-1401 Fax: 301-662-

Frequency

-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
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1 GHz	INTERCEPT (mV)	1709
	SLOPE (mV/dB)	15.1

948	961	999	1068	1148	1232	1318	1401	1489	1570	1658	1732	1770
72	9	-28	-35	-31	-23	-12	-5	7	13	25	23	-15
4.75	0.61	-1.88	-2.32	-2.04	-1.49	-0.81	-0.33	0.48	0.83	1.64	1.53	-0.96

RF Input Power (dBm)

Measured Value (mV)
 Error (mV)
 LINEARITY ERROR (dB)

4.17 GHz	INTERCEPT (mV)	1708
	SLOPE (mV/dB)	15.2

947	958	994	1065	1150	1233	1319	1402	1488	1573	1659	1731	1763
72	7	-32	-37	-28	-21	-10	-3	7	16	27	23	-21
4.77	0.49	-2.13	-2.45	-1.84	-1.36	-0.69	-0.21	0.47	1.08	1.75	1.50	-1.39

Measured Value (mV)
 Error (mV)
 LINEARITY ERROR (dB)

7.33 GHz	INTERCEPT (mV)	1699
	SLOPE (mV/dB)	14.8

948	961	1001	1075	1158	1237	1321	1400	1485	1567	1651	1721	1747
64	3	-31	-31	-22	-18	-8	-3	8	16	26	22	-26
4.32	0.20	-2.10	-2.11	-1.51	-1.18	-0.51	-0.18	0.55	1.08	1.75	1.48	-1.77

Measured Value (mV)
 Error (mV)
 LINEARITY ERROR (dB)

10.5 GHz	INTERCEPT (mV)	1692
	SLOPE (mV/dB)	14.5

950	967	1014	1090	1168	1245	1325	1399	1483	1564	1648	1708	1734
53	-2	-27	-24	-18	-13	-5	-4	8	17	29	16	-30
3.68	-0.14	-1.89	-1.63	-1.24	-0.91	-0.37	-0.25	0.56	1.17	1.98	1.13	-2.07

Measured Value (mV)
 Error (mV)
 LINEARITY ERROR (dB)

13.66 GHz	INTERCEPT (mV)	1681
	SLOPE (mV/dB)	14.1

951	970	1020	1097	1172	1245	1321	1394	1473	1551	1630	1689	1738
48	-3	-24	-18	-14	-11	-6	-4	5	12	20	8	-13
3.41	-0.24	-1.71	-1.26	-0.96	-0.80	-0.42	-0.26	0.32	0.84	1.42	0.60	-0.94

Measured Value (mV)
 Error (mV)
 LINEARITY ERROR (dB)

16.83 GHz	INTERCEPT (mV)	1677
	SLOPE (mV/dB)	14.0

954	972	1024	1103	1177	1247	1324	1394	1468	1547	1624	1703	1723
46	-6	-24	-15	-11	-11	-4	-4	0	9	17	26	-24
3.29	-0.43	-1.71	-1.06	-0.77	-0.77	-0.26	-0.26	0.03	0.68	1.18	1.83	-1.74

Measured Value (mV)
 Error (mV)
 LINEARITY ERROR (dB)

20 GHz	INTERCEPT (mV)	1690
	SLOPE (mV/dB)	14.0

957	983	1040	1117	1190	1259	1340	1406	1481	1558	1634	1714	1735
38	-6	-19	-12	-9	-10	0	-4	1	8	14	24	-25
2.70	-0.45	-1.38	-0.88	-0.67	-0.75	0.03	-0.26	0.10	0.59	1.01	1.72	-1.78

Measured Value (mV)
 Error (mV)
 LINEARITY ERROR (dB)

Flatness P-P

0.6	1.8	3.2	3.6	2.8	1.8	1.6	0.8	1.4	1.8	2.4	3.0	3.2
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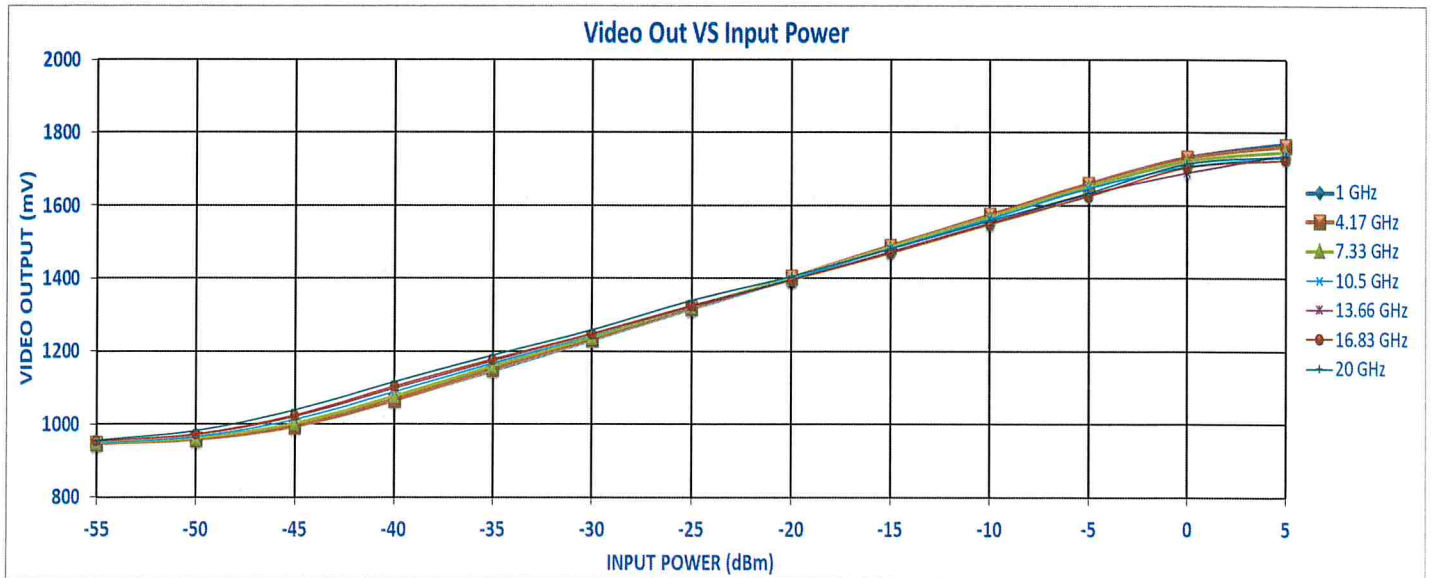
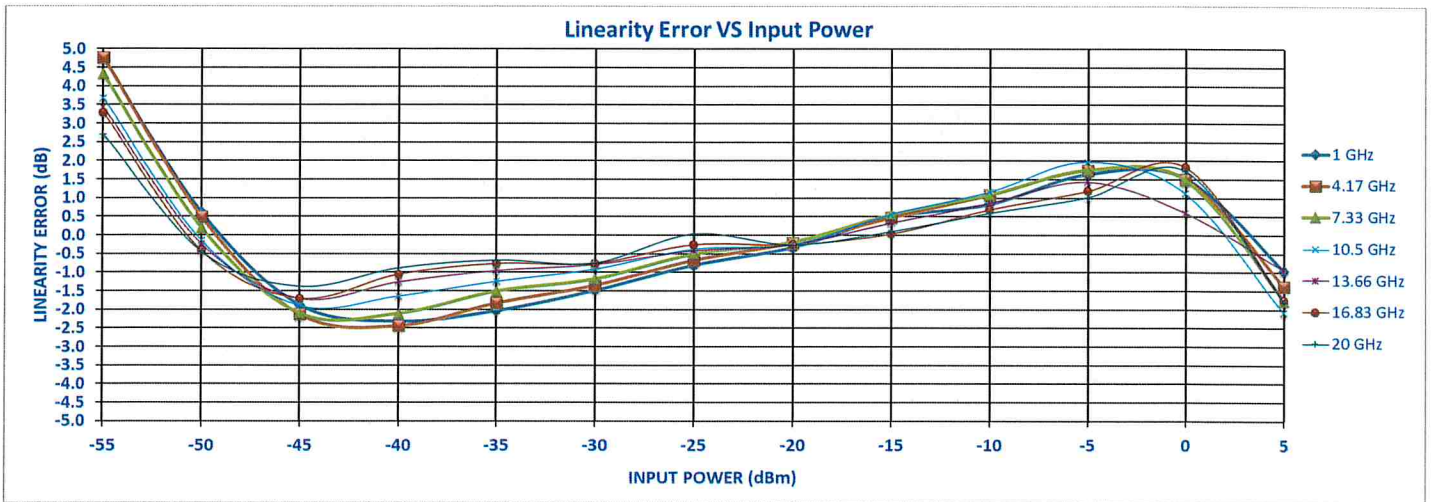
Slope Avg(mV/dB) **14.5**



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Transfer @ 25C – Plot

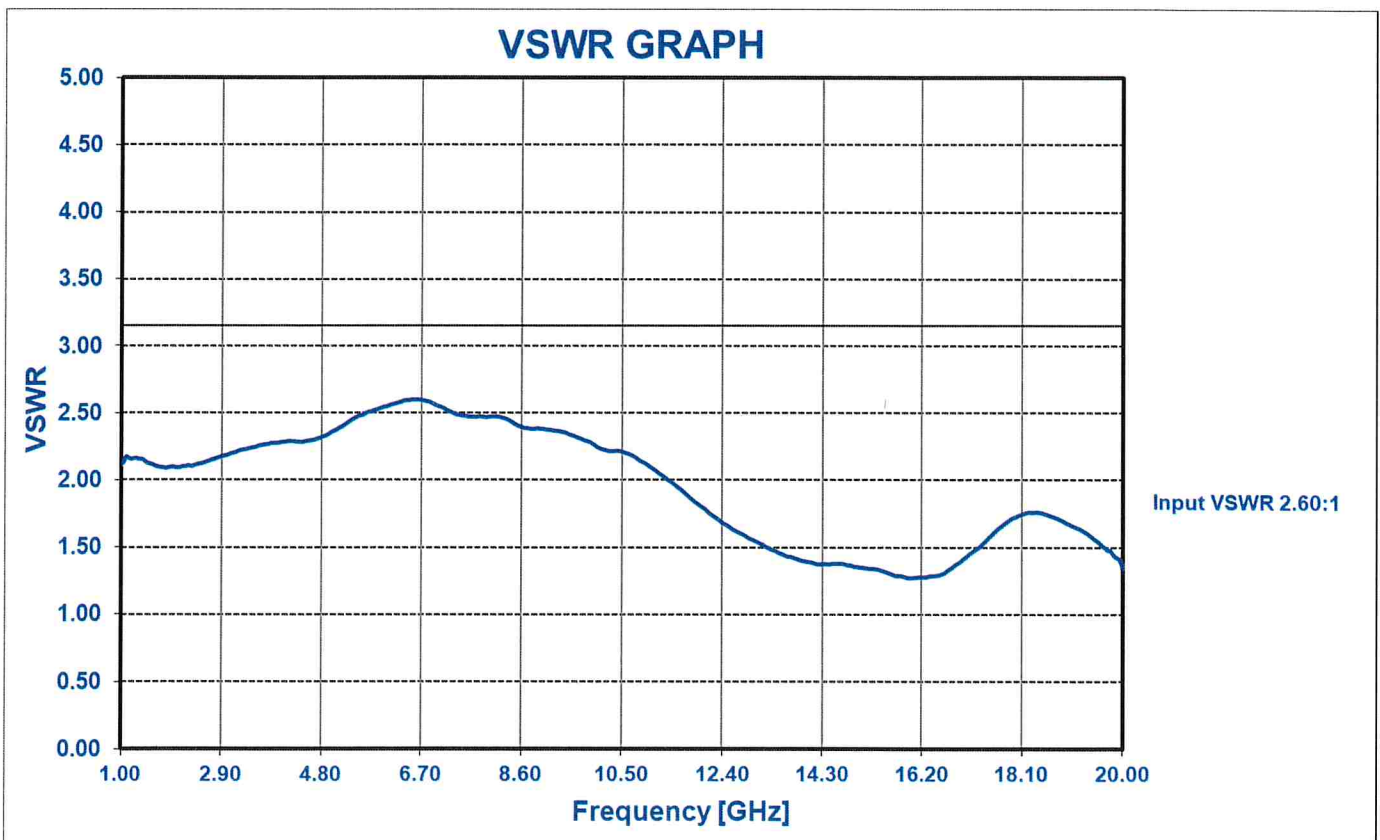




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VSWR

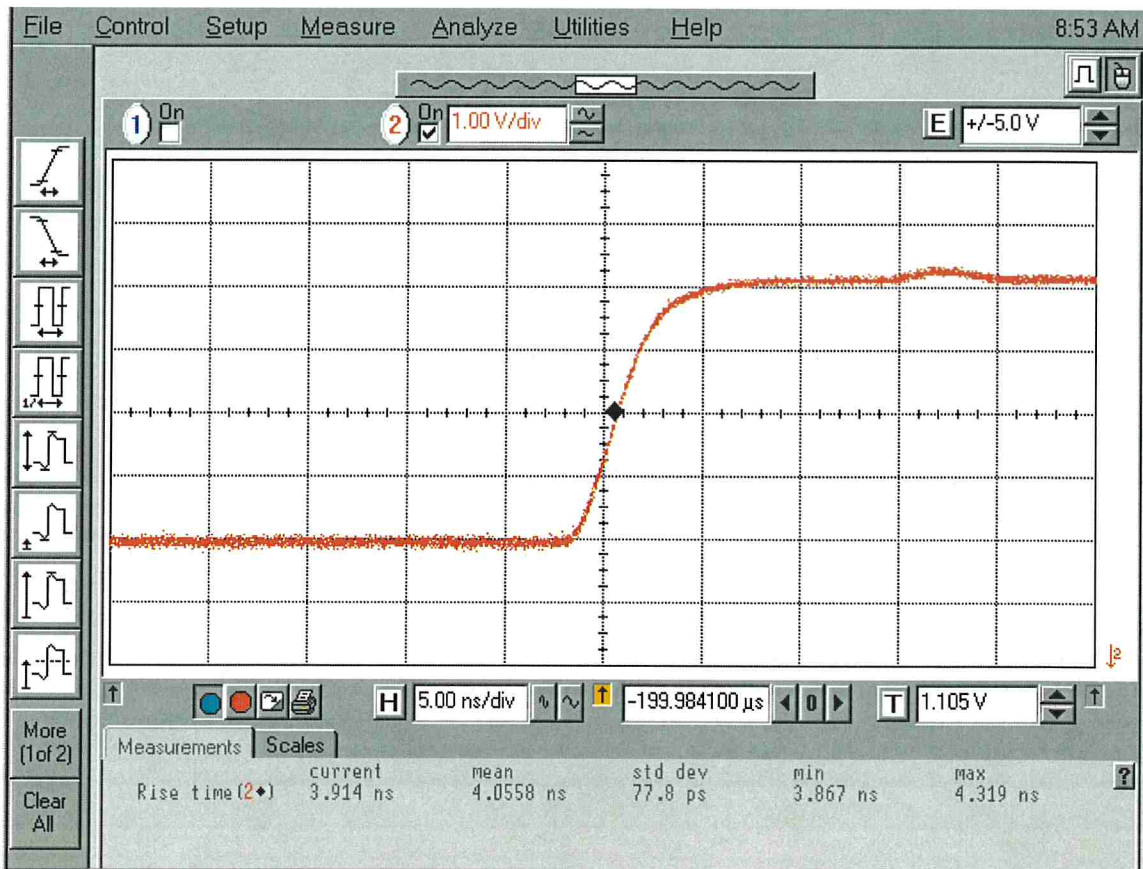




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Rise Time





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Fall Time

