



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

PL28124/2021

Customer: _____
 SO No: _____
 Model No: SDLVA-1G20G-58-12-SFF
 Serial No: PL28124/2021

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	± 1.2 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	2.79:1	
7	Log Video Output Voltage	0.9 V to 1.5V Typ	See Plot	1.749 V	
8	Log Video Output Slope	14 mV / dB Typ	See Plot	14.5 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



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PL28124/2021

Transfer @ 25C – Data

LOG TRANSFER WITH FREQUENCY
MODEL: SDLVA-1G20G-55-12-SFF
TESTED BY: JERRY WADE
DATE: 05/21/20
SERIAL NO: PL28124
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

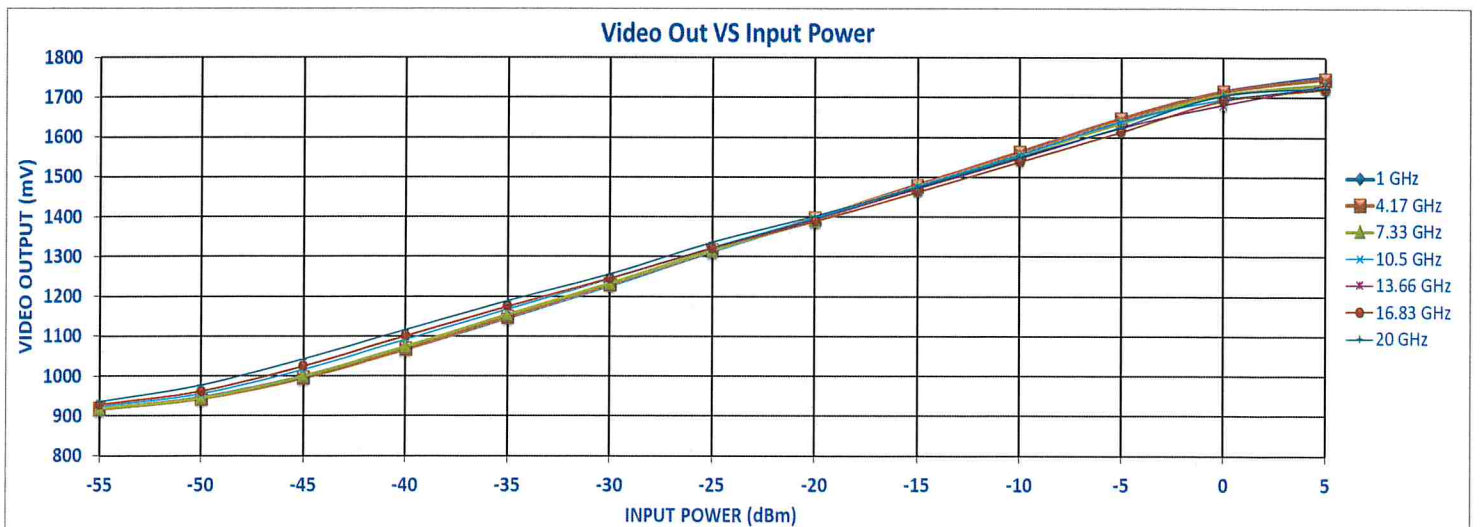
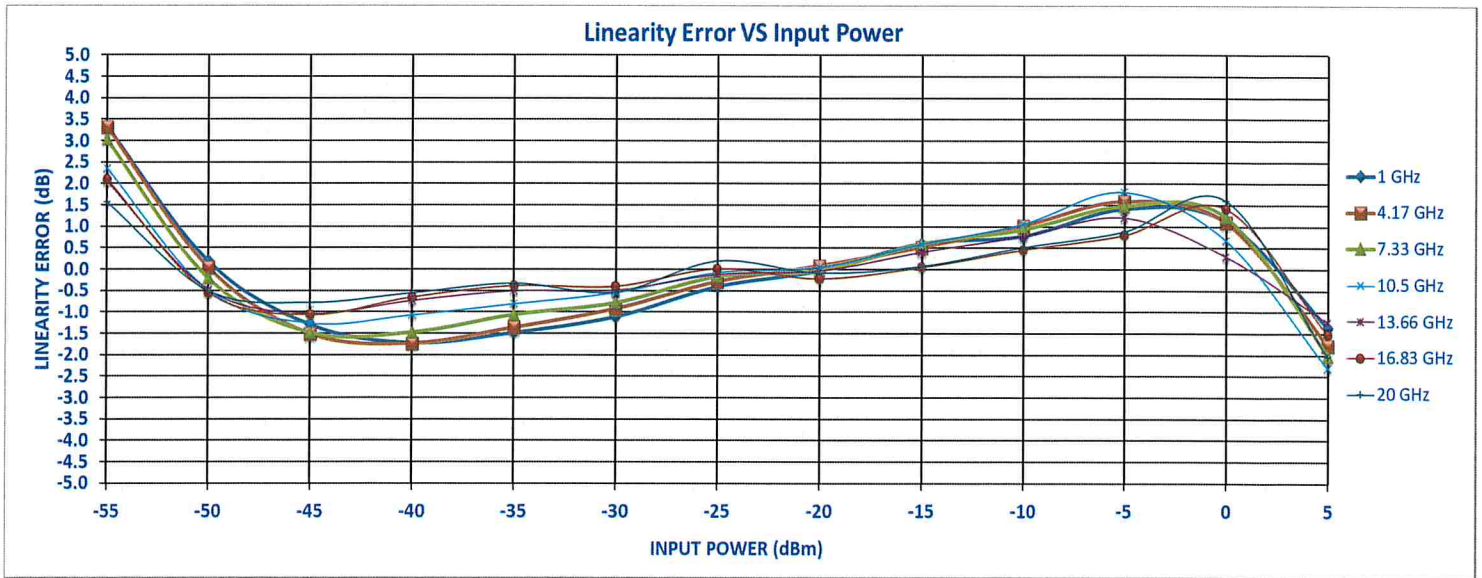
		-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
1 GHz	INTERCEPT (mV)	1695													Measured Value (mV)
	SLOPE (mV/dB)	15.1													Error (mV)
		916	943	996	1066	1145	1226	1312	1393	1478	1556	1641	1712	1749	LINEARITY ERROR (dB)
		51	2	-20	-26	-22	-17	-6	0	9	12	21	17	-21	Measured Value (mV)
		3.35	0.14	-1.34	-1.70	-1.46	-1.09	-0.39	-0.02	0.61	0.78	1.42	1.13	-1.42	Error (mV)
		X													LINEARITY ERROR (dB)
4.17 GHz	INTERCEPT (mV)	1696													Measured Value (mV)
	SLOPE (mV/dB)	15.1													Error (mV)
		916	942	995	1066	1148	1230	1314	1394	1478	1561	1645	1712	1743	LINEARITY ERROR (dB)
		50	0	-22	-27	-20	-13	-5	0	8	16	25	16	-28	Measured Value (mV)
		3.29	0.01	-1.47	-1.76	-1.33	-0.89	-0.32	-0.01	0.56	1.07	1.64	1.08	-1.86	Error (mV)
		X													LINEARITY ERROR (dB)
7.33 GHz	INTERCEPT (mV)	1685													Measured Value (mV)
	SLOPE (mV/dB)	14.8													Error (mV)
		917	943	998	1072	1152	1230	1313	1390	1473	1551	1634	1702	1727	LINEARITY ERROR (dB)
		44	-3	-22	-22	-16	-12	-3	1	10	14	23	17	-32	Measured Value (mV)
		3.01	-0.23	-1.50	-1.49	-1.07	-0.79	-0.17	0.04	0.66	0.95	1.57	1.17	-2.14	Error (mV)
		X													LINEARITY ERROR (dB)
10.5 GHz	INTERCEPT (mV)	1681													Measured Value (mV)
	SLOPE (mV/dB)	14.4													Error (mV)
		922	954	1014	1089	1165	1241	1320	1393	1474	1552	1635	1691	1720	LINEARITY ERROR (dB)
		34	-6	-19	-16	-12	-8	-1	0	9	15	26	10	-33	Measured Value (mV)
		2.33	-0.45	-1.28	-1.08	-0.81	-0.53	-0.05	0.01	0.63	1.04	1.80	0.69	-2.30	Error (mV)
		X													LINEARITY ERROR (dB)
13.66 GHz	INTERCEPT (mV)	1673													Measured Value (mV)
	SLOPE (mV/dB)	14.1													Error (mV)
		925	960	1023	1098	1171	1243	1319	1390	1467	1543	1620	1676	1726	LINEARITY ERROR (dB)
		28	-7	-15	-10	-8	-6	-1	-1	6	11	18	3	-18	Measured Value (mV)
		2.02	-0.50	-1.04	-0.73	-0.56	-0.46	-0.08	-0.05	0.41	0.79	1.24	0.21	-1.25	Error (mV)
		X													LINEARITY ERROR (dB)
16.83 GHz	INTERCEPT (mV)	1669													Measured Value (mV)
	SLOPE (mV/dB)	14.0													Error (mV)
		927	961	1024	1100	1173	1242	1319	1387	1459	1535	1611	1690	1714	LINEARITY ERROR (dB)
		28	-8	-15	-9	-6	-7	0	-2	0	6	12	21	-25	Measured Value (mV)
		2.02	-0.55	-1.05	-0.62	-0.40	-0.47	0.03	-0.11	0.03	0.46	0.89	1.53	-1.75	Error (mV)
		X													LINEARITY ERROR (dB)
20 GHz	INTERCEPT (mV)	1678													Measured Value (mV)
	SLOPE (mV/dB)	13.9													Error (mV)
		933	975	1040	1113	1185	1253	1334	1398	1470	1546	1621	1701	1718	LINEARITY ERROR (dB)
		21	-6	-11	-8	-5	-7	4	-1	1	7	13	23	-30	Measured Value (mV)
		1.52	-0.46	-0.80	-0.56	-0.39	-0.51	0.30	-0.10	0.07	0.52	0.90	1.65	-2.13	Error (mV)
		X													LINEARITY ERROR (dB)
Flatness P-P		1.2	2.2	3.2	3.2	2.8	1.8	1.6	0.8	1.4	1.8	2.4	2.4	2.4	
Slope Avg(mV/dB)		14.5													



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Transfer @ 25C – Plot

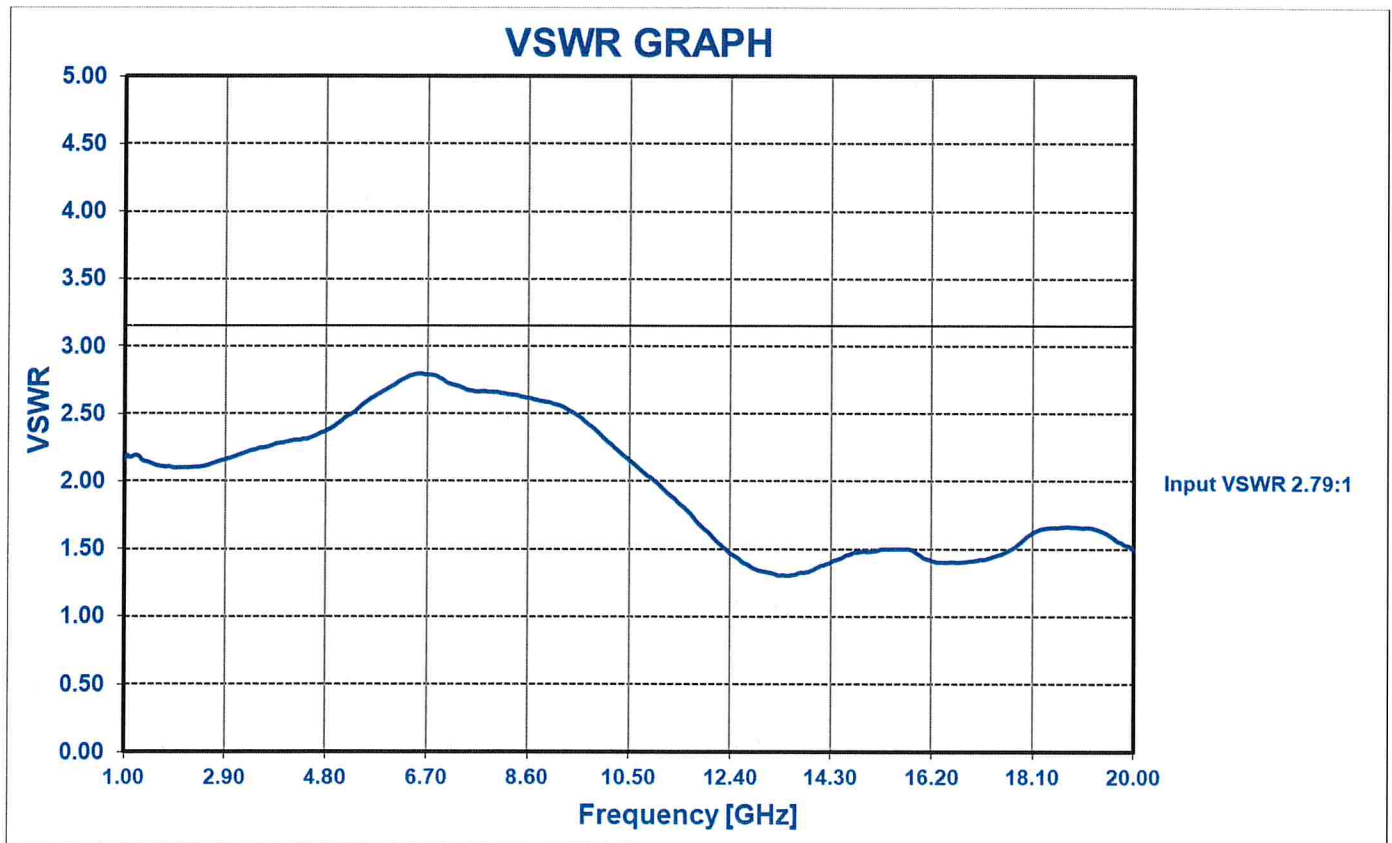




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VSWR

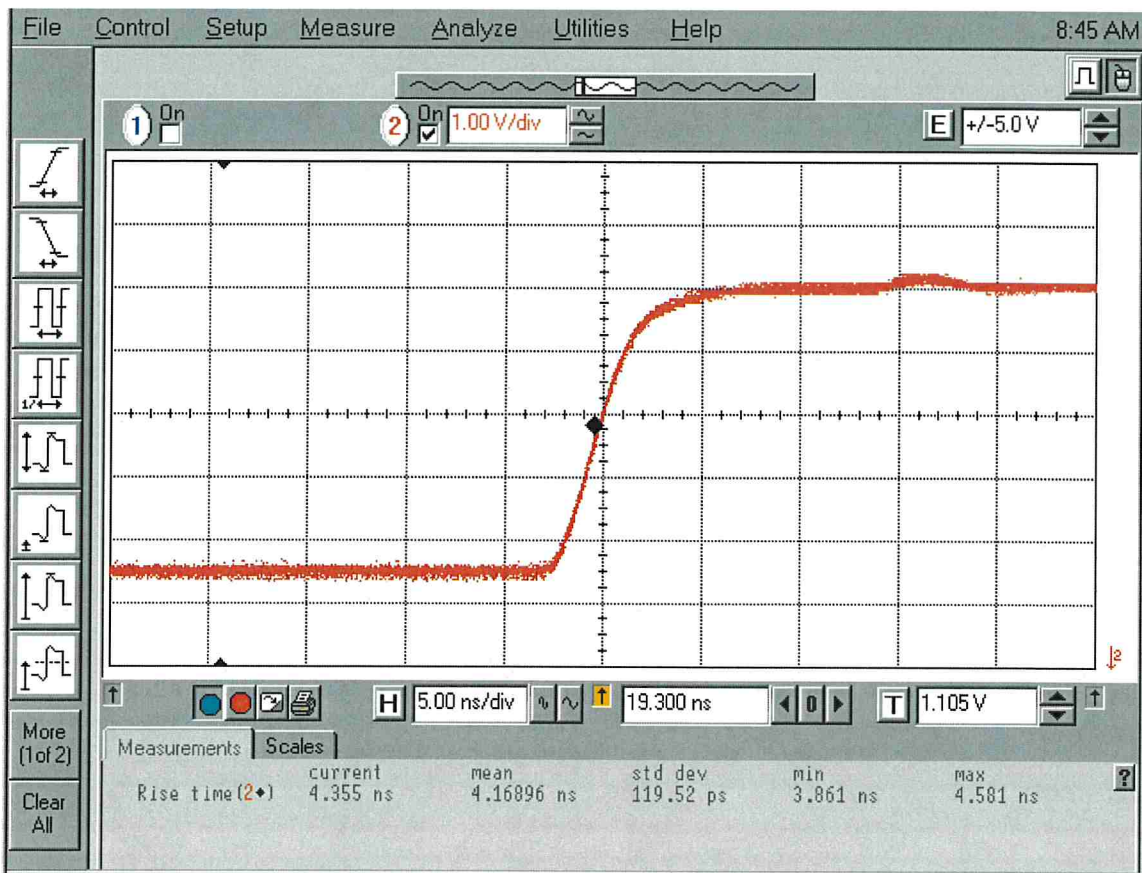




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Rise Time





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Fall Time

