



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

PL26823/1945

Customer: _____
 SO No: _____
 Model No: SDLVA-1G20G-58-12-SFF
 Serial No: PL 26823/1945

Tested By: Simon K. Sign: *SK*
 QA/QC By: Arthur Z. Sign: *AZ*
 Temperature: +25°C
 Date: 11/06/2019
 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>B</i> 11-13-19
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	3.58 :1	
7	Log Video Output Voltage	0.9 V to 1.5V Typ	See Plot	1.78 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	93 mA	Pass	<i>B</i> 11-13-19

QA/QC Approval: *Arthur Zimmerman* Date: 11-13-2019



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ON
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PL26823/1945

Transfer @ 25C – Data

LOG TRANSFER WITH FREQUENCY
MODEL: SDLVA-1G20G-55-12-SFF
TESTED BY: Simon K.
DATE: 11/06/19
SERIAL NO: PL26823
Test Temp: +25C



PLANAR MONOLITHICS INDUSTRIES
 4921 Robert J. Mathews Parkway,
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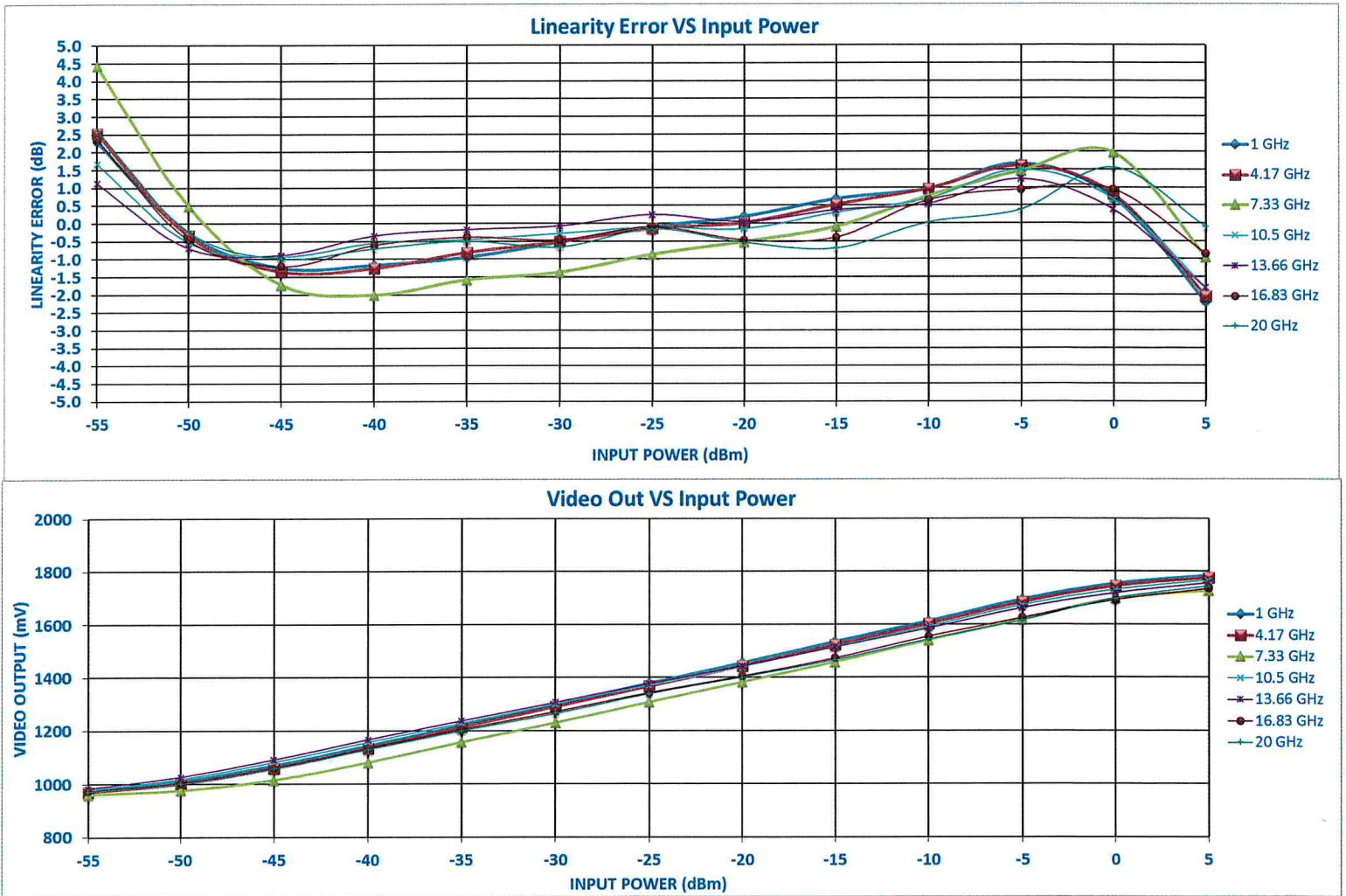
Frequency		-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)	
1 GHz	INTERCEPT (mV)	1743	975	1010	1069	1143	1219	1298	1377	1454	1534	1611	1694	1753	1783	Measured Value (mV)
	SLOPE (mV/dB)	14.6	33	-4	-18	-17	-14	-8	-1	3	10	14	24	10	-32	Error (mV)
			2.30	-0.30	-1.25	-1.17	-0.95	-0.52	-0.10	0.19	0.68	0.97	1.67	0.72	-2.22	LINEARITY ERROR (dB)
			x													
4.17 GHz	INTERCEPT (mV)	1733	971	1002	1060	1134	1213	1290	1368	1443	1523	1602	1684	1745	1776	Measured Value (mV)
	SLOPE (mV/dB)	14.5	37	-5	-20	-18	-12	-7	-2	0	8	14	23	12	-30	Error (mV)
			2.53	-0.34	-1.35	-1.25	-0.81	-0.51	-0.14	0.02	0.53	0.97	1.61	0.81	-2.05	LINEARITY ERROR (dB)
			x													
7.33 GHz	INTERCEPT (mV)	1669	961	976	1015	1081	1157	1230	1307	1382	1458	1540	1620	1697	1726	Measured Value (mV)
	SLOPE (mV/dB)	14.0	62	7	-24	-28	-22	-19	-12	-7	-1	11	21	28	-13	Error (mV)
			4.42	0.50	-1.72	-2.01	-1.58	-1.37	-0.87	-0.52	-0.09	0.76	1.47	1.97	-0.96	LINEARITY ERROR (dB)
			x													
10.5 GHz	INTERCEPT (mV)	1722	979	1018	1082	1157	1228	1300	1372	1441	1517	1592	1673	1731	1766	Measured Value (mV)
	SLOPE (mV/dB)	13.9	23	-7	-13	-8	-6	-4	-2	-2	4	10	21	9	-25	Error (mV)
			1.67	-0.53	-0.93	-0.55	-0.45	-0.28	-0.11	-0.16	0.30	0.68	1.50	0.66	-1.82	LINEARITY ERROR (dB)
			x													
13.66 GHz	INTERCEPT (mV)	1713	984	1027	1092	1167	1237	1306	1378	1443	1515	1585	1662	1718	1756	Measured Value (mV)
	SLOPE (mV/dB)	13.5	15	-9	-12	-5	-2	-1	3	1	5	7	17	5	-25	Error (mV)
			1.13	-0.69	-0.89	-0.34	-0.17	-0.07	0.25	0.05	0.37	0.55	1.24	0.38	-1.82	LINEARITY ERROR (dB)
			x													
16.83 GHz	INTERCEPT (mV)	1679	974	1003	1060	1135	1205	1271	1343	1405	1473	1554	1625	1692	1735	Measured Value (mV)
	SLOPE (mV/dB)	13.4	32	-6	-16	-8	-5	-6	-1	-6	-5	9	13	13	-11	Error (mV)
			2.38	-0.46	-1.20	-0.61	-0.39	-0.46	-0.09	-0.47	-0.39	0.65	0.95	0.94	-0.85	LINEARITY ERROR (dB)
			x													
20 GHz	INTERCEPT (mV)	1677	973	1002	1059	1130	1200	1265	1339	1401	1466	1543	1615	1698	1743	Measured Value (mV)
	SLOPE (mV/dB)	13.4	35	-3	-13	-9	-7	-9	-2	-7	-9	0	5	21	-1	Error (mV)
			2.61	-0.23	-0.99	-0.70	-0.50	-0.66	-0.15	-0.54	-0.71	0.02	0.38	1.56	-0.10	LINEARITY ERROR (dB)
			x													
	Flatness P-P		2.2	3.6	5.2	5.8	5.2	5.1	4.9	4.7	4.9	4.6	5.1	4.4	4.0	
	Slope Avg(mV/dB)	13.9														



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Transfer @ 25C – Plot

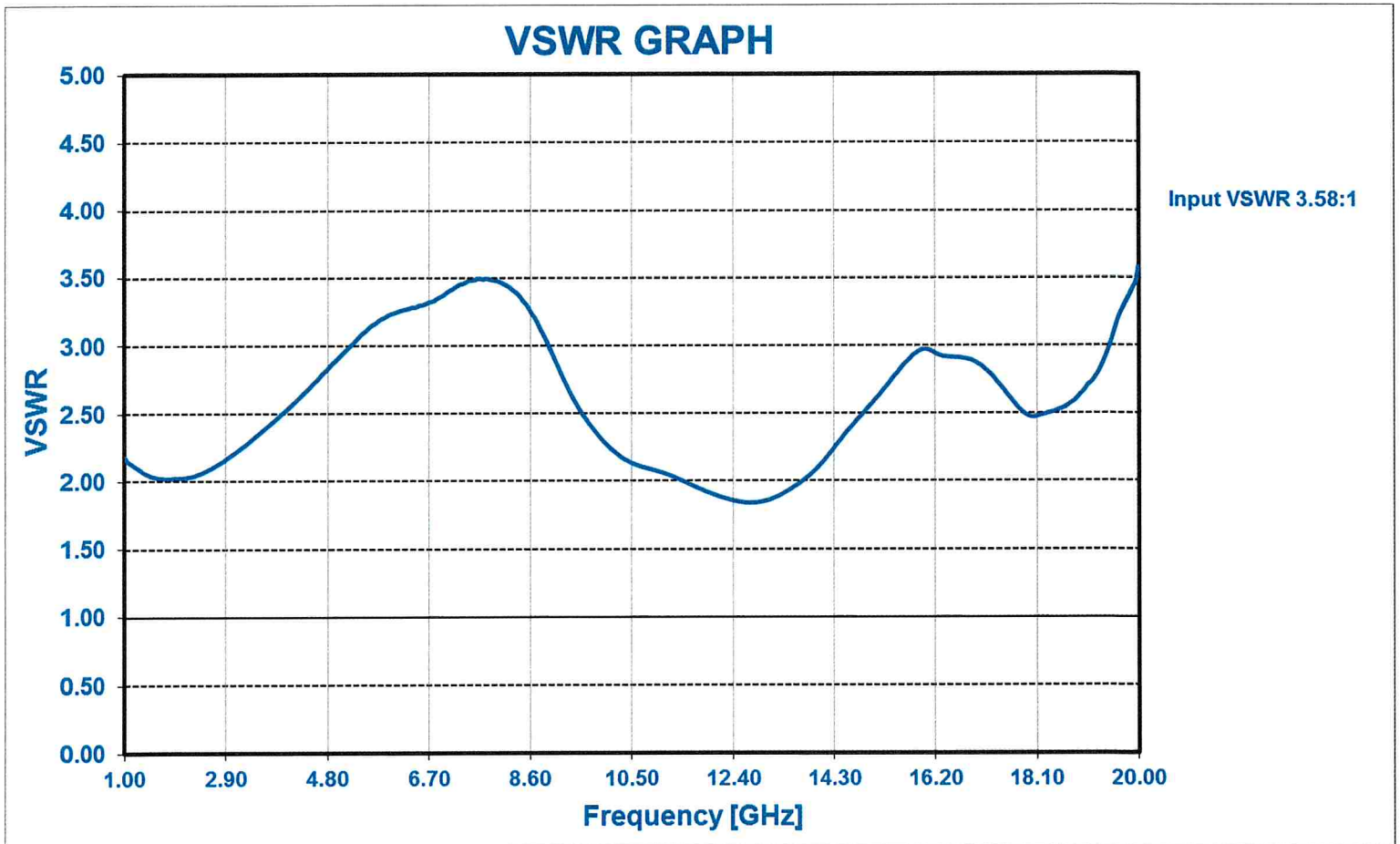




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VSWR

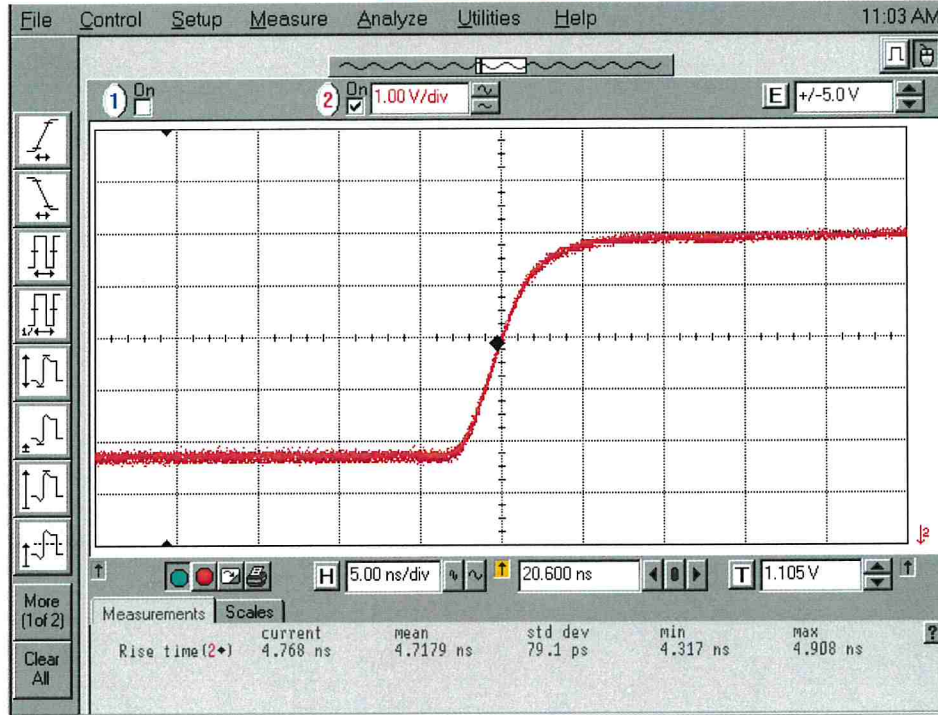




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Rise Time



Fall Time

