



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

PL26821/1944

Customer: _____
 SO No: _____
 Model No: SDLVA-1G20G-58-12-SFF
 Serial No: PL26821/1944

Tested By: Simon K. Sign: *SK*
 QA/QC By: Arthur Z. Sign: *AZ*
 Temperature: +25°C
 Date: 10/30/2019
 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>AZ</i>
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	3.77:1	
7	Log Video Output Voltage	0.9 V to 1.5V Typ	See Plot	1.74 V	
8	Log Video Output Slope	14 mV / dB Typ	See Plot	14.6 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	✓

QA/QC Approval: *Arthur Zimmerman* Date: 10/30/2019



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

PL26821/1944

Transfer @ 25C – Data

LOG TRANSFER WITH FREQUENCY
MODEL: SDLVA-1G20G-58-12-SFF
TESTED BY: Simon K.
DATE: 10/16/2019
SERIAL NO: PL26821
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-

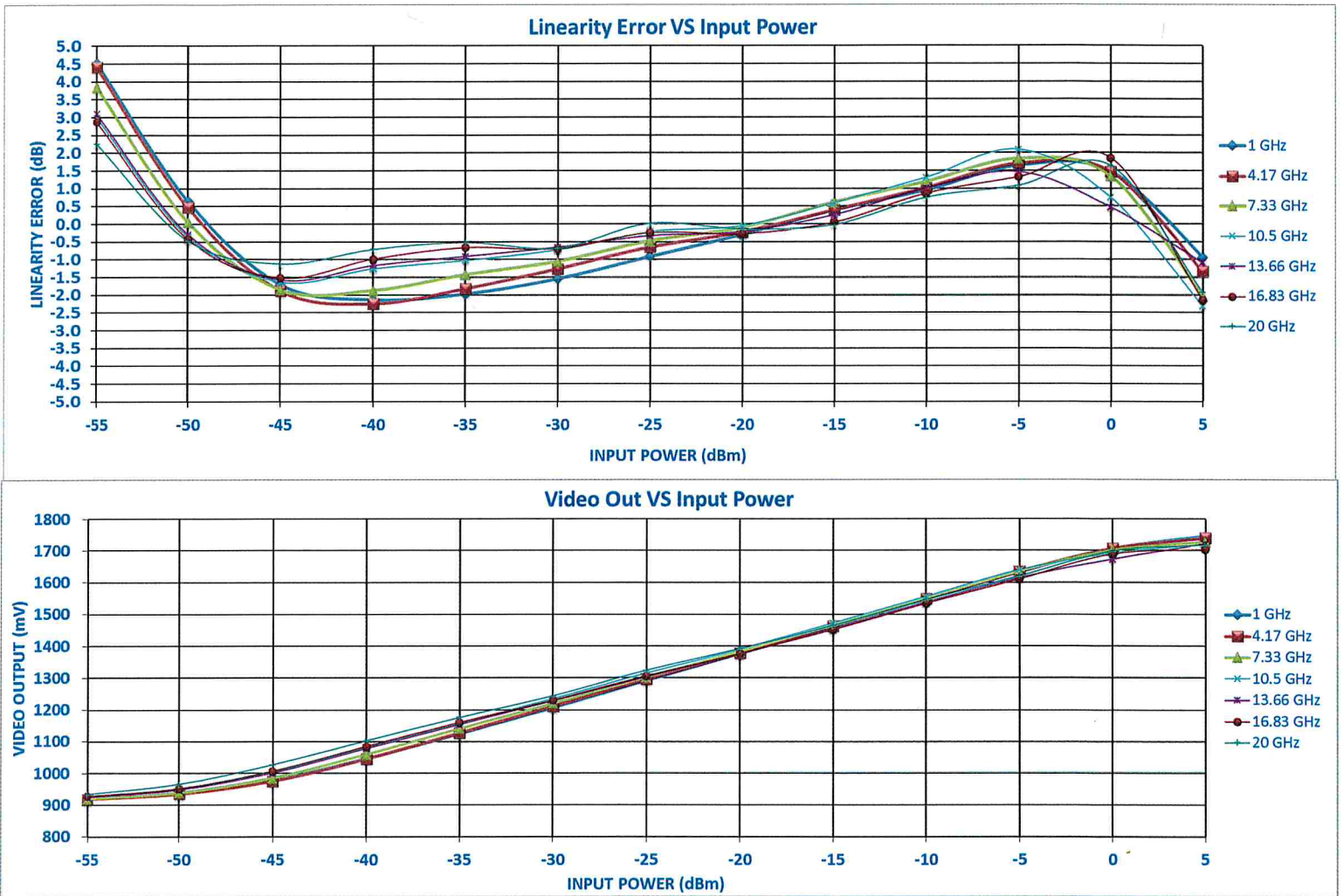
Frequency		-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)	
1 GHz	INTERCEPT (mV)	1683	920	937	977	1046	1124	1206	1291	1376	1462	1546	1632	1705	1744	Measured Value (mV)
	SLOPE (mV/dB)	15.1	68	10	-26	-32	-30	-24	-14	-5	6	14	25	22	-14	Error (mV)
			4.51	0.64	-1.71	-2.15	-1.98	-1.56	-0.93	-0.31	0.39	0.94	1.64	1.47	-0.95	LINEARITY ERROR (dB)
			x													
4.17 GHz	INTERCEPT (mV)	1684	919	935	975	1045	1127	1211	1296	1378	1463	1548	1634	1706	1739	Measured Value (mV)
	SLOPE (mV/dB)	15.1	67	7	-28	-34	-28	-19	-10	-3	6	15	26	22	-20	Error (mV)
			4.41	0.47	-1.88	-2.25	-1.83	-1.27	-0.65	-0.23	0.39	1.02	1.70	1.47	-1.35	LINEARITY ERROR (dB)
			x													
7.33 GHz	INTERCEPT (mV)	1682	921	939	985	1059	1140	1220	1303	1383	1468	1551	1635	1702	1726	Measured Value (mV)
	SLOPE (mV/dB)	14.9	57	1	-28	-28	-21	-16	-7	-2	9	18	27	20	-31	Error (mV)
			3.85	0.06	-1.85	-1.88	-1.44	-1.06	-0.48	-0.10	0.61	1.19	1.83	1.34	-2.05	LINEARITY ERROR (dB)
			x													
10.5 GHz	INTERCEPT (mV)	1680	925	949	1003	1081	1157	1234	1314	1389	1471	1554	1638	1691	1719	Measured Value (mV)
	SLOPE (mV/dB)	14.5	43	-5	-24	-18	-15	-11	-3	-1	8	19	30	11	-34	Error (mV)
			2.99	-0.36	-1.64	-1.27	-1.04	-0.74	-0.23	-0.06	0.58	1.30	2.08	0.73	-2.34	LINEARITY ERROR (dB)
			x													
13.66 GHz	INTERCEPT (mV)	1665	925	948	1001	1078	1153	1228	1304	1377	1455	1537	1615	1672	1721	Measured Value (mV)
	SLOPE (mV/dB)	14.3	44	-4	-22	-17	-13	-9	-5	-3	4	14	21	7	-16	Error (mV)
			3.10	-0.29	-1.57	-1.18	-0.92	-0.66	-0.33	-0.22	0.25	1.00	1.47	0.46	-1.10	LINEARITY ERROR (dB)
			x													
16.83 GHz	INTERCEPT (mV)	1663	928	952	1007	1085	1160	1230	1307	1377	1452	1534	1611	1689	1703	Measured Value (mV)
	SLOPE (mV/dB)	14.1	41	-6	-21	-14	-9	-10	-3	-4	1	12	19	26	-30	Error (mV)
			2.88	-0.42	-1.52	-0.99	-0.67	-0.70	-0.24	-0.27	0.05	0.86	1.32	1.86	-2.15	LINEARITY ERROR (dB)
			x													
20 GHz	INTERCEPT (mV)	1674	933	965	1026	1102	1175	1243	1323	1391	1463	1544	1619	1697	1717	Measured Value (mV)
	SLOPE (mV/dB)	14.1	32	-7	-16	-10	-7	-10	0	-2	0	10	15	23	-27	Error (mV)
			2.25	-0.47	-1.13	-0.72	-0.53	-0.69	0.01	-0.15	-0.03	0.73	1.07	1.62	-1.95	LINEARITY ERROR (dB)
			x													
	Flatness P-P		1.0	2.0	3.4	4.0	3.4	2.6	2.2	1.0	1.4	1.4	1.8	2.4	2.8	
	Slope Avg(mv/dB)	14.6														



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

PL26821/1944

Transfer @ 25C – Plot



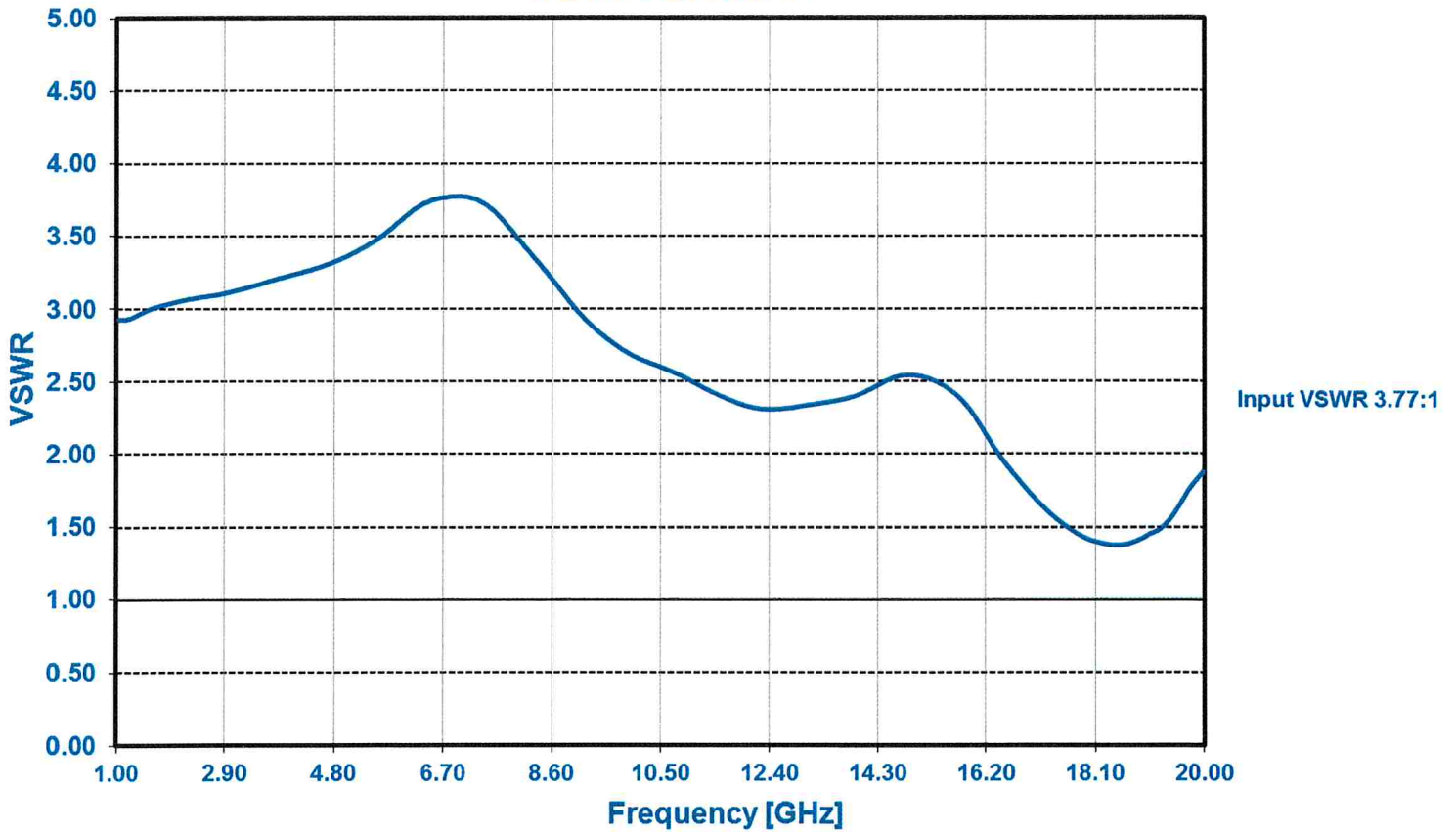


**SUMMARY TEST DATA
ON
SDLVA-1G20G-58-12-SFF**

PL26821/1944

VSWR

VSWR GRAPH

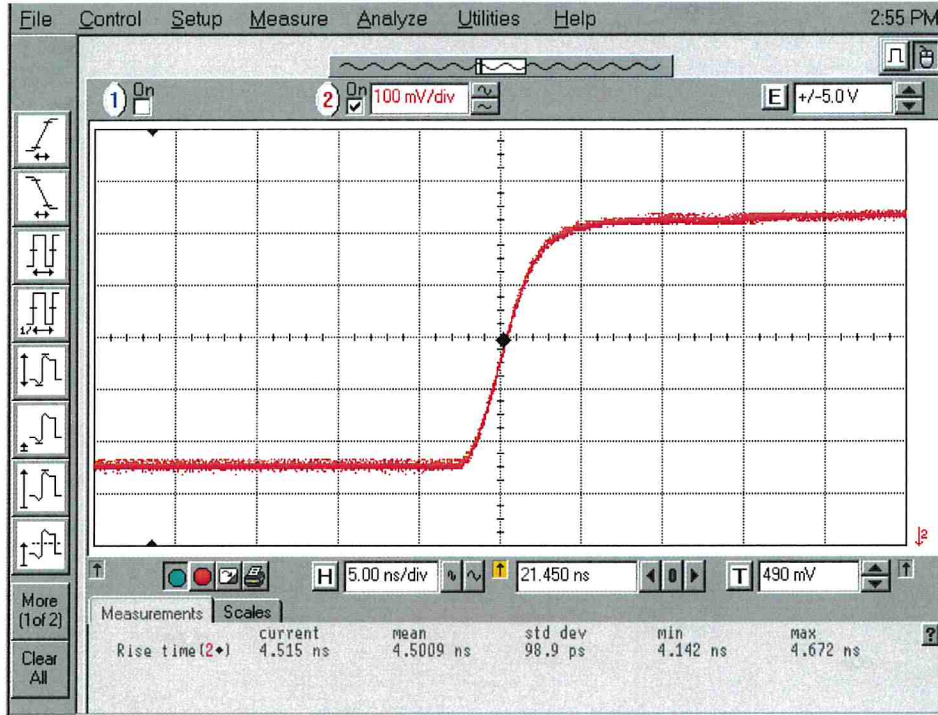




**SUMMARY TEST DATA
ON
SDLVA-1G20G-58-12-SFF**

PL26821/1944

Rise Time



Fall Time

