



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

PL28120/2012

Customer: _____
 SO No: _____
 Model No: SDLVA-1G20G-58-12-SFF
 Serial No: PL28120/2012

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	3 3/19/20	
2	Frequency Flatness	±2.0 dB Typ	See Plot	± 1.6 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	2.76:1		
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	94 mA	Pass		3 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: PL28120
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) **1698**
 SLOPE (mV/dB) **14.4**

976	986	1023	1089	1166	1246	1330	1409	1491	1566	1649	1718	1754
68	7	-28	-34	-29	-21	-9	-2	9	12	23	20	-16
4.76	0.46	-1.97	-2.38	-2.02	-1.45	-0.60	-0.11	0.60	0.82	1.60	1.40	-1.10

RF Input Power (dBm)

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

4.17 GHz INTERCEPT (mV) **1697**
 SLOPE (mV/dB) **14.4**

974	983	1018	1087	1167	1246	1330	1408	1490	1569	1650	1717	1748
68	5	-32	-35	-27	-20	-7	-1	9	16	25	20	-21
4.74	0.37	-2.20	-2.40	-1.84	-1.36	-0.52	-0.10	0.60	1.09	1.72	1.37	-1.47

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

7.33 GHz INTERCEPT (mV) **1689**
 SLOPE (mV/dB) **14.1**

975	985	1023	1096	1172	1249	1330	1405	1487	1562	1643	1709	1733
62	2	-31	-29	-23	-16	-6	-2	10	14	25	20	-26
4.41	0.11	-2.19	-2.09	-1.63	-1.17	-0.43	-0.11	0.71	1.02	1.77	1.45	-1.85

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

10.5 GHz INTERCEPT (mV) **1683**
 SLOPE (mV/dB) **13.8**

977	991	1036	1108	1181	1256	1333	1406	1484	1559	1640	1695	1727
53	-2	-26	-23	-19	-13	-5	-1	8	14	26	12	-24
3.82	-0.17	-1.90	-1.68	-1.38	-0.94	-0.36	-0.06	0.60	1.04	1.91	0.90	-1.78

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

13.66 GHz INTERCEPT (mV) **1677**
 SLOPE (mV/dB) **13.6**

979	995	1043	1115	1187	1258	1334	1403	1478	1553	1628	1685	1733
49	-3	-23	-19	-15	-12	-4	-3	4	12	19	8	-12
3.58	-0.25	-1.71	-1.41	-1.10	-0.88	-0.28	-0.20	0.33	0.85	1.38	0.58	-0.89

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

16.83 GHz INTERCEPT (mV) **1678**
 SLOPE (mV/dB) **13.5**

980	996	1045	1119	1190	1259	1337	1403	1475	1550	1626	1705	1722
47	-4	-23	-17	-14	-12	-2	-4	1	8	16	27	-23
3.50	-0.32	-1.70	-1.24	-1.00	-0.91	-0.15	-0.28	0.04	0.58	1.19	2.02	-1.73

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

20 GHz INTERCEPT (mV) **1688**
 SLOPE (mV/dB) **13.5**

983	1006	1058	1132	1201	1272	1352	1413	1486	1560	1636	1714	1729
40	-5	-21	-14	-13	-10	3	-4	1	7	16	26	-27
2.94	-0.36	-1.52	-1.05	-0.96	-0.71	0.19	-0.30	0.09	0.55	1.17	1.93	-1.97

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

Flatness P-P

0.6	1.6	2.8	3.2	2.6	1.8	1.6	0.8	1.2	1.4	1.8	2.4	2.4
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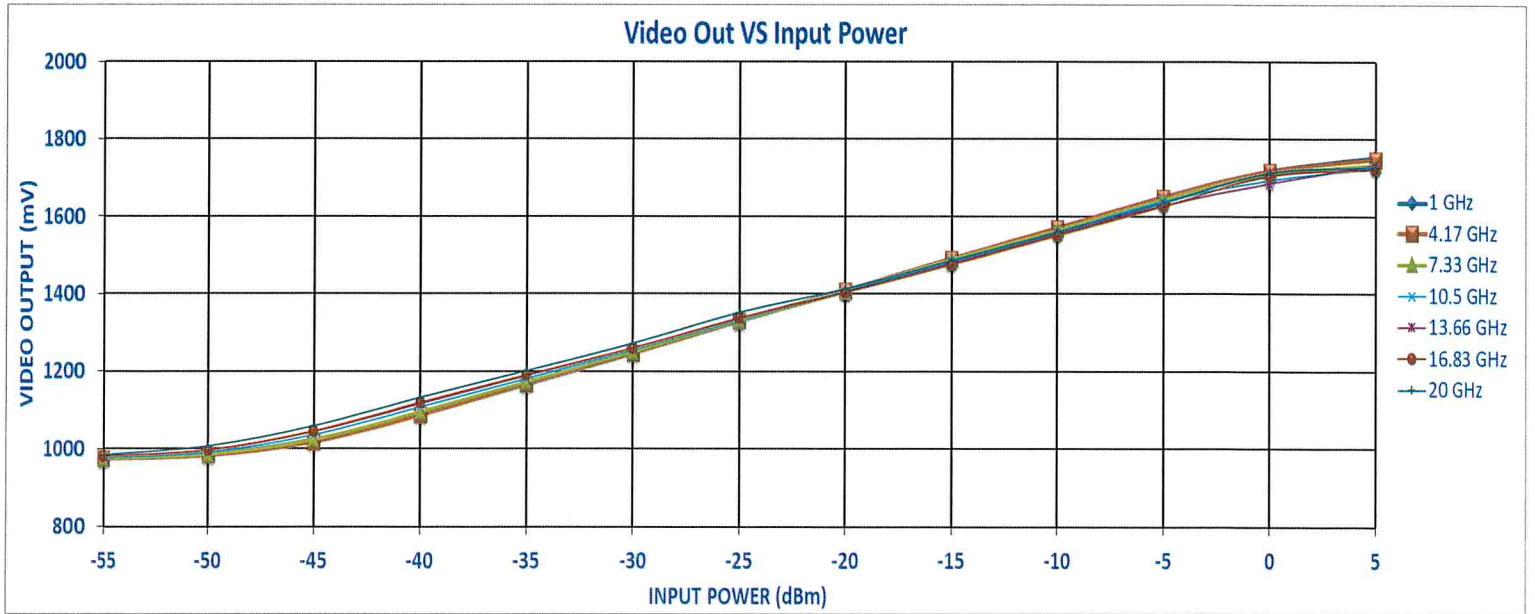
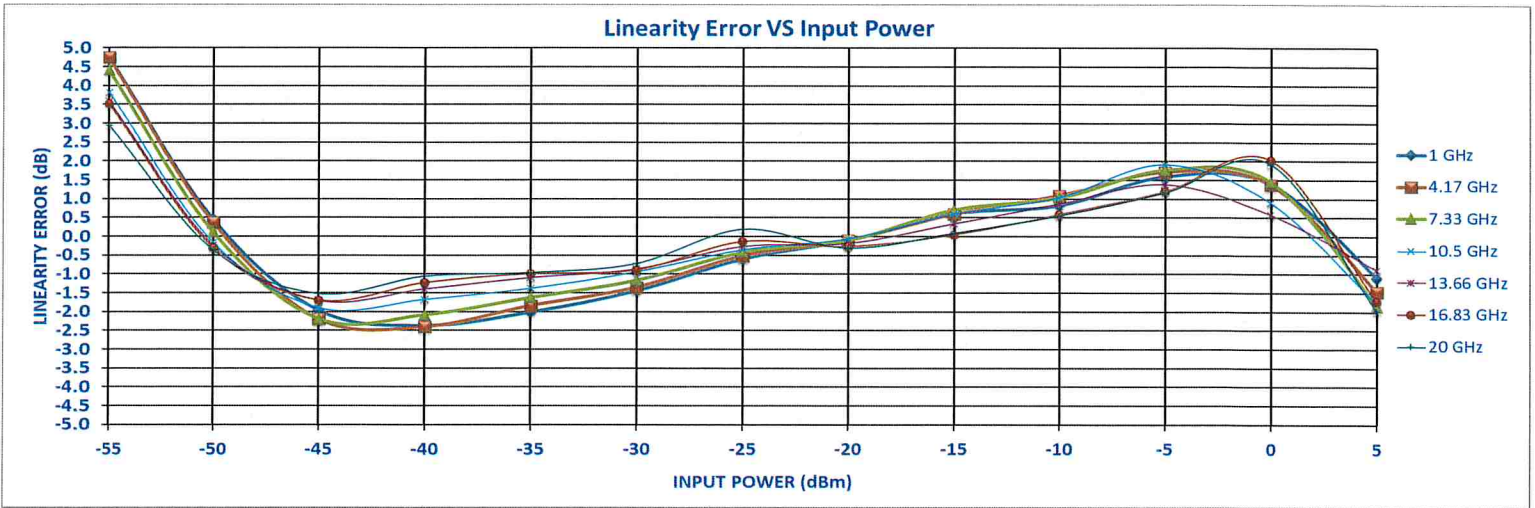
Slope Avg(mV/dB) **13.9**



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Transfer @ 25C – Plot

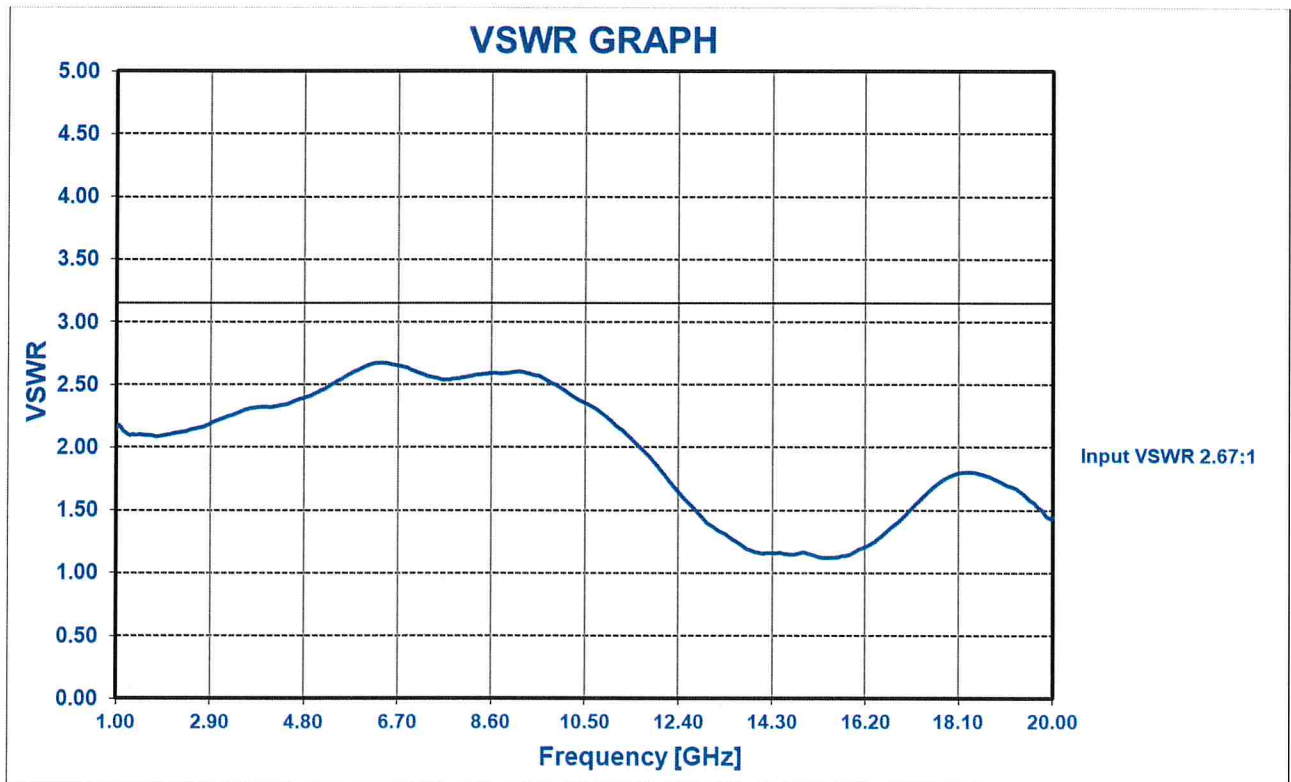




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VSWR

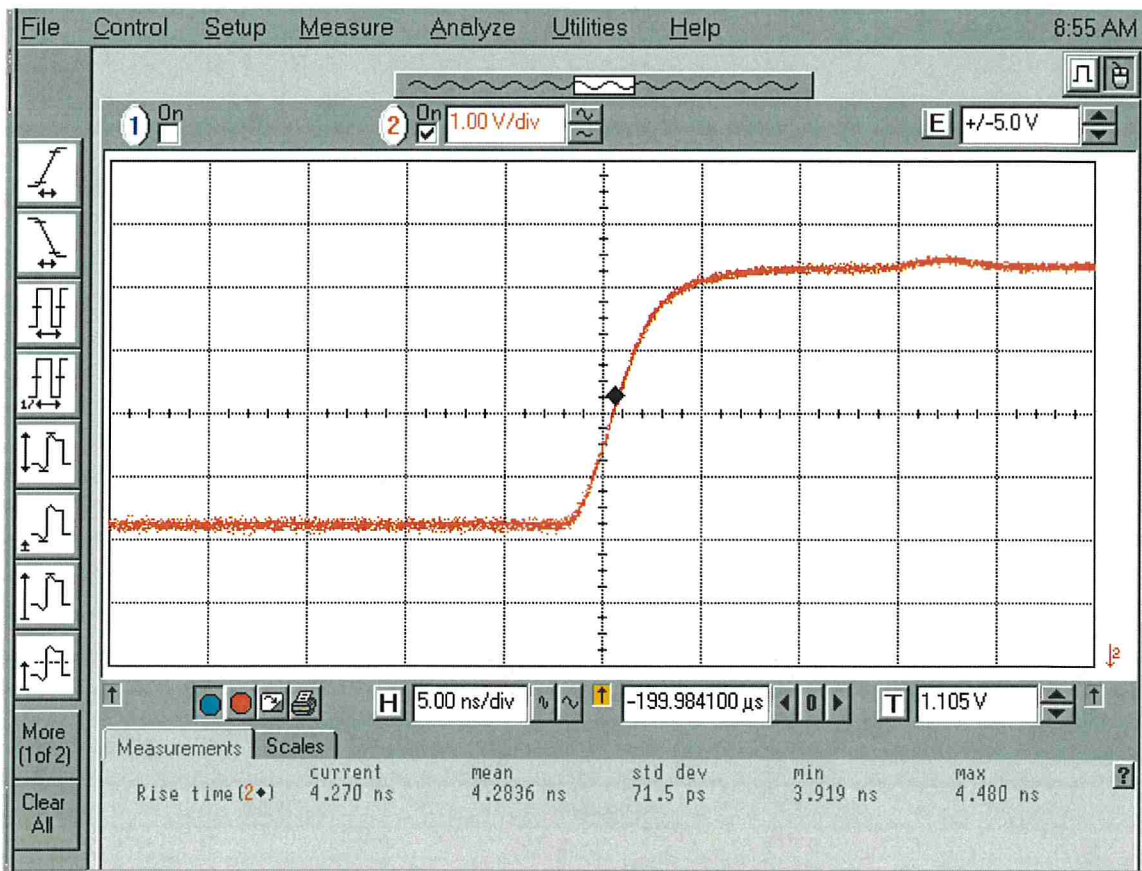




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Rise Time





SUMMARY TEST DATA
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Fall Time

