



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

PL28122/2012

Customer: _____
 SO No: _____
 Model No: SDLVA-1G20G-58-12-SFF
 Serial No: PL28122/2012

Tested By: J WADE Sign: JW
 QA/QC By: ARTHUR Z. Sign: 03
 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	03 3/19/20
2	Frequency Flatness	±2.0 dB Typ	See Plot	± 2.0 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	2.73:1	
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	14.1 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	93 mA	Pass	03 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-58-12-SFF
TESTED BY: Simon K.
DATE: 10/16/2019
SERIAL NO: PL26822
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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RF Input Power (dBm)

1 GHz INTERCEPT (mV) **1695**
 SLOPE (mV/dB) **14.7**

937	964	1016	1086	1161	1239	1321	1400	1480	1559	1642	1713	1751
49	2	-19	-22	-21	-16	-7	-2	5	11	20	18	-18
3.32	0.16	-1.29	-1.52	-1.41	-1.09	-0.50	-0.12	0.33	0.72	1.38	1.22	-1.19

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

4.17 GHz INTERCEPT (mV) **1695**
 SLOPE (mV/dB) **14.7**

X

936	962	1015	1086	1165	1243	1324	1400	1481	1561	1644	1713	1744
47	0	-21	-23	-17	-13	-5	-2	6	12	22	18	-24
3.19	-0.03	-1.42	-1.57	-1.18	-0.85	-0.33	-0.14	0.39	0.85	1.52	1.22	-1.66

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

7.33 GHz INTERCEPT (mV) **1691**
 SLOPE (mV/dB) **14.4**

X

938	968	1024	1099	1175	1250	1329	1404	1484	1561	1642	1707	1730
37	-4	-20	-17	-13	-10	-3	1	9	14	23	16	-33
2.61	-0.30	-1.41	-1.19	-0.90	-0.68	-0.18	0.04	0.60	0.96	1.60	1.12	-2.28

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

10.5 GHz INTERCEPT (mV) **1687**
 SLOPE (mV/dB) **14.0**

X

945	980	1042	1117	1187	1261	1336	1407	1484	1562	1642	1695	1727
28	-7	-15	-10	-10	-6	-1	0	7	15	25	8	-30
1.98	-0.52	-1.09	-0.73	-0.73	-0.45	-0.09	-0.02	0.48	1.05	1.76	0.55	-2.17

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

13.66 GHz INTERCEPT (mV) **1676**
 SLOPE (mV/dB) **13.8**

X

946	982	1044	1118	1188	1257	1331	1399	1472	1549	1624	1681	1729
26	-6	-13	-8	-7	-7	-1	-2	2	10	17	5	-16
1.91	-0.47	-0.96	-0.58	-0.49	-0.48	-0.10	-0.15	0.16	0.76	1.21	0.35	-1.16

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

16.83 GHz INTERCEPT (mV) **1678**
 SLOPE (mV/dB) **13.6**

X

950	988	1052	1127	1196	1262	1338	1401	1472	1550	1623	1702	1716
22	-8	-12	-5	-4	-7	1	-4	-1	9	14	24	-30
1.64	-0.57	-0.88	-0.38	-0.32	-0.48	0.10	-0.28	-0.08	0.64	0.99	1.79	-2.19

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

20 GHz INTERCEPT (mV) **1687**
 SLOPE (mV/dB) **13.5**

X

958	1004	1068	1142	1208	1275	1352	1411	1483	1557	1630	1709	1728
16	-6	-9	-3	-5	-5	4	-5	-1	6	11	22	-26
1.20	-0.41	-0.68	-0.22	-0.34	-0.40	0.29	-0.35	-0.04	0.43	0.82	1.65	-1.95

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

Flatness P-P

X

1.6	3.0	3.8	4.0	3.4	2.6	2.2	0.8	0.8	1.0	1.4	2.2	2.4
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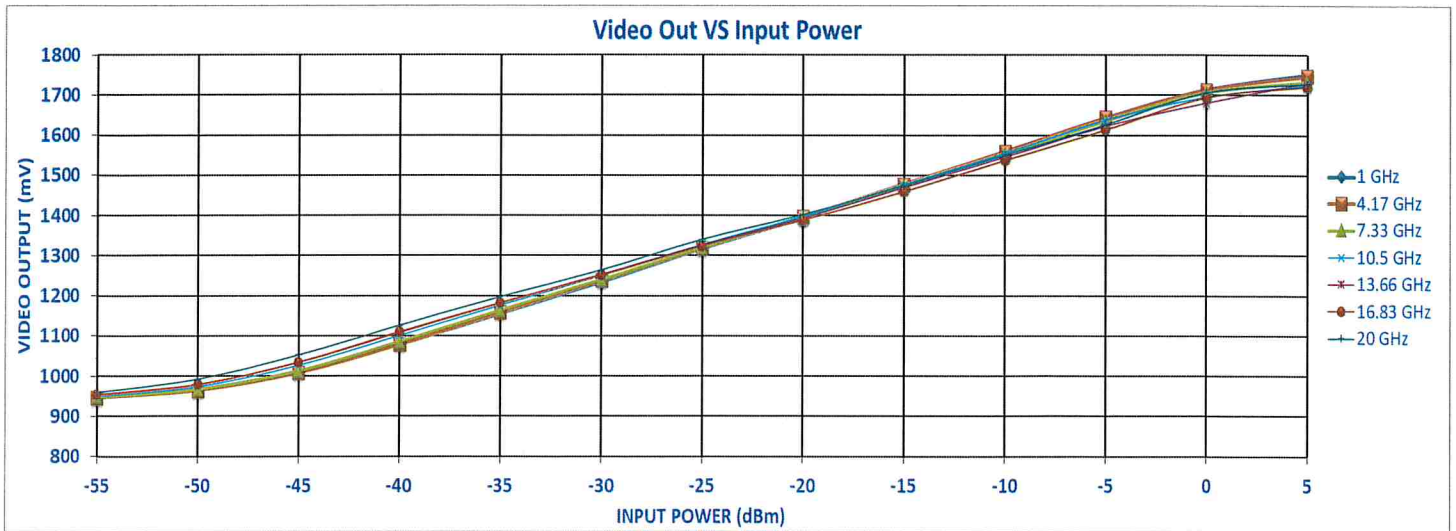
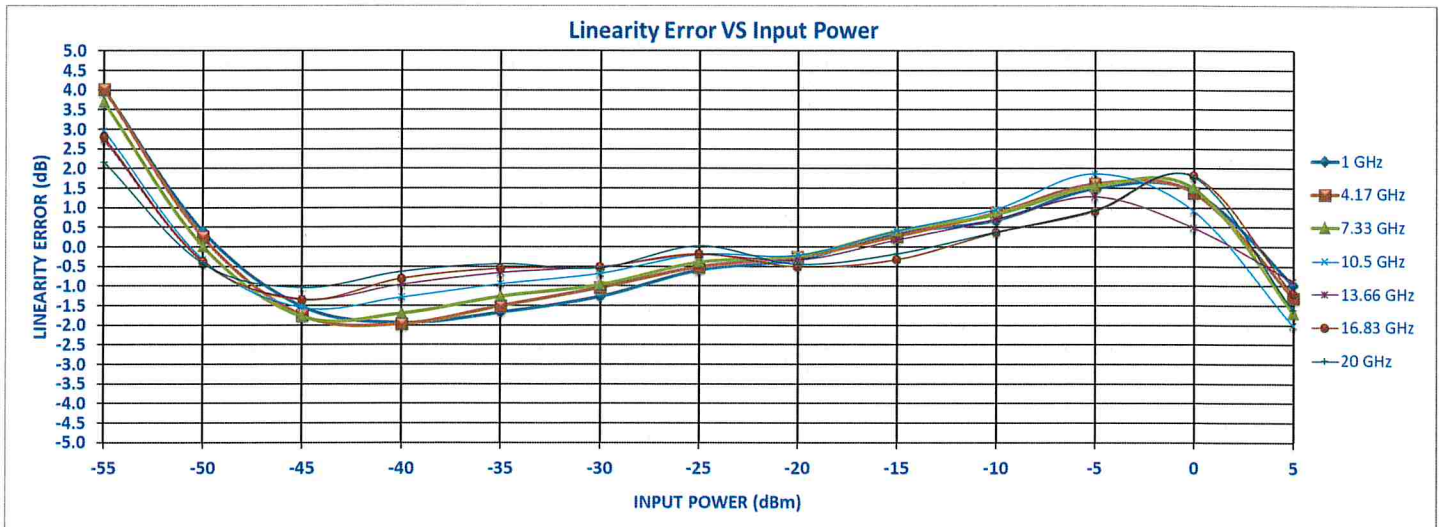
Slope Avg(mv/dB) **14.1**



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Transfer @ 25C – Plot

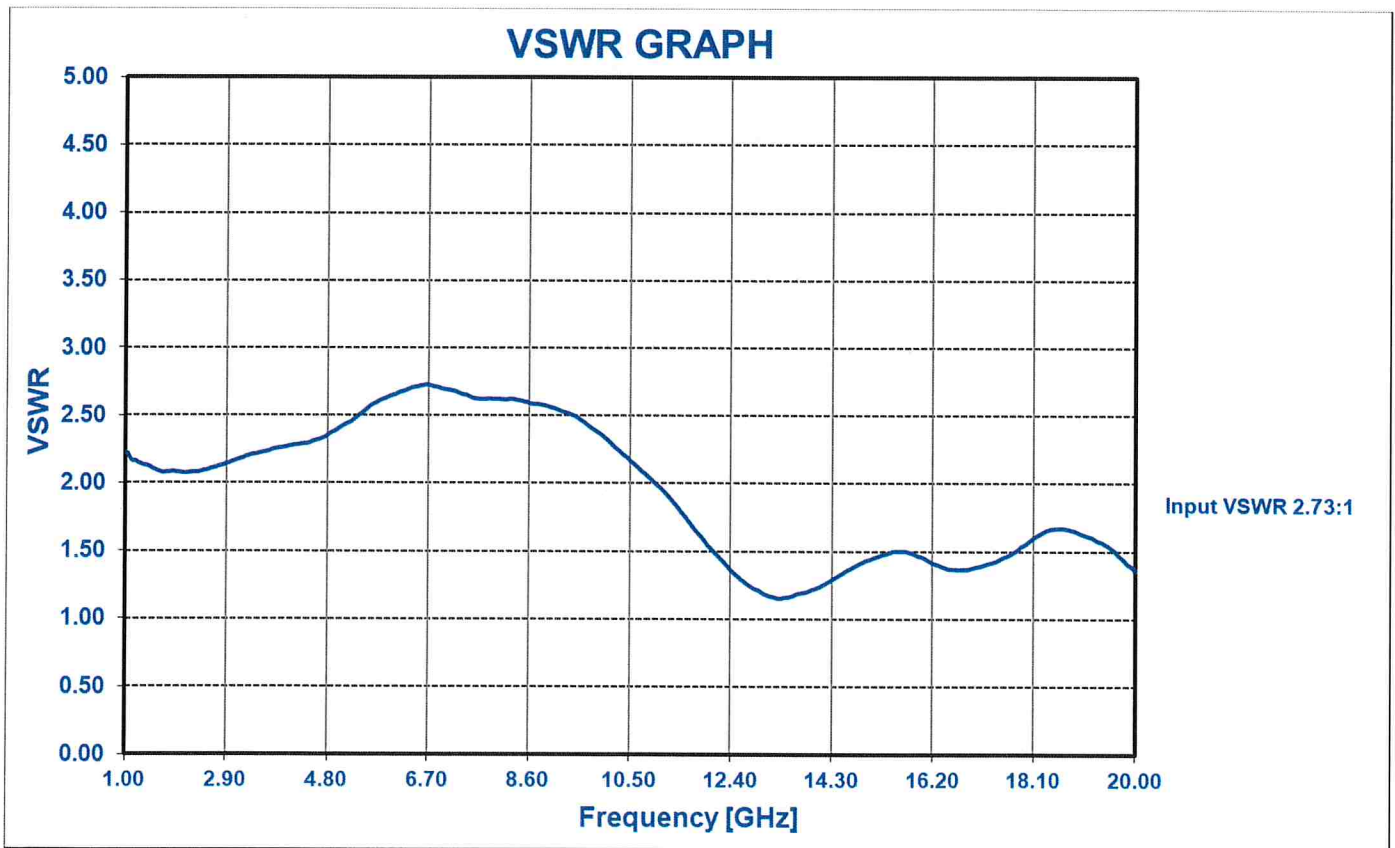




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VSWR

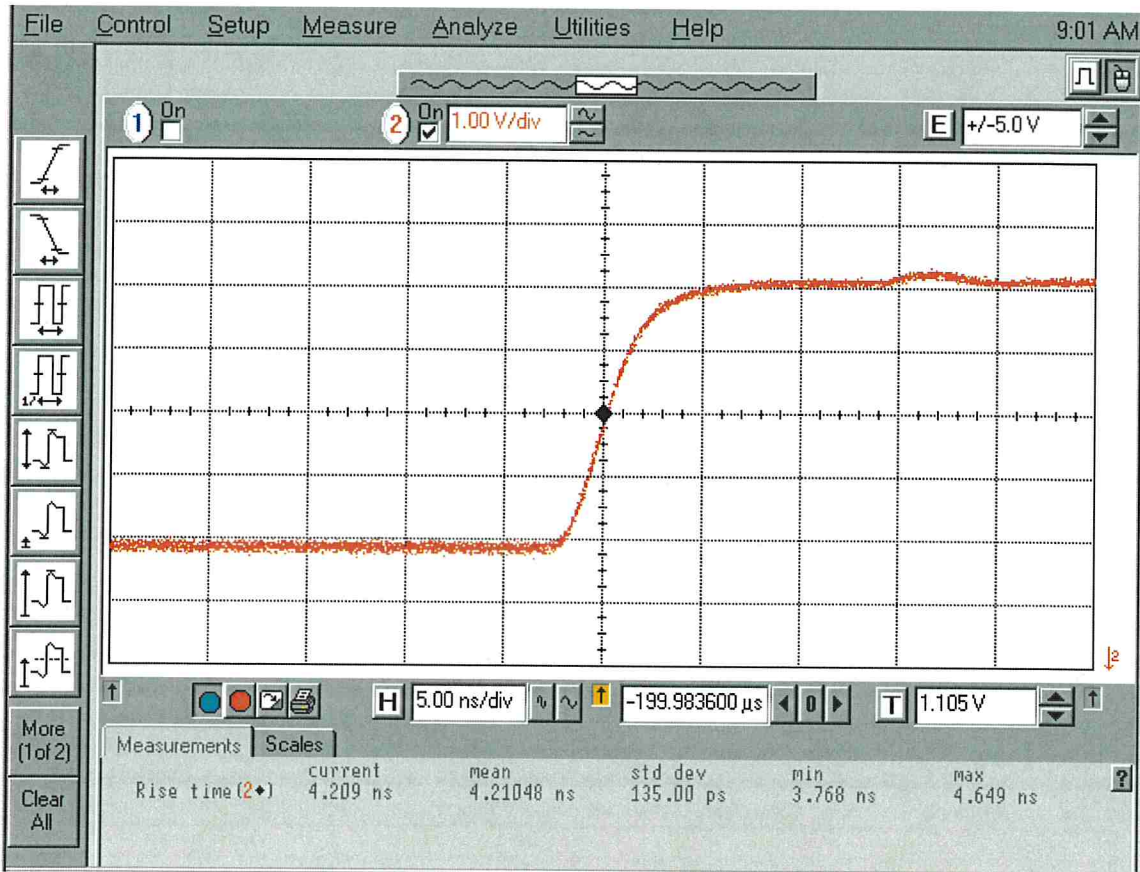




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Rise Time





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Fall Time

