



SUMMARY TEST DATA
ON
SDLVA-18G40G-65-CD-292FF-A15

PL21704/1742

Customer: _____ Tested By: J.EMPERADOR
SO No: _____ Temperature: +25°C
Model No: SDLVA-18G40G-65-CD-292FF-A15 Date: 10/19/2017
Serial No: PL21704/1742 Drawing No: 27625393 Rev A2

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	18.0 to 40.0GHz	18.0 to 40.0GHz	PMI QA 1
2	TSS (See Graph #2)	-67 dBm Nom.	-67.7 dBm	
3	Power Handling	+10dBm Max.	+10dBm Max.	
4	Dynamic Range:	-63dBm to +2dBm	-63dBm to +2dBm	
5	Log Linearity: @+25C (See Graph #1)	± 1.5 dB Max.	+0.75 dB -0.83 dB	
6	Log Slope: (See Graph #1)	25 mV/dB Nom.	26.0 mV/dB	
7	Frequency Flatness: @+25C (See Graph #1)	±2.5dB Max.	+/-1.40 dB	
8	Pulse Width Range:	30ns to CW	30ns to CW	
9	Rise Time: (See Graph #3)	11ns Max. (8 ns Typ.)	7.66 ns	
10	Recovery Time: (See Graph #4)	60ns Max. (40 ns Typ.)	49.99 ns	
11	Delay Time:	15ns Max.	13.69 ns	
12	Input VSWR: (See Graph #5)	2.5:1 Max.	2.3:1	
13	Power Supply	+12V @ 600mA -12V @ 250mA	+345 mA -161 mA	PMI QA 1

QA/QC Approval:  PMI QA 1 Date: 10/20/17



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Log Transfer vs Frequency @+25C Graph #1

MODEL: SDLVA-18G40G-65-CD-292FF-A15
SERIAL NO: PL21704 final
DATE: 10-19-2017
TESTED BY: E.Benson
Test Temp: +25C

GRAPH #1



PLANAR MONOLITHICS INDUSTRIES
4921 Robert J. Mathews Parkway Suite 1
El Dorado Hills, CA 95762
TEL: 916-542-1401 FAX: 916-265-2597
EMAIL: SALES@PMI-RF.COM

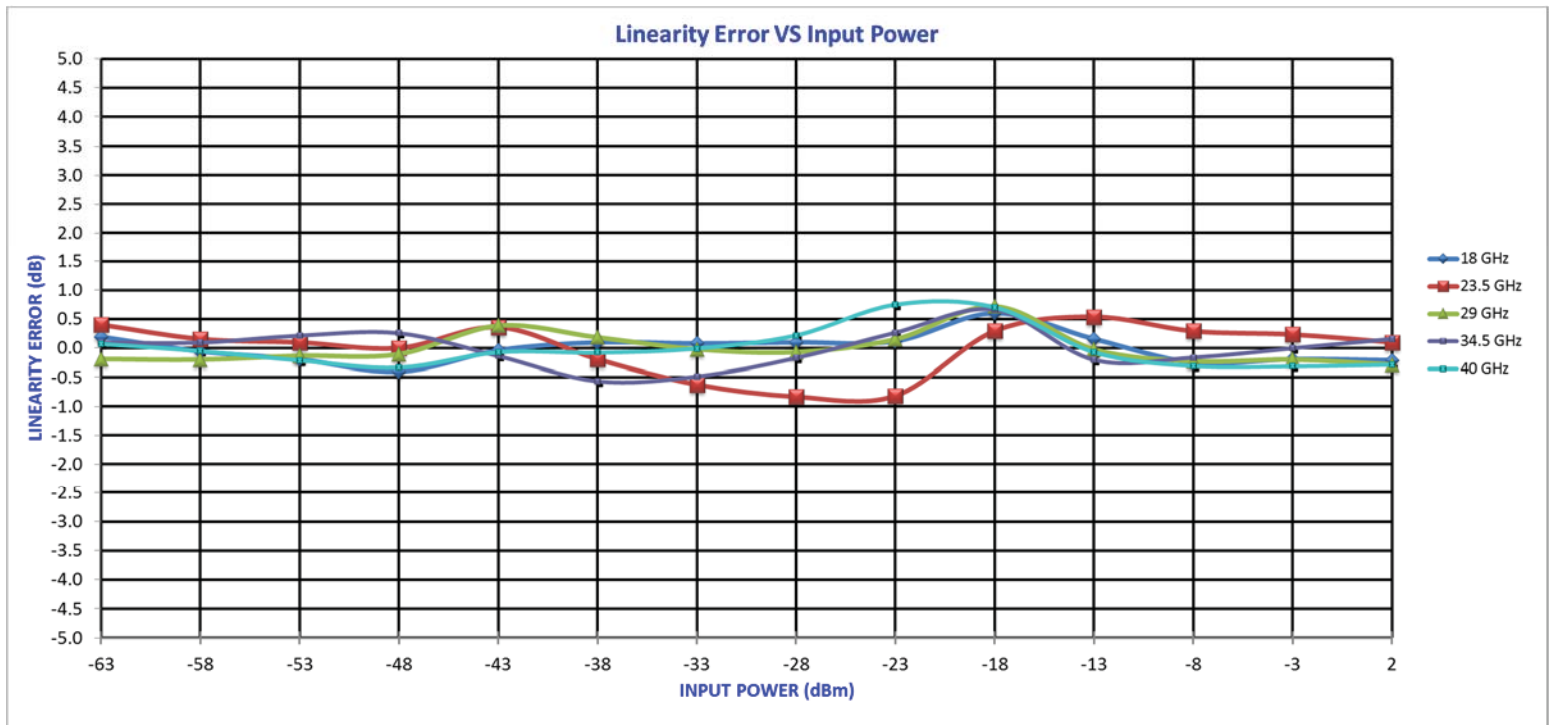
Frequency		-63	-58	-53	-48	-43	-38	-33	-28	-23	-18	-13	-8	-3	2	RF Input Power (dBm)		
18 GHz	INTERCEPT (mV)	1789	162	285	411	535	674	807	936	1066	1196	1338	1456	1575	1706	1835	Measured Value (mV)	
	SLOPE (mV/dB)	25.9	5	-1	-5	-10	-1	3	2	3	3	16	4	-6	-5	-5	Error (mV)	
			0.19	-0.06	-0.19	-0.40	-0.04	0.10	0.08	0.10	0.12	0.60	0.16	-0.25	-0.19	-0.21	LINEARITY ERROR (dB)	
																	MAX	
																	MIN	
																	0.60	
																	-0.40	
23.5 GHz	INTERCEPT (mV)	1799	140	266	397	527	669	787	908	1035	1168	1330	1469	1595	1726	1855	Measured Value (mV)	
	SLOPE (mV/dB)	26.5	11	4	3	0	9	-5	-17	-22	-22	8	14	8	6	3	Error (mV)	
			0.40	0.16	0.10	0.00	0.36	-0.19	-0.63	-0.83	-0.82	0.29	0.54	0.29	0.23	0.10	LINEARITY ERROR (dB)	
																	MAX	
																	MIN	
																	0.54	
																	-0.83	
29 GHz	INTERCEPT (mV)	1803	157	287	419	550	693	818	943	1072	1208	1353	1464	1589	1720	1848	Measured Value (mV)	
	SLOPE (mV/dB)	26.1	-5	-5	-3	-3	10	5	-1	-2	4	19	-1	-6	-5	-7	Error (mV)	
			-0.19	-0.20	-0.13	-0.10	0.39	0.18	-0.02	-0.07	0.15	0.72	-0.02	-0.22	-0.20	-0.28	LINEARITY ERROR (dB)	
																	MAX	
																	MIN	
																	0.72	
																	-0.28	
34.5 GHz	INTERCEPT (mV)	1784	187	314	444	572	689	805	934	1069	1207	1344	1449	1577	1708	1839	Measured Value (mV)	
	SLOPE (mV/dB)	25.4	2	2	5	6	-3	-14	-12	-4	7	17	-5	-4	0	4	Error (mV)	
			0.09	0.09	0.21	0.25	-0.14	-0.57	-0.49	-0.17	0.26	0.66	-0.20	-0.16	0.00	0.16	LINEARITY ERROR (dB)	
																	MAX	
																	MIN	
																	0.66	
																	-0.57	
40 GHz	INTERCEPT (mV)	1818	180	307	433	560	697	827	959	1095	1239	1368	1478	1602	1732	1863	Measured Value (mV)	
	SLOPE (mV/dB)	26	2	-1	-6	-9	-2	-2	0	6	19	18	-2	-8	-8	-7	Error (mV)	
			0.07	-0.05	-0.21	-0.33	-0.07	-0.08	-0.01	0.22	0.75	0.70	-0.07	-0.31	-0.32	-0.28	LINEARITY ERROR (dB)	
																	MAX	
																	MIN	
																	0.75	
																	-0.33	
Flatness +/- dB			0.90	0.90	0.90	0.90	0.50	0.80	1.00	1.20	1.40	0.70	0.60	0.50	0.50	0.50		
Max Video Output Volts			0.19	0.31	0.44	0.57	0.70	0.83	0.96	1.10	1.24	1.37	1.48	1.60	1.73	1.86		
Min Video Output Volts			0.14	0.27	0.40	0.53	0.67	0.79	0.91	1.04	1.17	1.33	1.45	1.58	1.71	1.84		
Nominal Log Slope mV/dB			26.0															
Log Slope Variation: ± mV/dB			0.56															
Video Output @ -63dBm																		
Min(V)=		140.0	65															
Max(V)=		187.0	280															
Video Output @ +2dBm																		
Min(V)=		1835.0	1476															
Max(V)=		1863.0	1940															



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Log Transfer vs Frequency @+25C
Graph #1 (cont.)

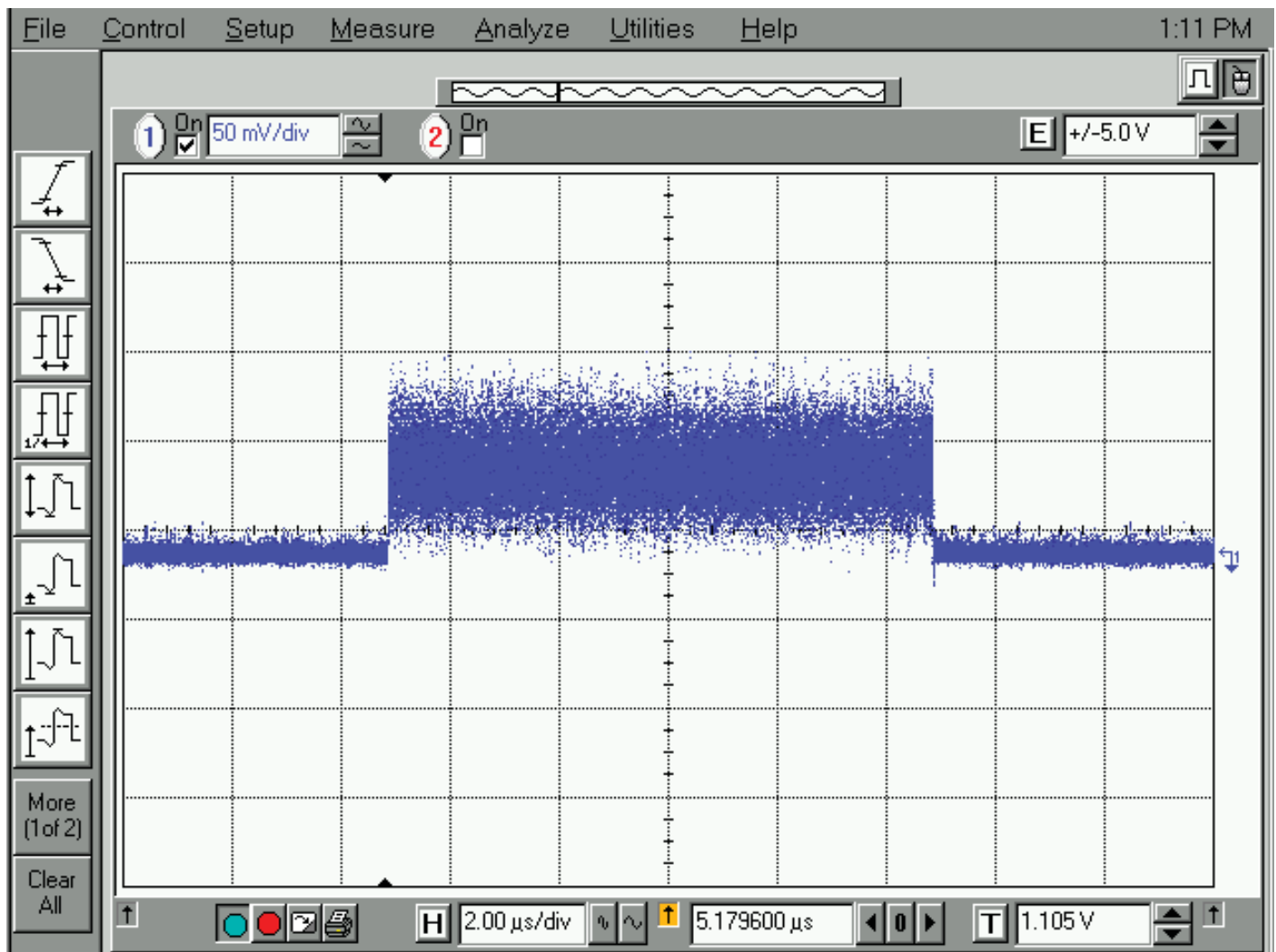




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TSS-67.7 dBm @+25C
Graph #2

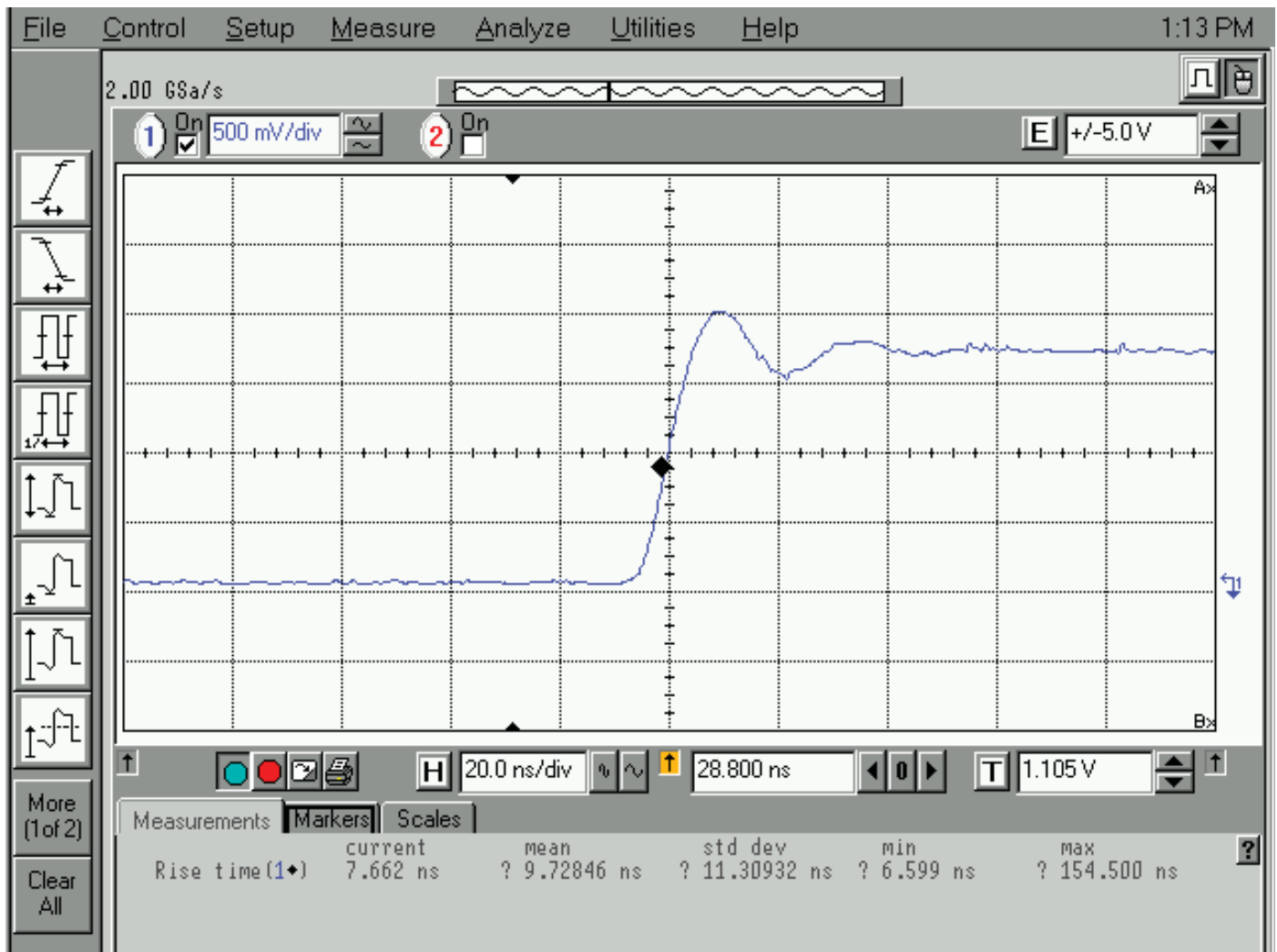




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Rise Time 7.66ns @+25C & +2dBm
Graph#3

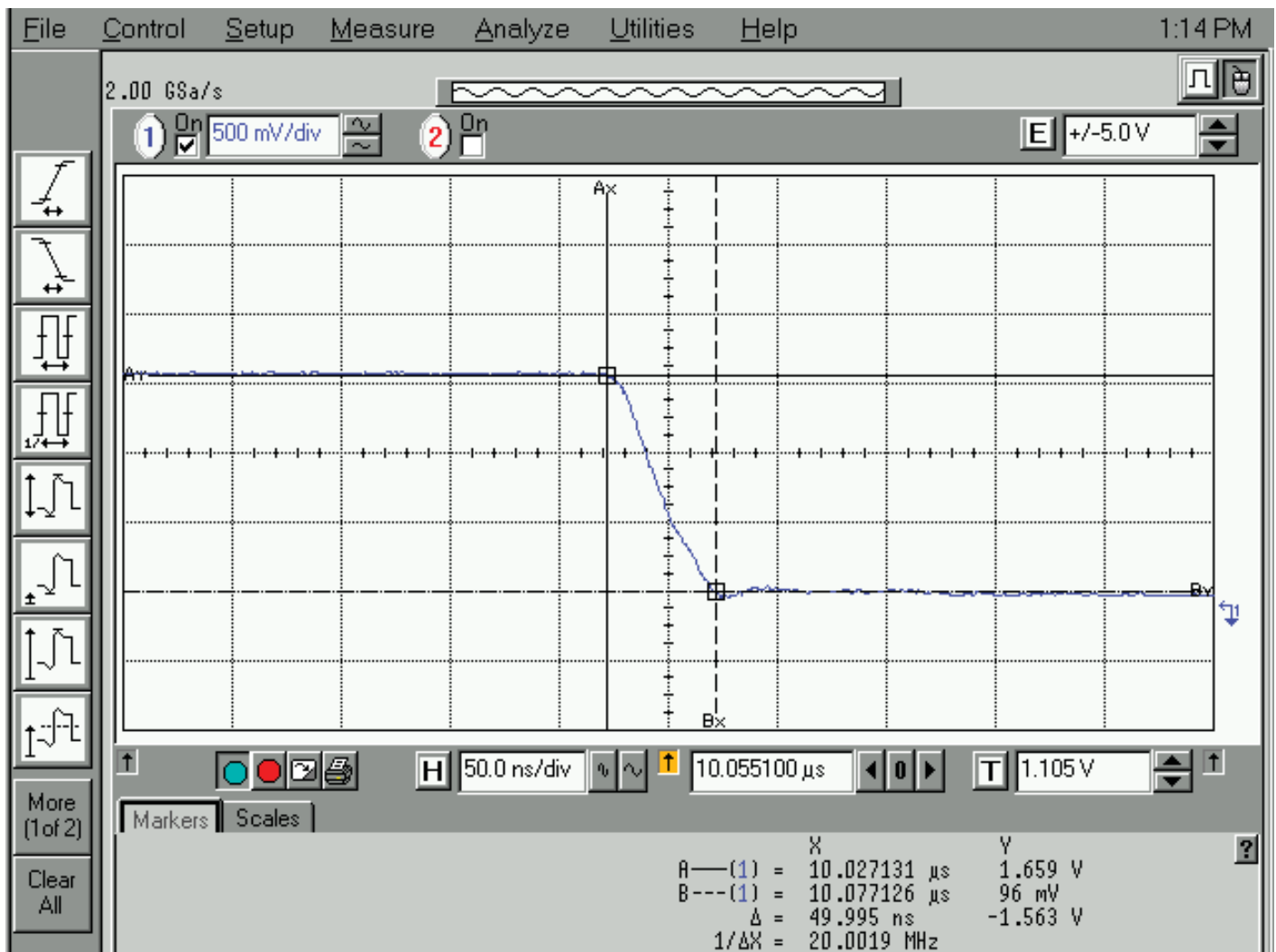




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Recovery Time 49.99ns @+25C & +2dBm
Graph#4





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VSWR 2.3 @+25C & -20dBm
Graph #5

