



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

PL28125/2021

Customer: _____
 SO No: _____
 Model No: SDLVA-1G20G-58-12-SFF
 Serial No: PL28125/2021

Tested By: J WADE Sign: JW
 QA/QC By: ARTHUR Z. Sign: az
 Temperature: +25°C
 Date: 05/21/2020
 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	az 5/21
2	Frequency Flatness	±2.0 dB Typ	See Plot	± 1.5 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	2.74:1	
7	Log Video Output Voltage	0.9 V to 1.5V Typ	See Plot	1.736 V	
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	95 mA	Pass	az 5/21

QA/QC Approval: Arthur Zimmerman Date: 5/21/2020



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

PL28125/2021

Transfer @ 25C – Data

LOG TRANSFER WITH FREQUENCY
MODEL: SDLVA-1G20G-55-12-SFF
TESTED BY: JERRY WADE
DATE: 05/21/2020
SERIAL NO: PL28125
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
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----	---	---

RF Input Power (dBm)

1 GHz INTERCEPT (mV) **1673**
 SLOPE (mV/dB) **14.4**

954	964	995	1059	1136	1215	1298	1376	1461	1540	1626	1697	1736
75	13	-28	-37	-32	-25	-14	-8	5	11	25	24	-9
5.19	0.89	-1.97	-2.53	-2.20	-1.73	-0.98	-0.57	0.32	0.79	1.75	1.67	-0.63

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

4.17 GHz INTERCEPT (mV) **1674**
 SLOPE (mV/dB) **14.5**

x

953	961	992	1058	1138	1218	1300	1377	1460	1544	1628	1699	1731
75	10	-31	-37	-30	-22	-12	-8	3	15	26	25	-15
5.17	0.72	-2.14	-2.58	-2.05	-1.51	-0.85	-0.52	0.22	1.02	1.83	1.74	-1.05

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

7.33 GHz INTERCEPT (mV) **1666**
 SLOPE (mV/dB) **14.2**

x

955	964	997	1067	1145	1222	1301	1375	1457	1538	1622	1691	1716
68	7	-31	-32	-25	-19	-11	-7	4	14	27	25	-21
4.83	0.47	-2.20	-2.26	-1.76	-1.32	-0.74	-0.52	0.27	0.99	1.92	1.79	-1.45

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

10.5 GHz INTERCEPT (mV) **1661**
 SLOPE (mV/dB) **13.8**

x

957	970	1011	1083	1157	1231	1306	1378	1458	1538	1622	1678	1707
57	1	-27	-24	-20	-15	-9	-6	4	15	30	17	-23
4.13	0.07	-1.96	-1.76	-1.42	-1.07	-0.66	-0.45	0.32	1.10	2.17	1.22	-1.69

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

13.66 GHz INTERCEPT (mV) **1654**
 SLOPE (mV/dB) **13.6**

x

958	973	1018	1091	1163	1233	1306	1375	1451	1530	1608	1664	1713
52	-1	-24	-19	-15	-13	-8	-7	1	12	22	10	-9
3.83	-0.07	-1.76	-1.40	-1.11	-0.96	-0.59	-0.52	0.06	0.87	1.61	0.72	-0.68

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

16.83 GHz INTERCEPT (mV) **1652**
 SLOPE (mV/dB) **13.5**

x

959	975	1022	1095	1167	1234	1308	1372	1446	1526	1603	1683	1699
50	-2	-22	-17	-12	-13	-7	-10	-4	9	18	31	-21
3.68	-0.13	-1.66	-1.25	-0.92	-0.96	-0.48	-0.75	-0.27	0.65	1.35	2.28	-1.54

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

20 GHz INTERCEPT (mV) **1665**
 SLOPE (mV/dB) **13.5**

x

963	985	1038	1111	1181	1247	1324	1385	1459	1538	1614	1693	1710
42	-4	-18	-13	-11	-12	-3	-9	-3	8	17	28	-22
3.09	-0.28	-1.36	-0.96	-0.78	-0.90	-0.20	-0.69	-0.22	0.63	1.25	2.09	-1.65

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

Flatness P-P

x

0.8	1.8	3.4	3.8	3.2	2.2	1.8	1.0	1.0	1.2	1.8	2.6	2.6
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

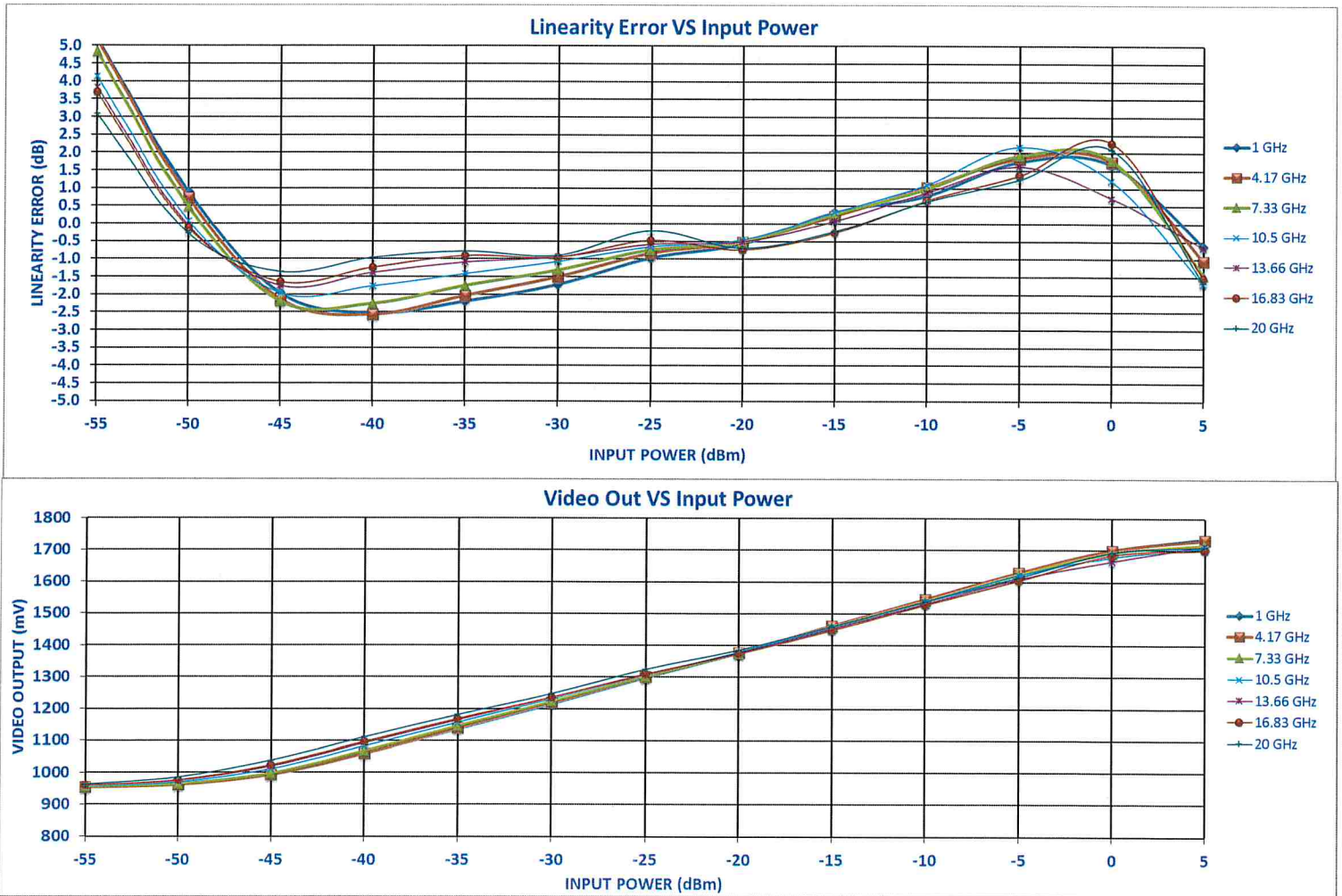
Slope Avg(mV/dB) **13.9**



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

PL28125/2021

Transfer @ 25C – Plot

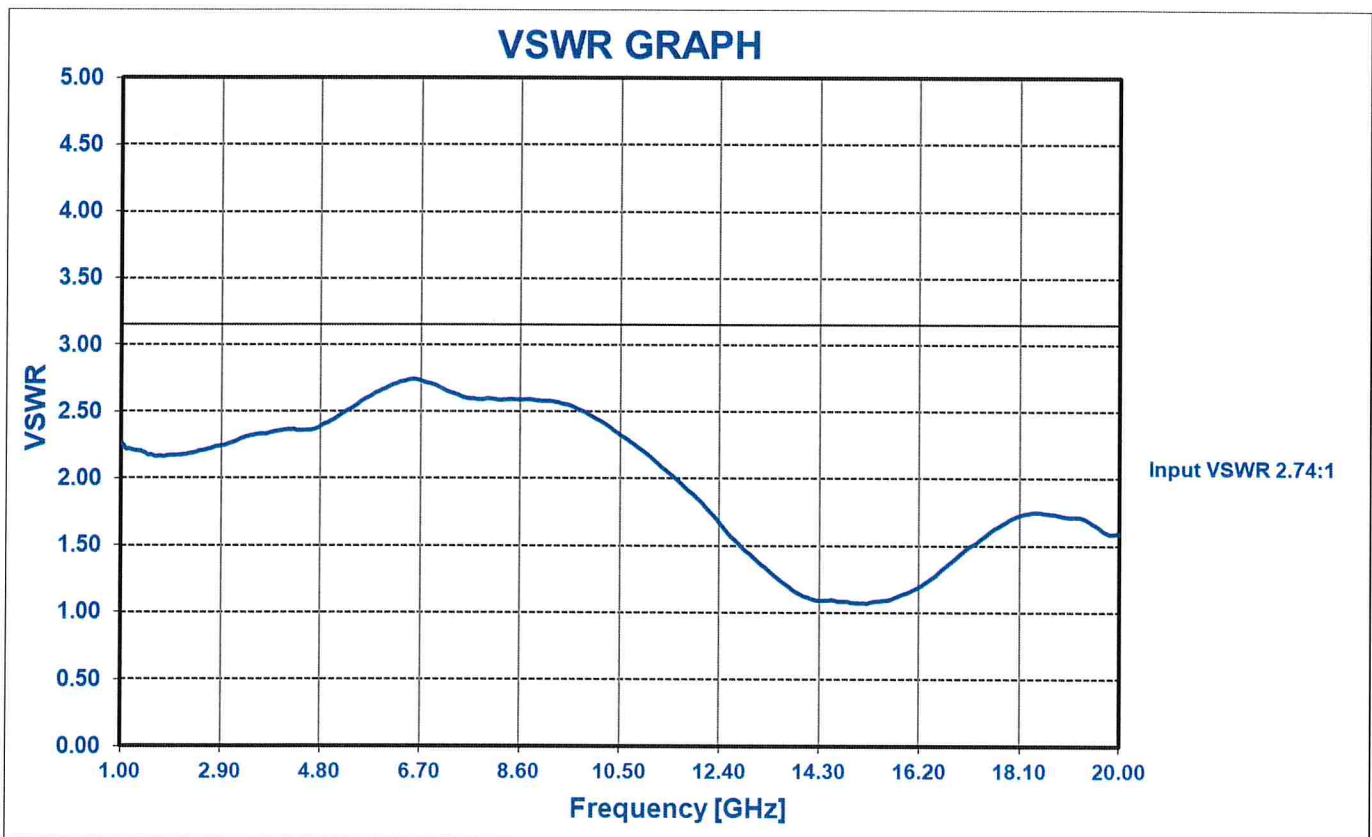




SUMMARY TEST DATA
ON
SDLVA-1G20G-58-12-SFF

PL28125/2021

VSWR

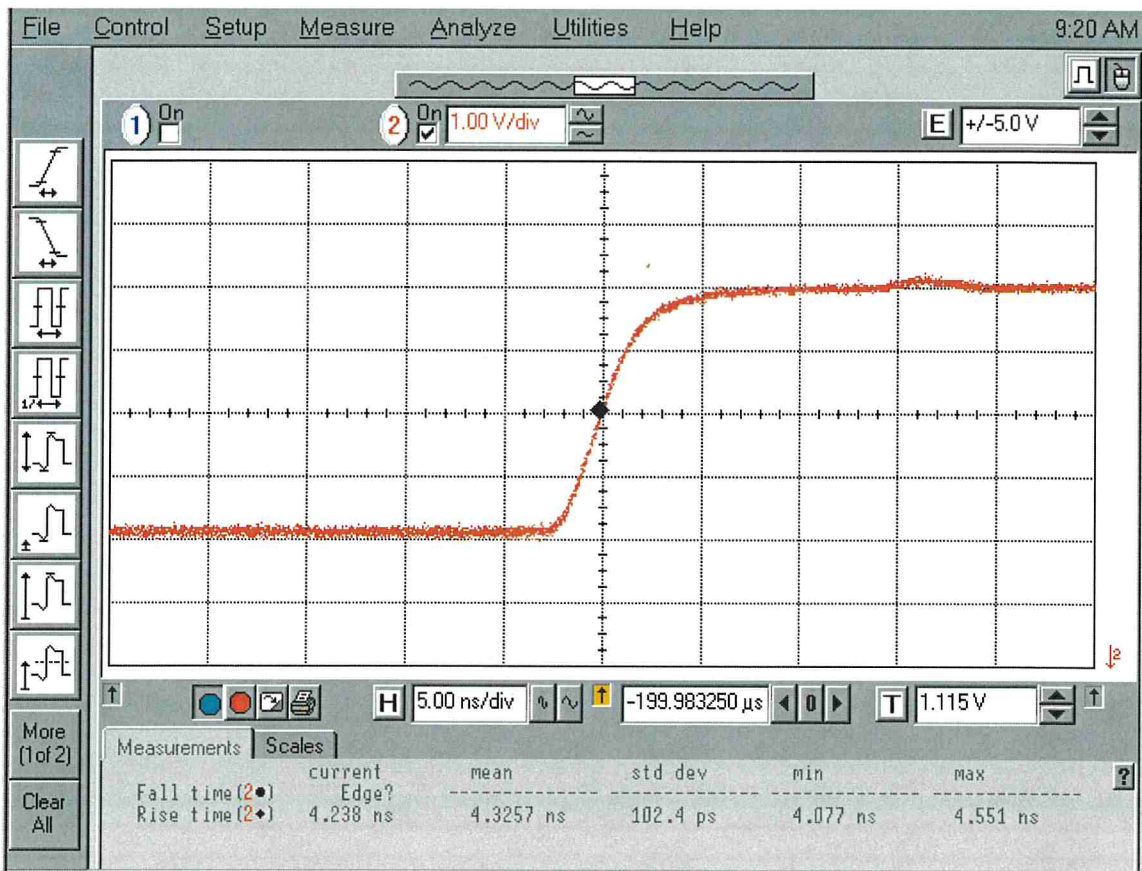




SUMMARY TEST DATA
ON
SDLVA-1G20G-58-12-SFF

PL28125/2021

Rise Time





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

PL28125/2021

Fall Time

