



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

PL26764/1945

Customer: _____
 SO No: _____
 Model No: SDLVA-1G20G-58-12-SFF
 Serial No: PL26764/1945

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	± 1.3 dB	<i>AZ</i>	
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	3.53:1		
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	14.3 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>AZ</i> 11-13-19

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



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Transfer @ 25C – Data

LOG TRANSFER WITH FREQUENCY
MODEL: SDLVA-1G20G-58-12-SFF
TESTED BY: Simon K.
DATE: 10/14/2019
SERIAL NO: PL26764
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
1 GHz	937	951	988	1056	1132	1212	1294	1376	1461	1544	1631	1704	1744
INTERCEPT (mV)	71	11	-26	-32	-30	-24	-16	-8	3	12	25	24	-10
SLOPE (mV/dB)	4.79	0.74	-1.76	-2.17	-2.03	-1.62	-1.08	-0.54	0.20	0.81	1.69	1.63	-0.67
	x												
4.17 GHz	936	949	987	1056	1136	1216	1299	1379	1463	1548	1633	1706	1738
INTERCEPT (mV)	69	8	-28	-33	-27	-21	-12	-6	4	15	26	25	-17
SLOPE (mV/dB)	4.66	0.54	-1.90	-2.24	-1.83	-1.43	-0.83	-0.42	0.25	0.99	1.73	1.66	-1.18
	x												
7.33 GHz	937	953	995	1069	1148	1224	1305	1383	1467	1549	1633	1701	1725
INTERCEPT (mV)	60	3	-28	-27	-21	-18	-10	-4	7	16	27	22	-27
SLOPE (mV/dB)	4.08	0.18	-1.93	-1.85	-1.43	-1.21	-0.65	-0.30	0.47	1.09	1.86	1.53	-1.82
	x												
10.5 GHz	941	962	1014	1090	1164	1238	1314	1388	1470	1553	1636	1690	1717
INTERCEPT (mV)	46	-4	-23	-18	-15	-12	-7	-4	7	18	30	13	-31
SLOPE (mV/dB)	3.24	-0.28	-1.62	-1.27	-1.07	-0.86	-0.51	-0.31	0.46	1.30	2.14	0.94	-2.16
	x												
13.66 GHz	941	960	1010	1085	1156	1228	1302	1373	1450	1532	1611	1669	1718
INTERCEPT (mV)	49	-2	-22	-16	-15	-13	-8	-7	0	13	22	10	-11
SLOPE (mV/dB)	3.50	-0.14	-1.55	-1.17	-1.08	-0.91	-0.60	-0.51	0.02	0.90	1.57	0.73	-0.76
	x												
16.83 GHz	943	963	1014	1091	1162	1230	1304	1373	1447	1530	1608	1688	1706
INTERCEPT (mV)	46	-3	-21	-13	-12	-13	-8	-9	-4	10	19	29	-22
SLOPE (mV/dB)	3.35	-0.20	-1.52	-0.97	-0.84	-0.93	-0.59	-0.61	-0.27	0.72	1.35	2.12	-1.58
	x												
20 GHz	947	974	1031	1105	1176	1242	1320	1386	1458	1539	1615	1696	1722
INTERCEPT (mV)	39	-4	-16	-11	-9	-13	-4	-7	-4	7	14	26	-18
SLOPE (mV/dB)	2.79	-0.26	-1.15	-0.80	-0.68	-0.91	-0.28	-0.52	-0.32	0.53	1.01	1.86	-1.26
	x												
Flatness P-P	0.8	1.8	3.0	3.4	3.0	2.0	1.8	1.0	1.6	1.6	2.0	2.6	2.6

RF Input Power (dBm)

Measured Value (mV)

Error (mV)

LINEARITY ERROR (dB)

Measured Value (mV)

Error (mV)

LINEARITY ERROR (dB)

Measured Value (mV)

Error (mV)

LINEARITY ERROR (dB)

Measured Value (mV)

Error (mV)

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Error (mV)

LINEARITY ERROR (dB)

Measured Value (mV)

Error (mV)

LINEARITY ERROR (dB)

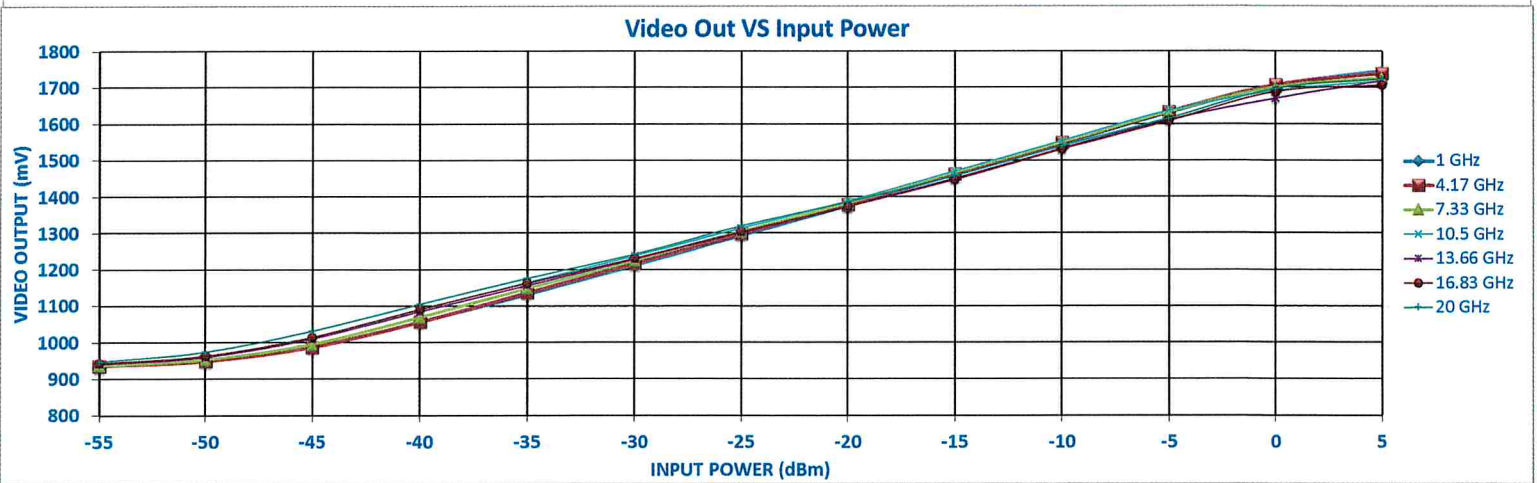
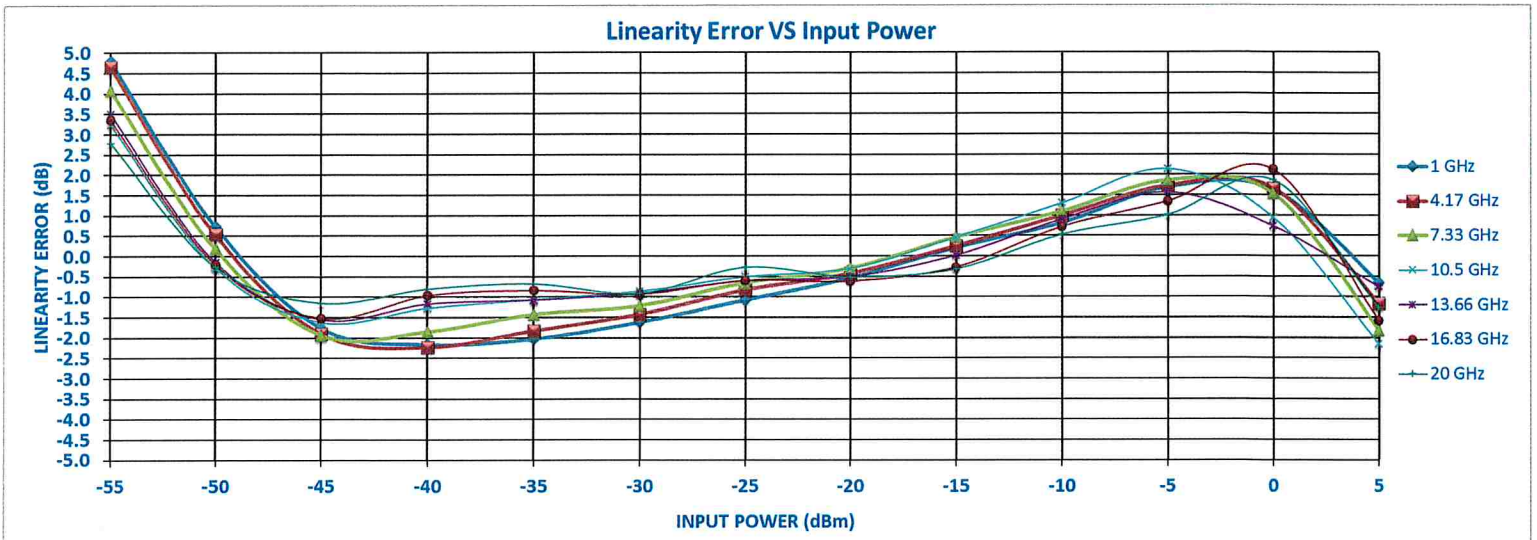
Slope Avg(mv/dB) **14.3**



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Transfer @ 25C – Plot



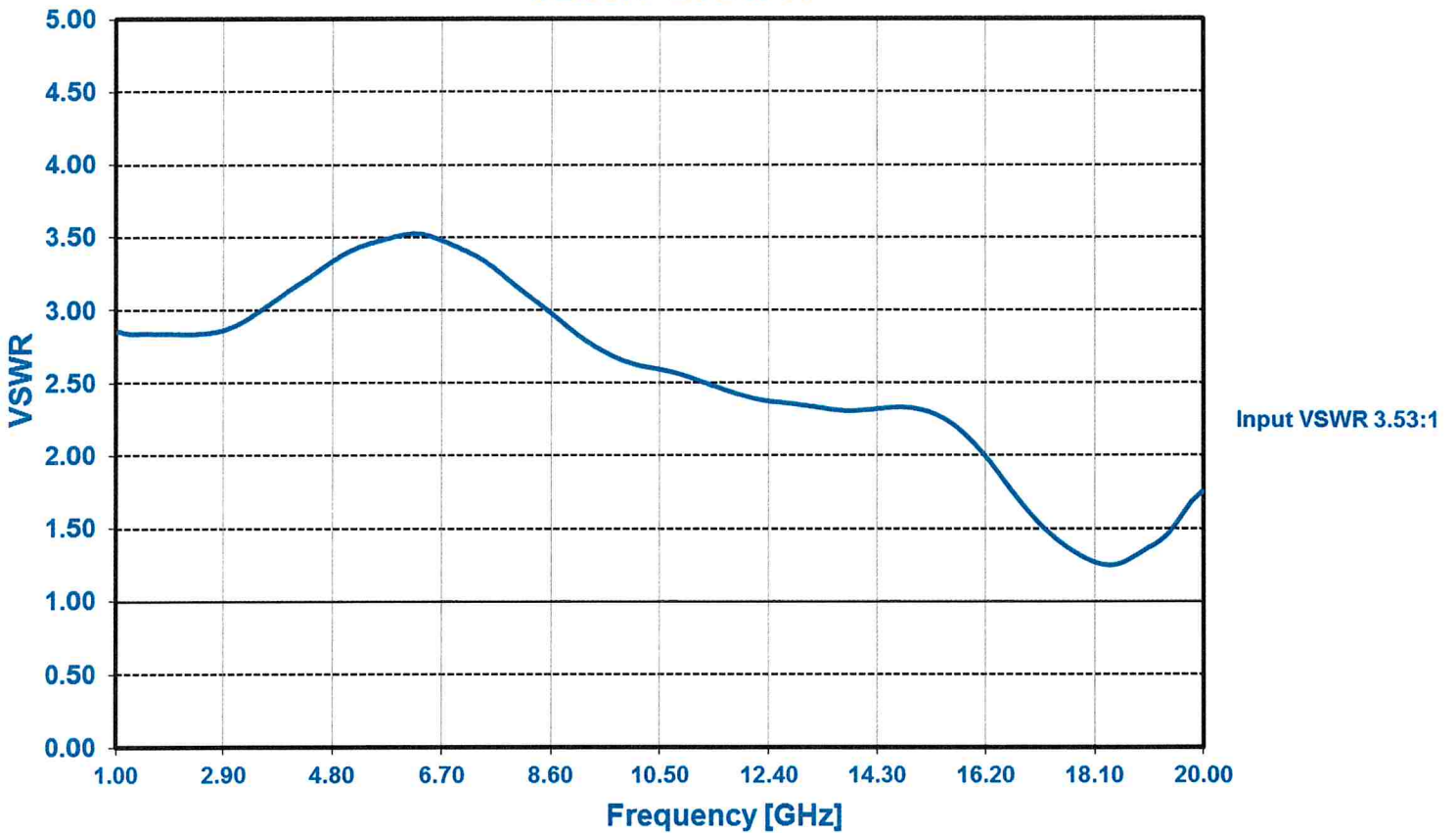


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VSWR

VSWR GRAPH

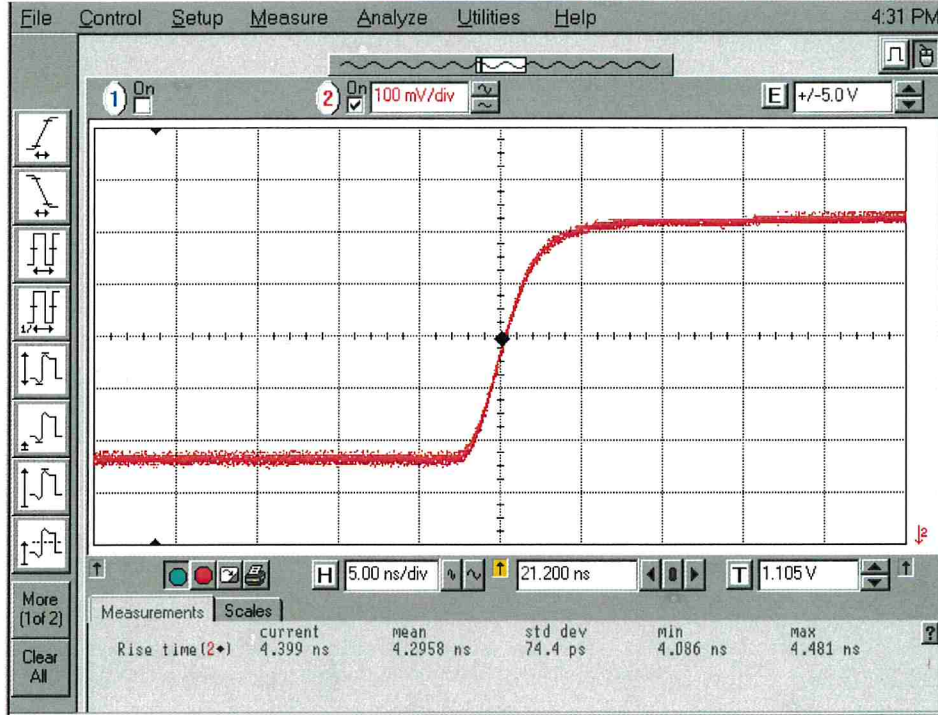




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Rise Time



Fall Time

