



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

PL26824/1945

Customer: _____
 SO No: _____
 Model No: SDLVA-1G20G-58-12-SFF
 Serial No: PL26824/1945

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	± 1.4 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	3.92:1	
7	Log Video Output Voltage	0.9 V to 1.5V Typ	See Plot	1.75 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: 10/17/2019
SERIAL NO: PL26824
Test Temp: +25C



PLANAR MONOLITHICS INDUSTRIES
 4921 Robert J. Mathews Parkway,
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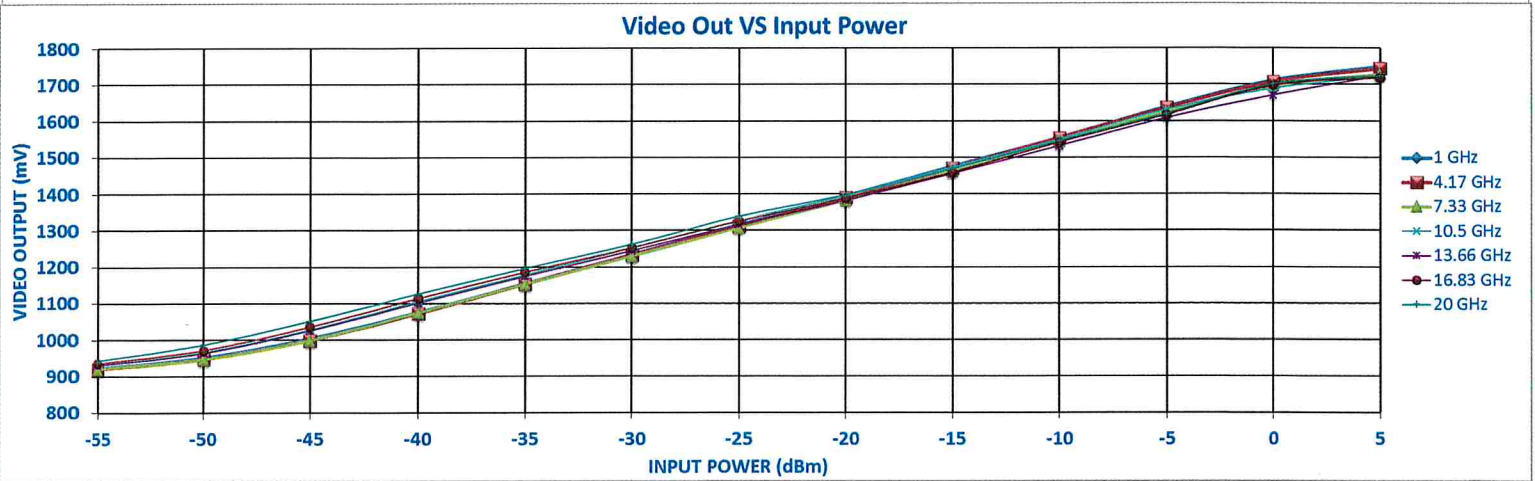
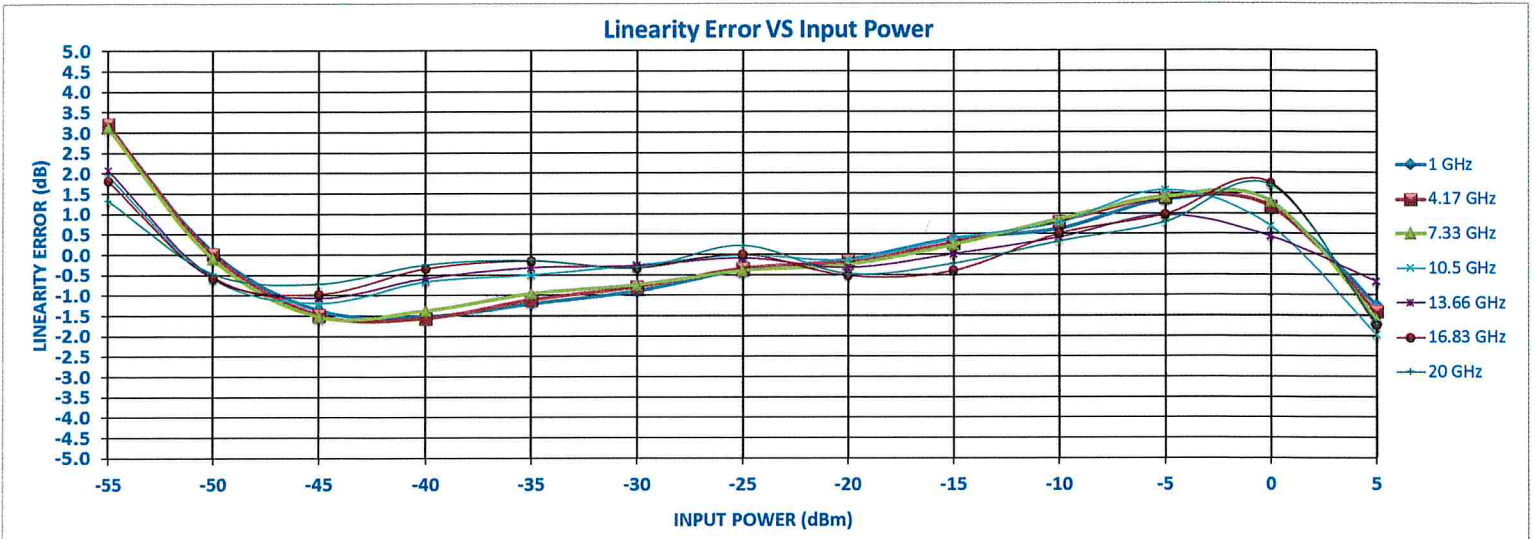
Frequency		-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
1 GHz	INTERCEPT (mV)	922	950	1003	1075	1154	1233	1315	1393	1475	1553	1638	1710	1748	Measured Value (mV)
	SLOPE (mV/dB)	47	1	-20	-23	-18	-13	-6	-2	6	9	20	18	-19	Error (mV)
		3.19	0.07	-1.36	-1.52	-1.21	-0.90	-0.38	-0.14	0.38	0.62	1.34	1.18	-1.26	LINEARITY ERROR (dB)
		x													
4.17 GHz	INTERCEPT (mV)	920	947	999	1072	1153	1232	1313	1390	1471	1553	1636	1707	1743	Measured Value (mV)
	SLOPE (mV/dB)	48	0	-22	-23	-17	-12	-5	-2	4	12	21	17	-21	Error (mV)
		3.21	0.02	-1.48	-1.56	-1.11	-0.80	-0.35	-0.17	0.29	0.80	1.39	1.17	-1.41	LINEARITY ERROR (dB)
		x													
7.33 GHz	INTERCEPT (mV)	921	947	999	1074	1153	1229	1307	1382	1462	1544	1625	1696	1727	Measured Value (mV)
	SLOPE (mV/dB)	46	-1	-22	-20	-14	-11	-6	-4	3	13	21	19	-23	Error (mV)
		3.13	-0.09	-1.52	-1.38	-0.96	-0.75	-0.40	-0.25	0.24	0.86	1.42	1.29	-1.59	LINEARITY ERROR (dB)
		x													
10.5 GHz	INTERCEPT (mV)	930	965	1027	1105	1178	1252	1326	1395	1473	1549	1631	1689	1722	Measured Value (mV)
	SLOPE (mV/dB)	27	-8	-17	-9	-7	-4	0	-2	5	11	22	10	-28	Error (mV)
		1.94	-0.58	-1.19	-0.67	-0.50	-0.26	-0.02	-0.14	0.39	0.77	1.57	0.68	-1.98	LINEARITY ERROR (dB)
		x													
13.66 GHz	INTERCEPT (mV)	930	963	1025	1101	1174	1244	1316	1382	1456	1531	1608	1670	1724	Measured Value (mV)
	SLOPE (mV/dB)	29	-7	-15	-8	-5	-4	-1	-5	0	6	13	6	-9	Error (mV)
		2.08	-0.54	-1.07	-0.59	-0.33	-0.28	-0.09	-0.33	0.00	0.41	0.96	0.43	-0.68	LINEARITY ERROR (dB)
		x													
16.83 GHz	INTERCEPT (mV)	935	971	1035	1113	1185	1252	1326	1388	1459	1541	1617	1697	1718	Measured Value (mV)
	SLOPE (mV/dB)	25	-8	-13	-5	-2	-5	0	-7	-6	7	14	24	-24	Error (mV)
		1.82	-0.58	-0.97	-0.35	-0.16	-0.33	0.01	-0.53	-0.41	0.50	0.98	1.75	-1.74	LINEARITY ERROR (dB)
		x													
20 GHz	INTERCEPT (mV)	942	986	1051	1126	1196	1262	1338	1397	1469	1545	1620	1701	1723	Measured Value (mV)
	SLOPE (mV/dB)	18	-6	-10	-3	-2	-5	3	-7	-3	4	11	23	-23	Error (mV)
		1.33	-0.46	-0.72	-0.25	-0.15	-0.33	0.21	-0.48	-0.23	0.31	0.78	1.69	-1.70	LINEARITY ERROR (dB)
		x													
	Flatness P-P	1.6	2.8	3.6	3.8	3.0	2.4	2.2	1.0	1.4	1.6	2.2	2.8	2.2	
	Slope Avg(mv/dB)	14.3													



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Transfer @ 25C – Plot

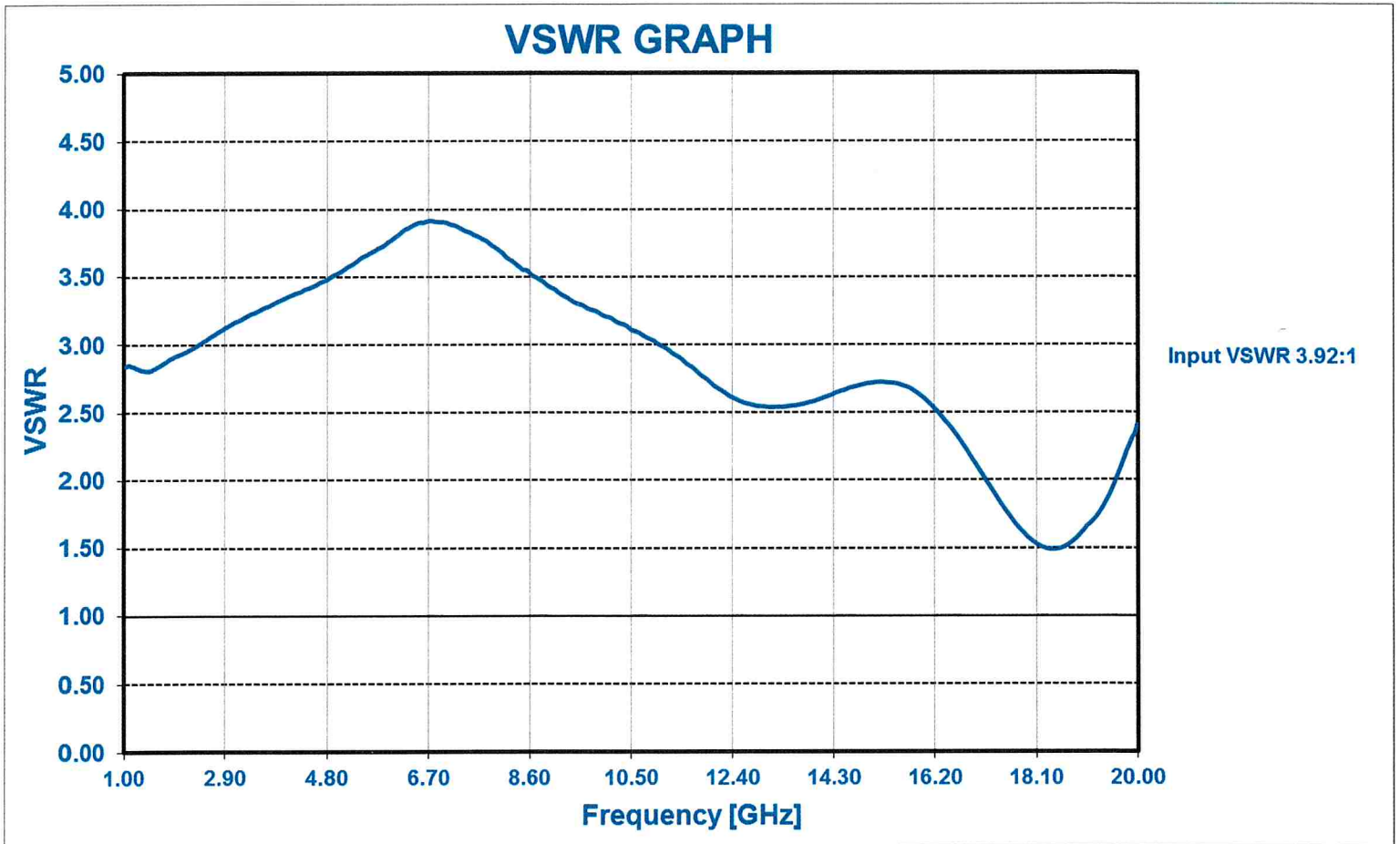




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VSWR

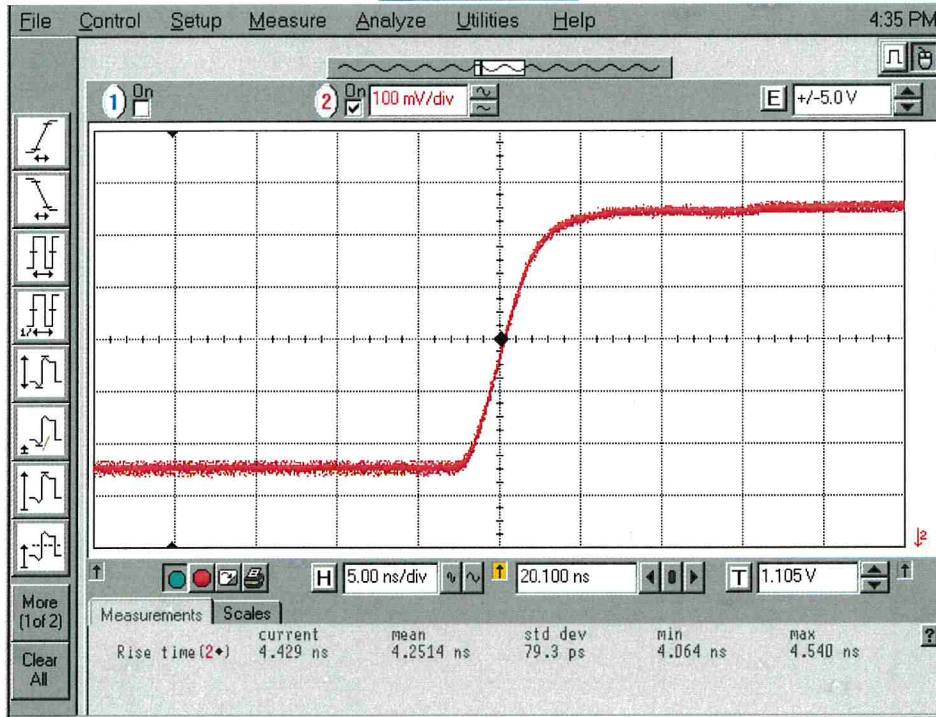




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Rise Time



Fall Time

