



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

PL26763/1945

Customer: _____
 SO No: _____
 Model No: SDLVA-1G20G-58-12-SFF
 Serial No: PL26763/1945

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>AZ</i> 11-13-19
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	3.46:1	
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	<i>B</i> 11-13-19

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



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

PL26763/1945

Transfer @ 25C – Data

LOG TRANSFER WITH FREQUENCY
MODEL: SDLVA-1G20G-58-12-SFF
TESTED BY: Simon K.
DATE: 10/14/2019
SERIAL NO: PL26763
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

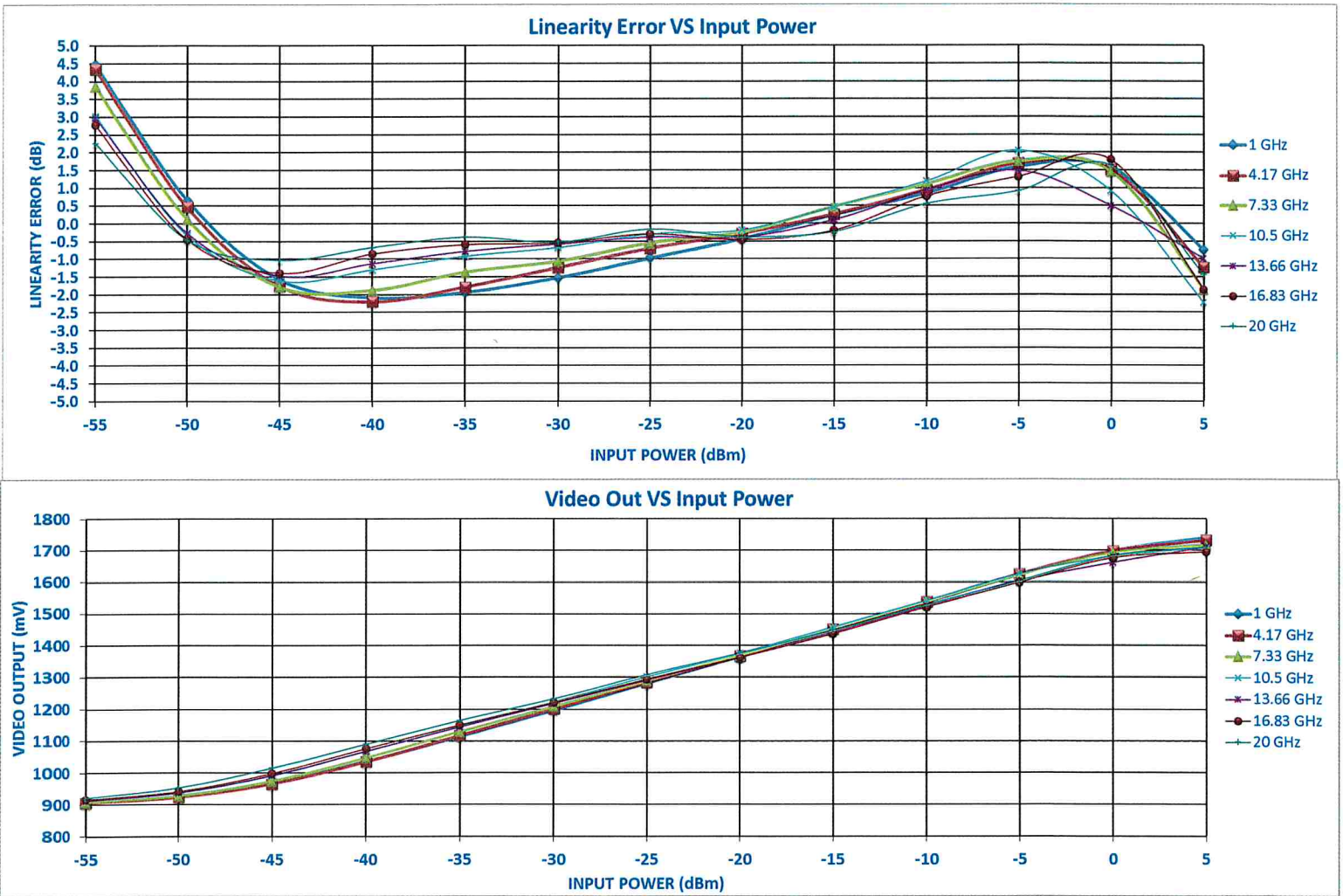
		-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)	
1 GHz	INTERCEPT (mV)	1674	908	926	968	1036	1114	1196	1280	1364	1450	1535	1622	1697	1738	Measured Value (mV)
	SLOPE (mV/dB)	15.2	68	10	-24	-32	-29	-23	-15	-7	4	13	24	23	-11	Error (mV)
		4.46	0.65	-1.58	-2.09	-1.94	-1.53	-0.98	-0.44	0.23	0.84	1.59	1.54	-0.76	LINEARITY ERROR (dB)	
		X														
4.17 GHz	INTERCEPT (mV)	1674	907	924	966	1035	1117	1201	1285	1367	1451	1537	1624	1697	1731	Measured Value (mV)
	SLOPE (mV/dB)	15.1	66	7	-27	-33	-27	-19	-11	-4	4	14	26	23	-19	Error (mV)
		4.34	0.47	-1.76	-2.20	-1.79	-1.24	-0.70	-0.28	0.27	0.94	1.69	1.51	-1.25	LINEARITY ERROR (dB)	
		X														
7.33 GHz	INTERCEPT (mV)	1670	909	928	974	1047	1129	1208	1290	1369	1454	1538	1622	1692	1717	Measured Value (mV)
	SLOPE (mV/dB)	14.9	57	2	-27	-28	-20	-16	-8	-4	7	17	26	22	-28	Error (mV)
		3.85	0.12	-1.78	-1.88	-1.37	-1.06	-0.55	-0.25	0.47	1.11	1.75	1.46	-1.86	LINEARITY ERROR (dB)	
		X														
10.5 GHz	INTERCEPT (mV)	1667	913	937	991	1068	1146	1222	1300	1374	1456	1539	1624	1680	1707	Measured Value (mV)
	SLOPE (mV/dB)	14.5	44	-5	-23	-19	-13	-10	-4	-3	7	17	30	13	-32	Error (mV)
		3.01	-0.33	-1.61	-1.30	-0.92	-0.68	-0.30	-0.20	0.46	1.18	2.04	0.90	-2.24	LINEARITY ERROR (dB)	
		X														
13.66 GHz	INTERCEPT (mV)	1653	913	938	992	1068	1144	1218	1292	1363	1441	1524	1603	1660	1710	Measured Value (mV)
	SLOPE (mV/dB)	14.2	42	-4	-21	-16	-11	-8	-5	-6	1	13	21	7	-14	Error (mV)
		2.97	-0.27	-1.47	-1.13	-0.78	-0.58	-0.38	-0.39	0.10	0.93	1.49	0.49	-0.99	LINEARITY ERROR (dB)	
		X														
16.83 GHz	INTERCEPT (mV)	1651	916	941	998	1076	1150	1221	1295	1363	1437	1521	1599	1676	1695	Measured Value (mV)
	SLOPE (mV/dB)	14.1	39	-6	-20	-12	-8	-8	-4	-6	-3	11	19	25	-26	Error (mV)
		2.77	-0.45	-1.40	-0.85	-0.60	-0.55	-0.29	-0.46	-0.20	0.77	1.32	1.79	-1.86	LINEARITY ERROR (dB)	
		X														
20 GHz	INTERCEPT (mV)	1659	921	953	1015	1090	1164	1232	1307	1374	1446	1527	1602	1682	1709	Measured Value (mV)
	SLOPE (mV/dB)	14.0	32	-6	-14	-9	-5	-7	-2	-5	-3	8	13	23	-20	Error (mV)
		2.25	-0.46	-1.03	-0.67	-0.39	-0.53	-0.17	-0.38	-0.24	0.55	0.90	1.62	-1.45	LINEARITY ERROR (dB)	
		X														
Flatness P-P		1.0	2.0	3.4	3.8	3.4	2.4	1.8	0.8	1.4	1.2	1.8	2.6	3.0		
Slope Avg(mv/dB)		14.6														



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

PL26763/1945

Transfer @ 25C – Plot

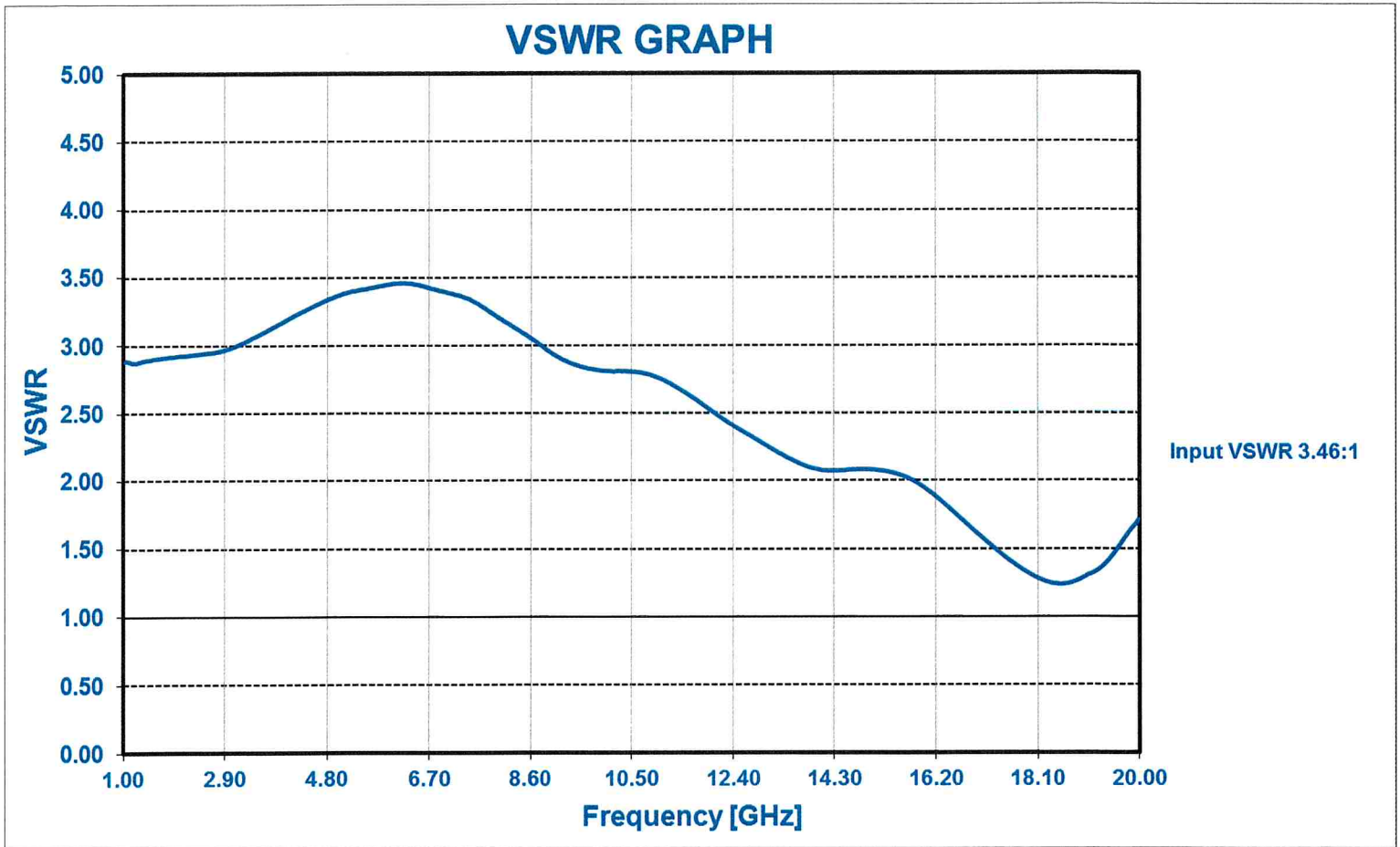




**SUMMARY TEST DATA
ON
SDLVA-1G20G-58-12-SFF**

PL26763/1945

VSWR

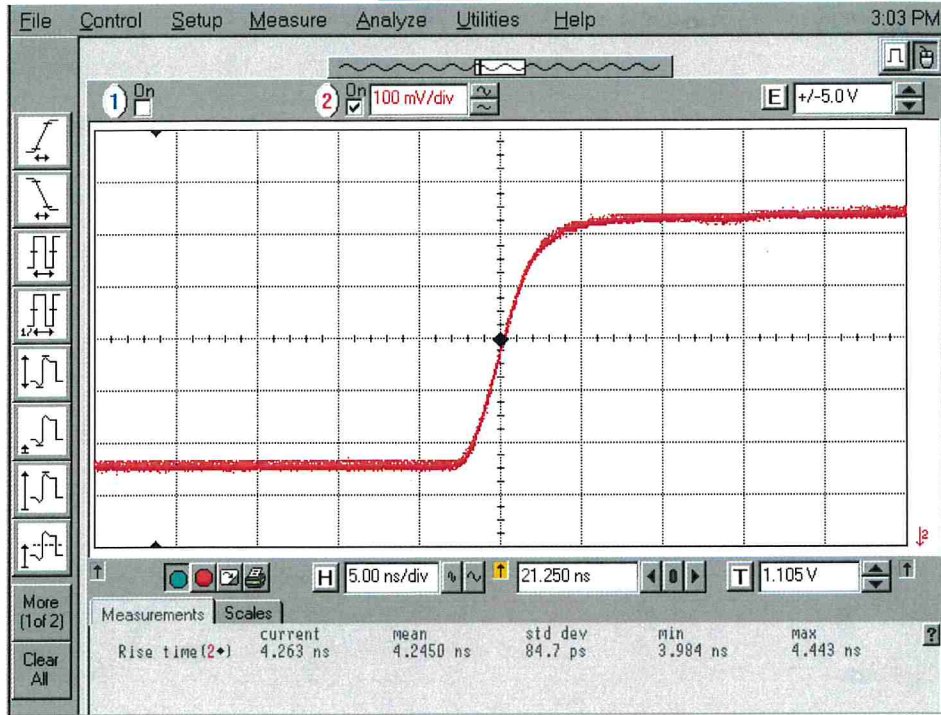




SUMMARY TEST DATA ON SDLVA-1G20G-58-12-SFF

PL26763/1945

Rise Time



Fall Time

