



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

Customer: _____ Tested By: Al Kendall
 SO No: _____ QA/QC By: Arthur Zimmerman
 Model No: SDLVA-1G20G-58-12-SFF Temperature: +25°C
 Serial No: PL26500/1937 Date: 09/12/2019
 Drawing No: 27612160 Rev: A1

TEST ITEM	PARAMETERS	SPECIFIED VALUE	TEST MEASUREMENT	TEST RESULT	QA QC
1	Frequency Range	1 GHz – 20 GHz	1 GHz – 20 GHz	Pass	
2	Frequency Flatness	±2.0 dB Typ	±1.60 dB	Pass	
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	-54 to +5 dBm	Pass	
6	Input VSWR	3.0:1 Typ	Pass	Pass	
7	Log Video Output Voltage	0.9 V to 1.5V Typ	0.9 to 1.70V	Pass	
8	Log Video Output Slope	14 mV / dB Typ	14.1 mV / dB	Pass	
9	Log Video Output Rise Time	5 ns Typ (Pin = -20 dBm @ 10% to 90%)	3.98 ns	Pass	
10	Log Video Output Fall Time	20 ns Typ (Pin = -20 dBm @ 90% to 10%)	9.088 ns	Pass	
11	Log Video Recovery Time	28 ns Typ (Pin = -50 dBm to 0 dBm)	18 ns	Pass	
12	Propagation Delay	14 ns Typ	By design	Pass	
13	TSS	-60 dBm	-60 dBm	Pass	
14	Power Supply	+12V Typ @ 100mA	98 mA	Pass	

QA/QC Approval: _____ Date: _____



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LOGGING LINEARITY @+25C

LOG TRANSFER WITH FREQUENCY
 MODEL: SDLVA-1G20G-58-12-SFF
 TESTED BY: Al Kendall
 DATE: 09/05/2019
 SERIAL NO: PL26500
 Test Temp: +85C



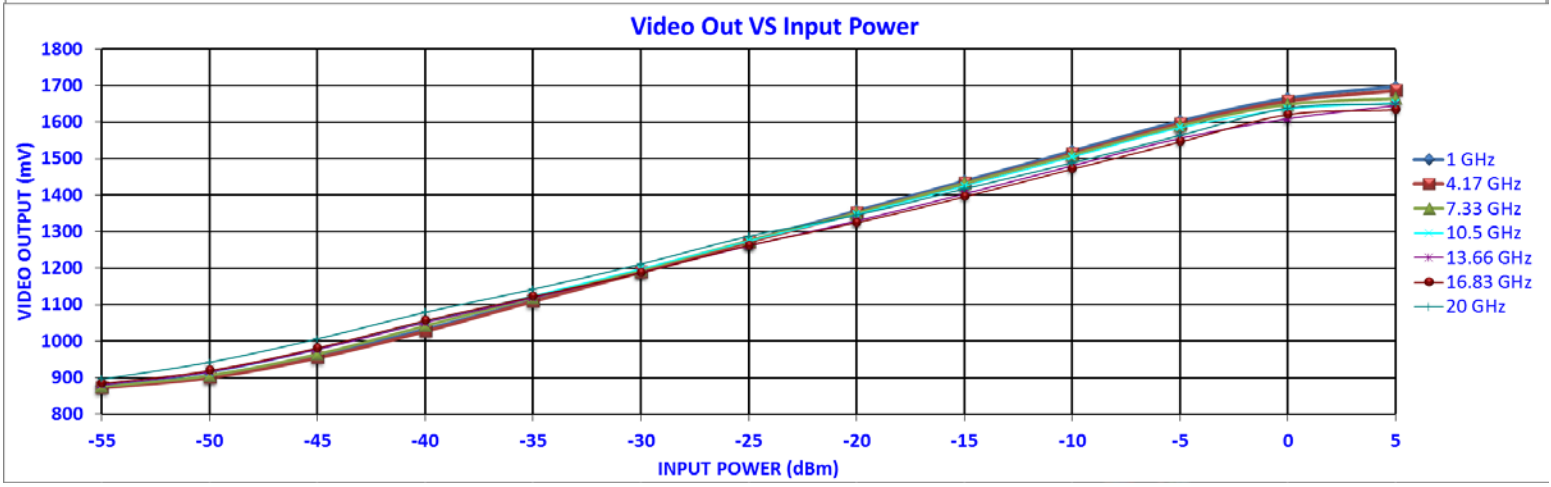
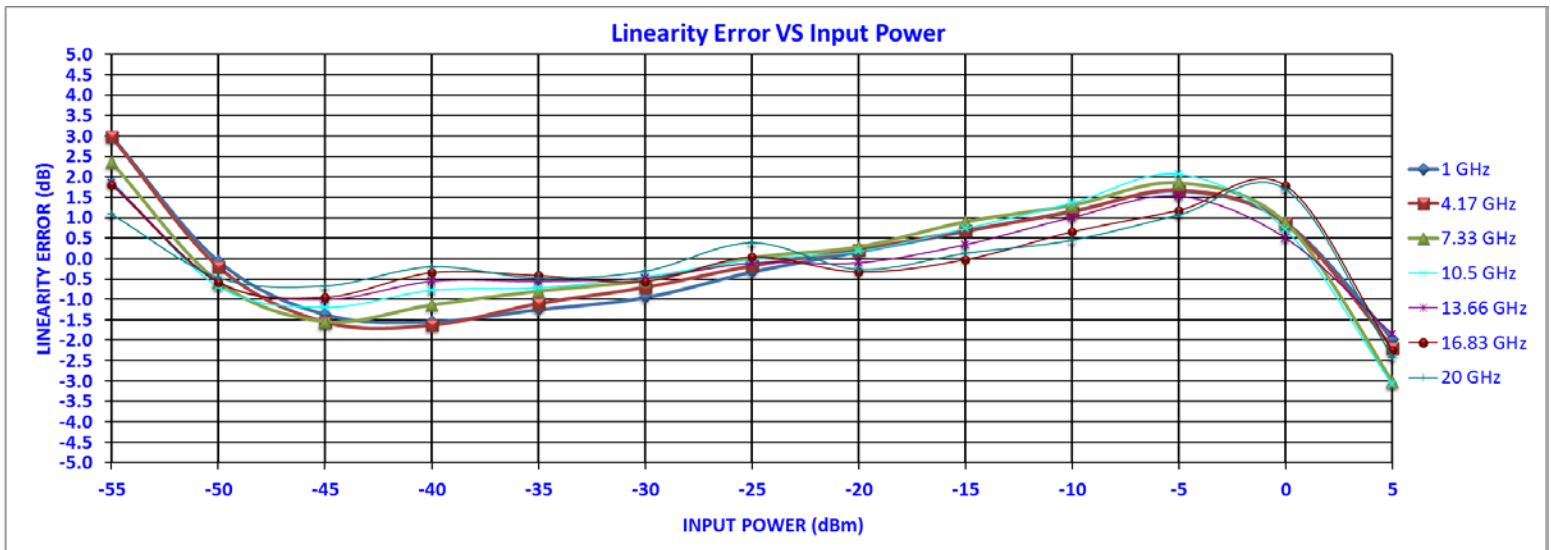
PLANAR MONOLITHICS INDUSTRIES
 4921 Robert J. Mathews Parkway,
 Suite 1
 El Dorado Hills, CA 95762
 Phone: 916-542-1401 Fax: 301-662-

Frequency		-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
1 GHz	INTERCEPT (mV)	1668													
	SLOPE (mV/dB)	14.4													
		930	954	1000	1065	1140	1215	1296	1375	1453	1532	1611	1688	1735	Measured Value (mV)
		56	8	-19	-26	-23	-20	-11	-4	1	8	15	20	-5	Error (mV)
		3.86	0.52	-1.29	-1.79	-1.59	-1.39	-0.78	-0.30	0.10	0.58	1.05	1.39	-0.35	LINEARITY ERROR (dB)
		x													
4.17 GHz	INTERCEPT (mV)	1664													
	SLOPE (mV/dB)	14.4													
		928	949	994	1060	1137	1213	1292	1370	1447	1527	1607	1685	1733	Measured Value (mV)
		58	7	-20	-27	-22	-18	-11	-5	-1	7	15	21	-3	Error (mV)
		4.01	0.47	-1.42	-1.84	-1.51	-1.25	-0.78	-0.38	-0.04	0.50	1.04	1.44	-0.24	LINEARITY ERROR (dB)
		x													
7.33 GHz	INTERCEPT (mV)	1665													
	SLOPE (mV/dB)	14.3													
		931	954	1003	1074	1149	1222	1300	1374	1453	1530	1610	1687	1723	Measured Value (mV)
		50	2	-20	-21	-17	-15	-8	-6	2	8	16	22	-13	Error (mV)
		3.52	0.14	-1.43	-1.45	-1.19	-1.06	-0.59	-0.40	0.14	0.54	1.15	1.55	-0.92	LINEARITY ERROR (dB)
		x													
10.5 GHz	INTERCEPT (mV)	1662													
	SLOPE (mV/dB)	13.9													
		935	961	1016	1089	1162	1234	1308	1379	1455	1532	1611	1677	1713	Measured Value (mV)
		40	-4	-18	-15	-12	-10	-5	-4	2	10	19	15	-19	Error (mV)
		2.87	-0.26	-1.32	-1.08	-0.85	-0.68	-0.38	-0.28	0.17	0.69	1.36	1.09	-1.33	LINEARITY ERROR (dB)
		x													
13.66 GHz	INTERCEPT (mV)	1654													
	SLOPE (mV/dB)	13.8													
		934	960	1015	1088	1160	1229	1301	1372	1445	1523	1598	1662	1720	Measured Value (mV)
		40	-3	-17	-13	-10	-10	-7	-5	-1	7	13	8	-3	Error (mV)
		2.92	-0.20	-1.22	-0.94	-0.73	-0.73	-0.52	-0.39	-0.10	0.54	0.97	0.60	-0.20	LINEARITY ERROR (dB)
		x													
16.83 GHz	INTERCEPT (mV)	1648													
	SLOPE (mV/dB)	13.7													
		935	960	1014	1087	1157	1225	1295	1364	1433	1513	1589	1669	1718	Measured Value (mV)
		43	-1	-16	-11	-10	-11	-10	-9	-9	2	9	21	1	Error (mV)
		3.12	-0.06	-1.13	-0.82	-0.73	-0.78	-0.69	-0.68	-0.66	0.16	0.69	1.51	0.07	LINEARITY ERROR (dB)
		x													
20 GHz	INTERCEPT (mV)	1642													
	SLOPE (mV/dB)	13.5													
		936	965	1021	1090	1158	1223	1293	1364	1430	1506	1579	1660	1717	Measured Value (mV)
		39	0	-11	-10	-10	-13	-10	-7	-9	0	5	18	7	Error (mV)
		2.89	0.03	-0.84	-0.74	-0.72	-0.92	-0.76	-0.51	-0.64	-0.03	0.36	1.34	0.55	LINEARITY ERROR (dB)
		x													
Flatness +/-dB		0.3	0.6	1	1.1	0.9	0.7	0.6	0.5	0.9	0.9	1.1	1	0.8	
Slope Avg(mv/dB)		14.0													



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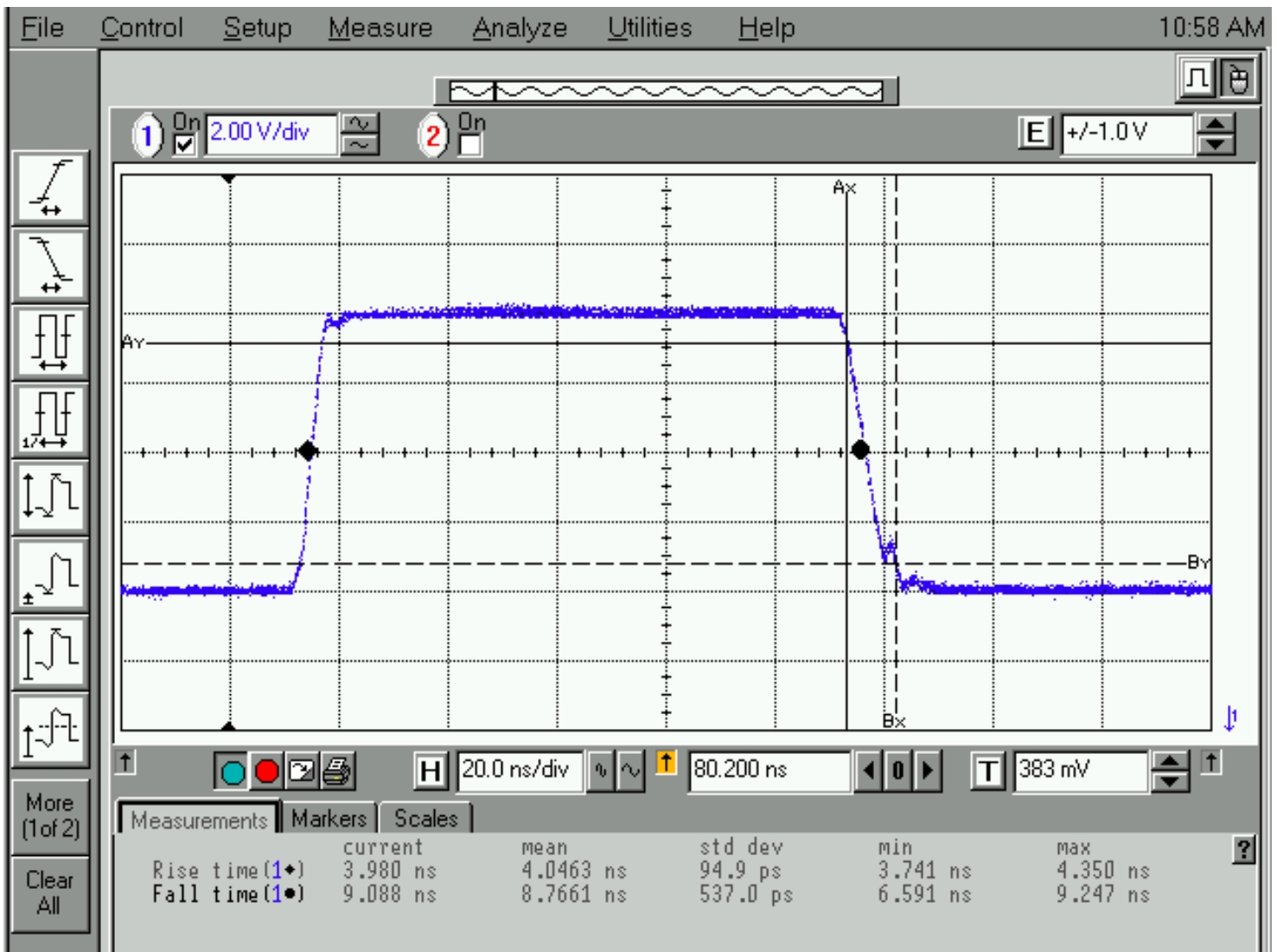
LOGGING LINEARITY (cont.) @+25C





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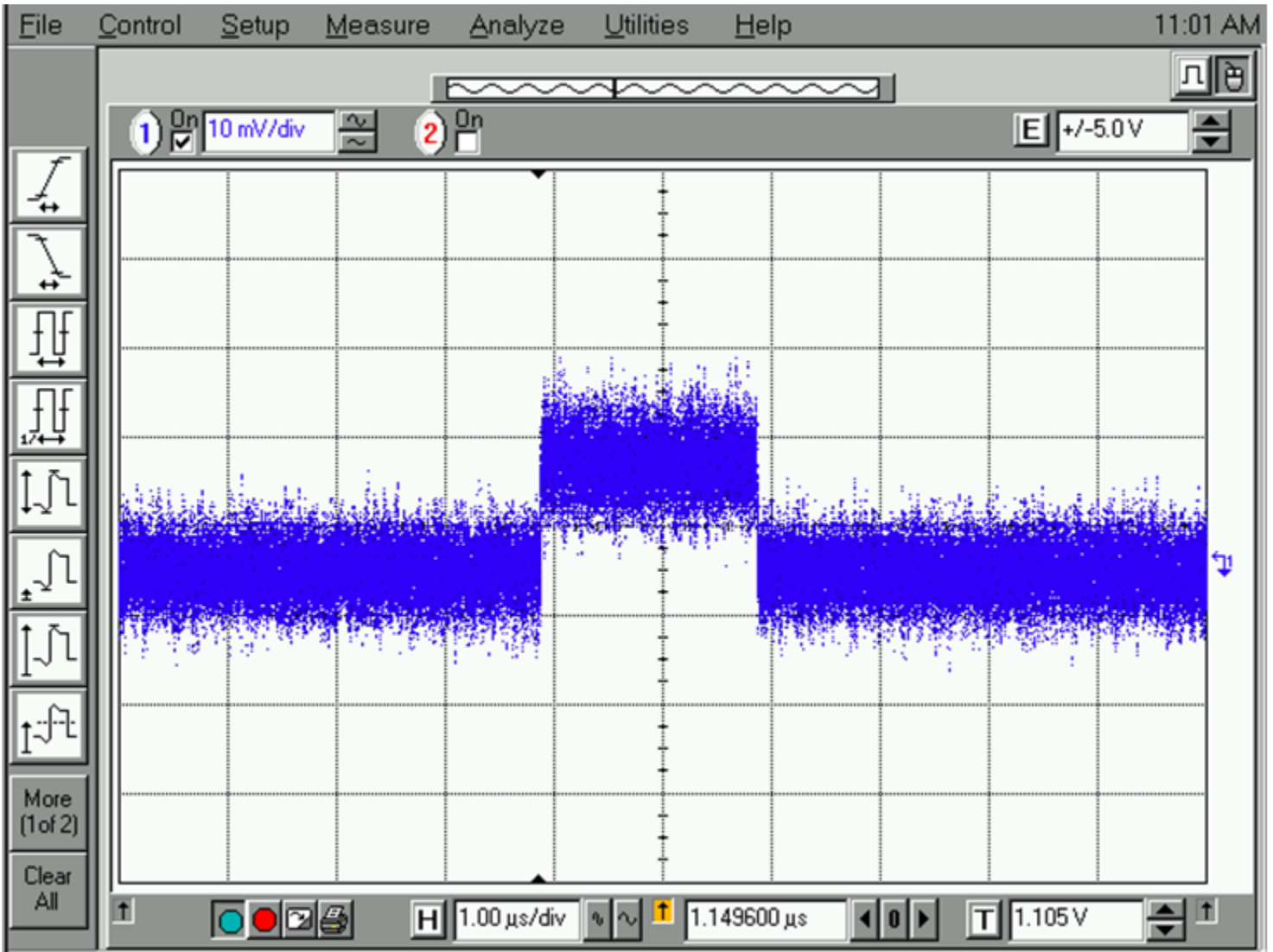
RISE/FALL & RECOVERY TIME





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TSS





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VSWR





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