



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

PL28128/2021

Customer: _____
 SO No: _____
 Model No: SDLVA-1G20G-58-12-SFF
 Serial No: PL28128/2021

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	03 5/21
2	Frequency Flatness	±2.0 dB Typ	See Plot	± 1.4 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	2.74:1	
7	Log Video Output Voltage	0.9 V to 1.5V Typ	See Plot	1.736 V	
8	Log Video Output Slope	14 mV / dB Typ	See Plot	14.7 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	96 mA	Pass	03 5/21

QA/QC Approval: Arthur Zimmerman Date: 5/21/2020



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PL28128/2021

Transfer @ 25C – Data

LOG TRANSFER WITH FREQUENCY
MODEL: SDLVA-1G20G-55-12-SFF
TESTED BY: JERRY WADE
DATE: 05/21/2020
SERIAL NO: PL28128
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

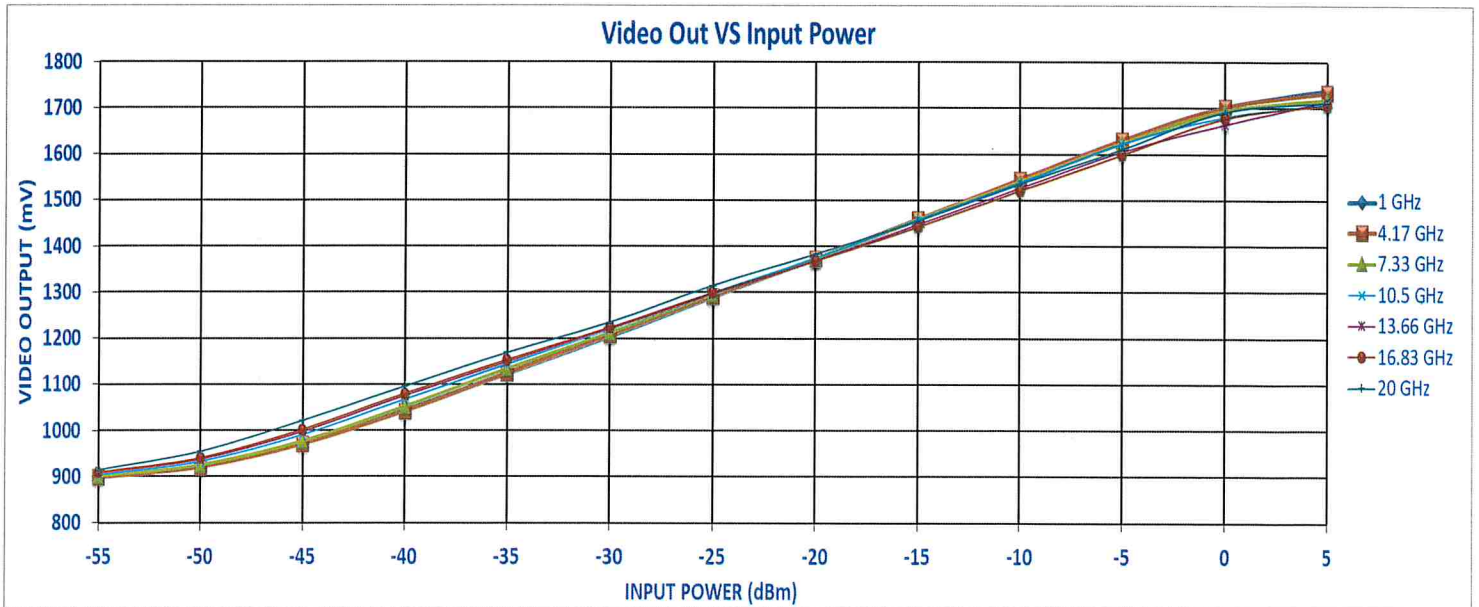
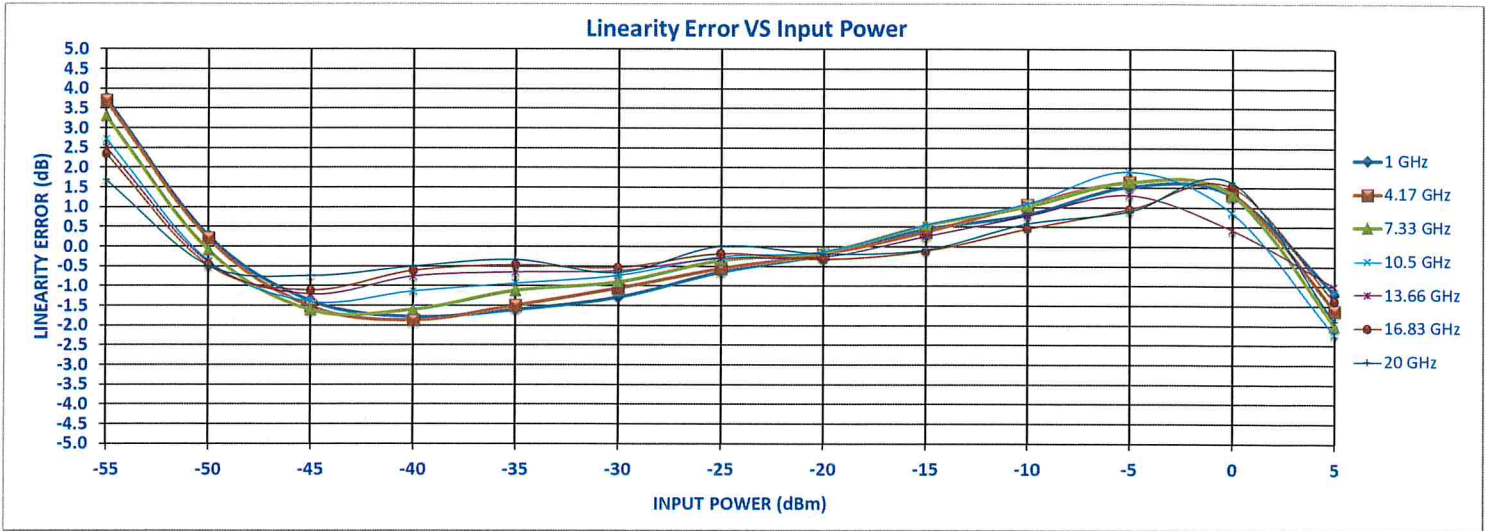
		-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
1 GHz	INTERCEPT (mV)	895	919	970	1040	1119	1201	1287	1370	1457	1538	1626	1698	1736	Measured Value (mV)
	SLOPE (mV/dB)	57	4	-21	-27	-25	-19	-10	-3	8	12	24	19	-19	Error (mV)
		3.71	0.29	-1.38	-1.80	-1.62	-1.26	-0.63	-0.20	0.50	0.80	1.56	1.27	-1.24	LINEARITY ERROR (dB)
		x													
4.17 GHz	INTERCEPT (mV)	894	917	967	1039	1121	1204	1289	1370	1455	1542	1628	1698	1728	Measured Value (mV)
	SLOPE (mV/dB)	56	2	-24	-28	-23	-16	-7	-3	6	17	26	20	-26	Error (mV)
		3.65	0.16	-1.57	-1.85	-1.48	-1.04	-0.48	-0.17	0.39	1.09	1.72	1.31	-1.73	LINEARITY ERROR (dB)
		x													
7.33 GHz	INTERCEPT (mV)	896	920	973	1048	1129	1208	1291	1369	1454	1537	1621	1689	1713	Measured Value (mV)
	SLOPE (mV/dB)	49	-2	-24	-24	-17	-13	-5	-2	8	17	26	19	-32	Error (mV)
		3.27	-0.13	-1.59	-1.57	-1.16	-0.88	-0.33	-0.12	0.56	1.11	1.72	1.26	-2.13	LINEARITY ERROR (dB)
		x													
10.5 GHz	INTERCEPT (mV)	900	928	986	1063	1139	1215	1295	1369	1453	1534	1619	1677	1704	Measured Value (mV)
	SLOPE (mV/dB)	40	-5	-20	-16	-14	-11	-4	-3	8	16	28	13	-33	Error (mV)
		2.72	-0.37	-1.40	-1.13	-0.92	-0.72	-0.25	-0.18	0.57	1.11	1.93	0.90	-2.25	LINEARITY ERROR (dB)
		x													
13.66 GHz	INTERCEPT (mV)	902	933	994	1071	1145	1216	1293	1364	1443	1522	1601	1659	1709	Measured Value (mV)
	SLOPE (mV/dB)	34	-6	-17	-11	-8	-9	-3	-4	4	11	19	6	-16	Error (mV)
		2.39	-0.44	-1.17	-0.78	-0.59	-0.62	-0.23	-0.26	0.27	0.80	1.33	0.39	-1.10	LINEARITY ERROR (dB)
		x													
16.83 GHz	INTERCEPT (mV)	905	937	1000	1078	1151	1220	1296	1365	1439	1518	1595	1673	1702	Measured Value (mV)
	SLOPE (mV/dB)	31	-7	-15	-8	-6	-8	-2	-4	-1	7	13	21	-21	Error (mV)
		2.21	-0.53	-1.08	-0.57	-0.41	-0.54	-0.17	-0.29	-0.07	0.51	0.95	1.46	-1.49	LINEARITY ERROR (dB)
		x													
20 GHz	INTERCEPT (mV)	912	953	1020	1094	1167	1233	1313	1379	1452	1530	1607	1687	1707	Measured Value (mV)
	SLOPE (mV/dB)	23	-7	-10	-7	-4	-8	1	-3	-1	7	14	23	-27	Error (mV)
		1.60	-0.49	-0.73	-0.47	-0.29	-0.60	0.08	-0.23	-0.05	0.49	0.96	1.65	-1.93	LINEARITY ERROR (dB)
		x													
Flatness P-P		1.2	2.4	3.6	3.8	3.2	2.2	1.8	1.0	1.2	1.6	2.2	2.6	2.4	
Slope Avg(mV/dB)		14.7													



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Transfer @ 25C – Plot

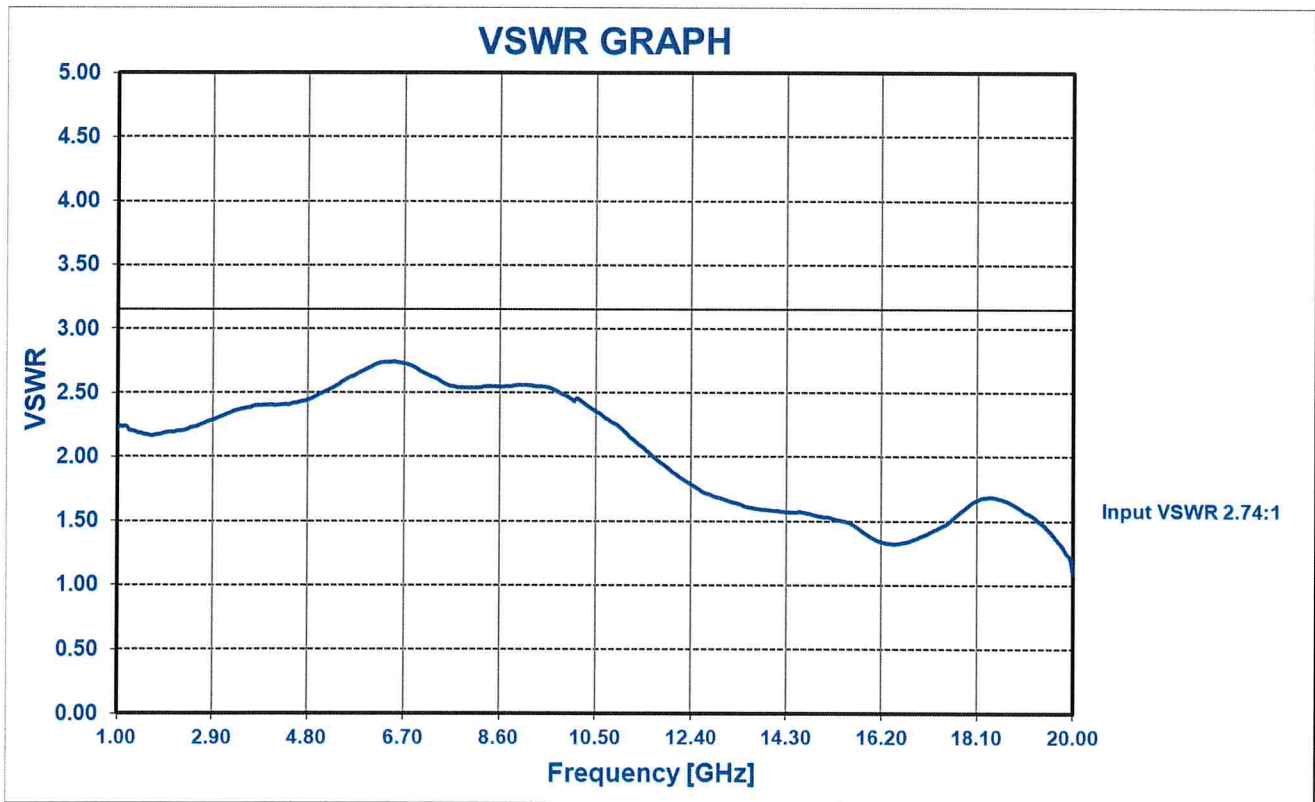




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VSWR

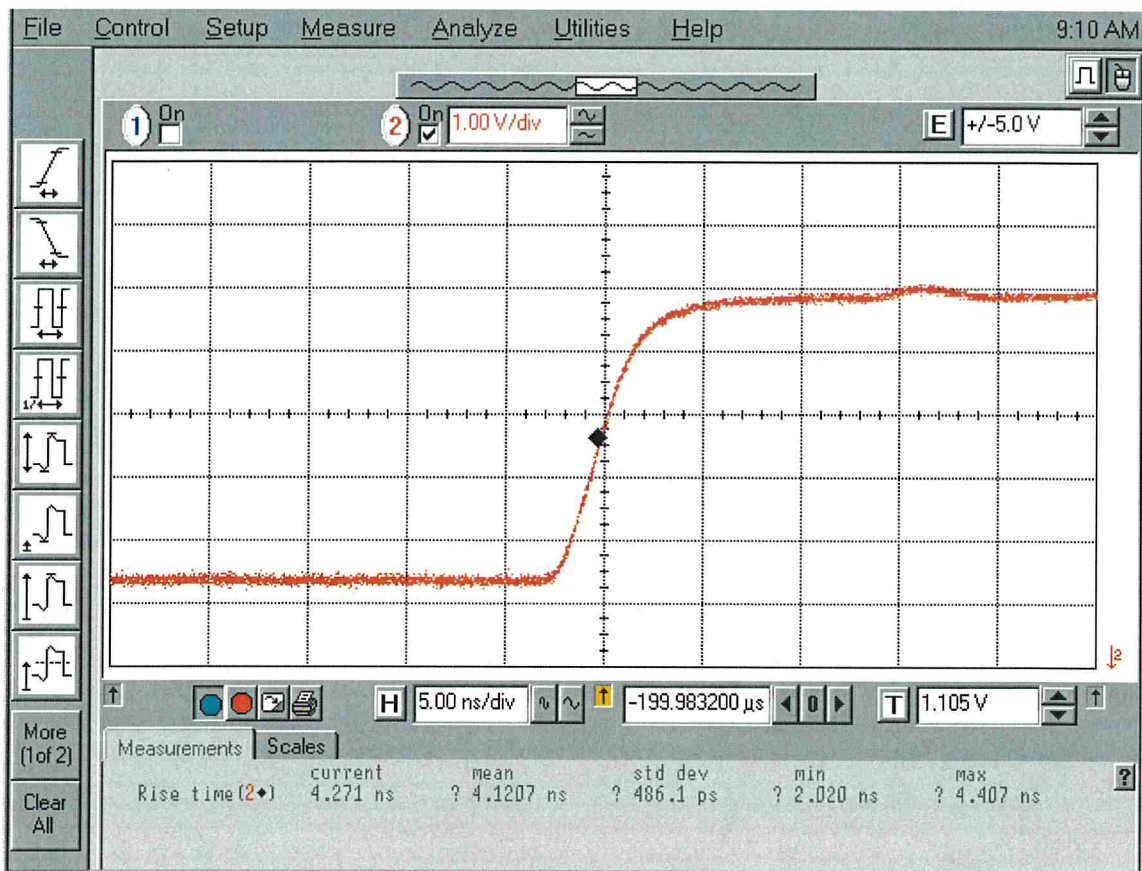




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Rise Time





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Fall Time

