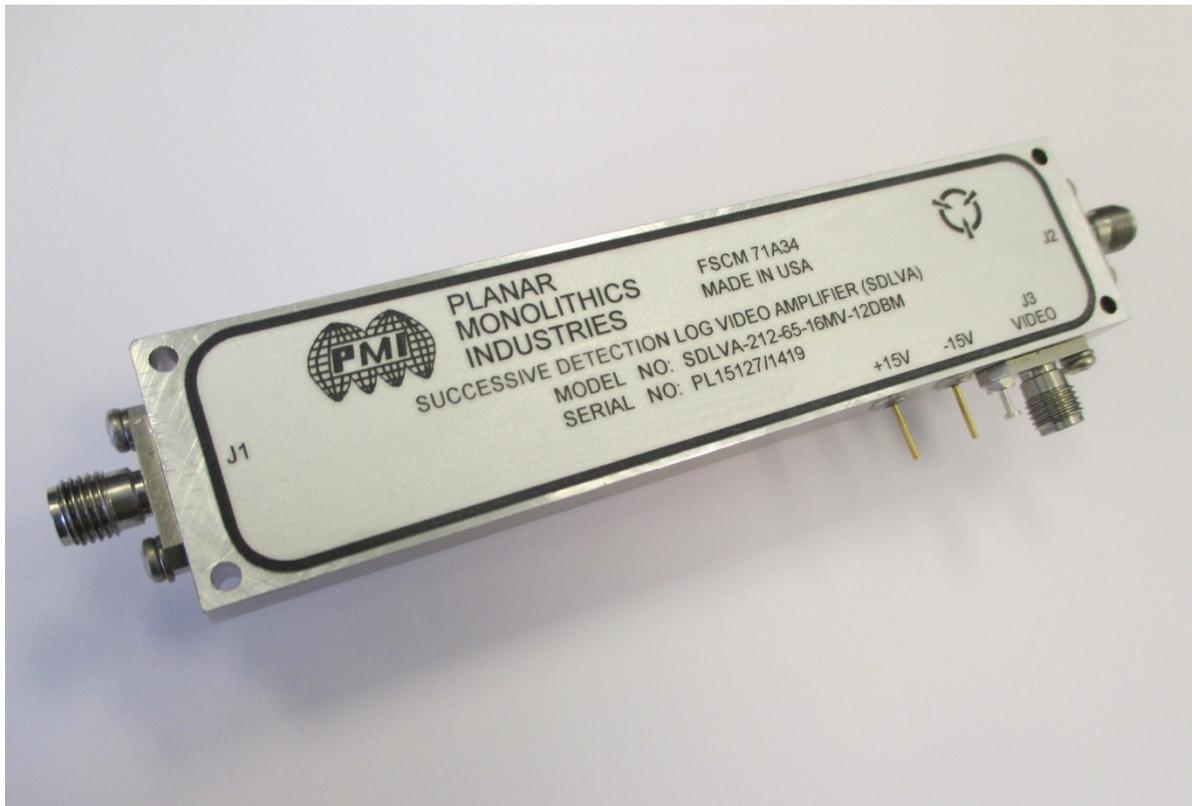




**TYPICAL CHARACTERISTICS
ON
SDLVA-212-65MV-12DBM**

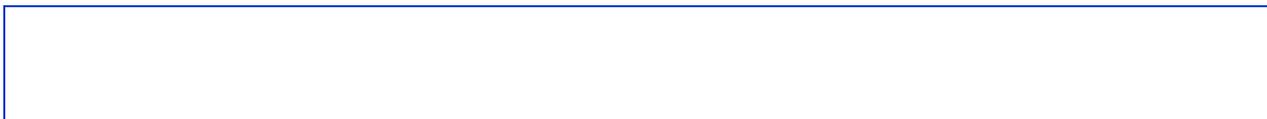
S/N: PL15127

MODEL SDLVA-212-65MV-12DBM IS A SUCSESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVA) THAT OPERATES BETWEEN THE 2GHz TO 12.5GHz FREQUENCY RANGE. IT HAS A DYNAMIC RANGE OF 65 dB, A LOG SLOPE OF 16.7mV / dB, AND A VERY HIGH NOMINAL VIDEO BANDWIDTH OF 50 MHz. FURTHERMORE; IT HAS BEEN DESIGNED USING CUTTING EDGE TECHNOLOGY WHICH PROVIDES STUNNING PERFORMANCE AND RELIABILITY IN A COMPACT PACKAGE MAKING IT AN OPTIMUM SOLUTION FOR HIGH SPEED CHANNELIZED RECEIVER APPLICATIONS.



May 23rd 2014

Prepared By: E. Benson
Tested By: J. Hopson
Designed By: John Merriner





**TYPICAL CHARACTERISTICS
ON
SDLVA-212-65MV-12DBM**

S/N: PL15127

+25C SUMMARY PERFORMANCE DATA

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS
1	Frequency Range:	2.0 to 12.5GHz	2.0GHz to 12.5GHz
2	Frequency Flatness (See Graph #1)	± 3.0 dB Max.	± 1.08 dB
3	Log Linearity: (See Graph #1)	± 1.8 dB Max.	+1.22dB -1.15dB
4	Logging Range (See Graph #1)	-55 to +10dBm	-55 to +10dBm
5	Logging Slope (See Graph #1)	16.7mV/dB ±1.3mV/dB	16.47mV/dB
6	VSWR (See Graph #2)	2.0:1 (-9.5dB)	-9.95dB
7	Limited RF Output (See Graph #3)	+10 to +14dBm	+12.9/11.0dBm
8	Harmonics (See Graph #4)	-9dBc	-10.45dBc
9	Simultaneous Signal Suppression (See Graph #5)	-5dB	-5.5dB
10	Rise Time (See Photo #1)	10 ns Max.	6.91 ns
11	Fall Time (See Photo #2)	15 ns Max.	10.62 ns
12	Recovery Time (See Photo #3)	30 ns Max.	24.71 ns
13	TSS	-64 dBm Max.	-65dBm
14	Power Supply	+15V @ 800mA -15V @ 200mA	+390mA -20mA





TYPICAL CHARACTERISTICS ON SDLVA-212-65MV-12DBM

S/N: PL15127

Graph #1 Log Transfer vs Frequency @+25C

LOG TRANSFER WITH FREQUENCY
MODEL: SDLVA-212-65-16MV-12DBM
TESTED BY: Jim Hopson
DATE: 5/22/2014
SERIAL NO: PL15127

Test Temp: 25C



PLANAR MONOLITHICS INDUSTRIES
4921 Robert J. Mathews Parkway STE 1
TEL: 916-542-1401 FAX: 301-662-1731
EMAIL: SALES@PMI-RF.COM
ISO 9001:2000 CERTIFIED

Frequency

2000 MHz	INTERCEPT (mV)	-1091
	SLOPE (mV/dB)	-16.77

7250 MHz	INTERCEPT (mV)	-1088
	SLOPE (mV/dB)	-16.47

12500 MHz	INTERCEPT (mV)	-1110
	SLOPE (mV/dB)	-16.71

-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	----	---	---	----

-182	-252	-339	-410	-514	-578	-652	-754	-826	-922	-1012	-1111	-1181	-1251
-14	0	-3	10	-10	9	19	1	13	1	-5	-20	-7	7
0.85	0.02	0.19	-0.58	0.62	-0.56	-1.15	-0.07	-0.77	-0.05	0.32	1.22	0.39	-0.43
-0.54	-1.34	-1.13	-1.87	-0.62	-1.78	-2.33	-1.21	-1.88	-1.12	-0.71	0.23	-0.56	-1.36

-200	-272	-349	-422	-504	-577	-663	-755	-844	-928	-1002	-1089	-1176	-1261
-18	-7	-2	7	7	17	13	3	-3	-5	4	-1	-6	-8
1.12	0.44	0.14	-0.43	-0.45	-1.02	-0.80	-0.21	0.19	0.29	-0.21	0.07	0.35	0.51
0.54	-0.18	-0.53	-1.15	-1.22	-1.84	-1.67	-1.15	-0.80	-0.76	-1.31	-1.09	-0.86	-0.76

-191	-270	-361	-438	-540	-599	-687	-781	-860	-956	-1021	-1114	-1199	-1266
0	5	-2	4	-14	10	6	-5	0	-13	6	-4	-5	11
-0.01	-0.32	0.14	-0.25	0.86	-0.61	-0.34	0.28	0.01	0.76	-0.35	0.22	0.30	-0.69
0.00	-0.29	0.19	-0.19	0.94	-0.52	-0.23	0.41	0.16	0.92	-0.17	0.41	0.52	-0.46

Flatness dB	+/-
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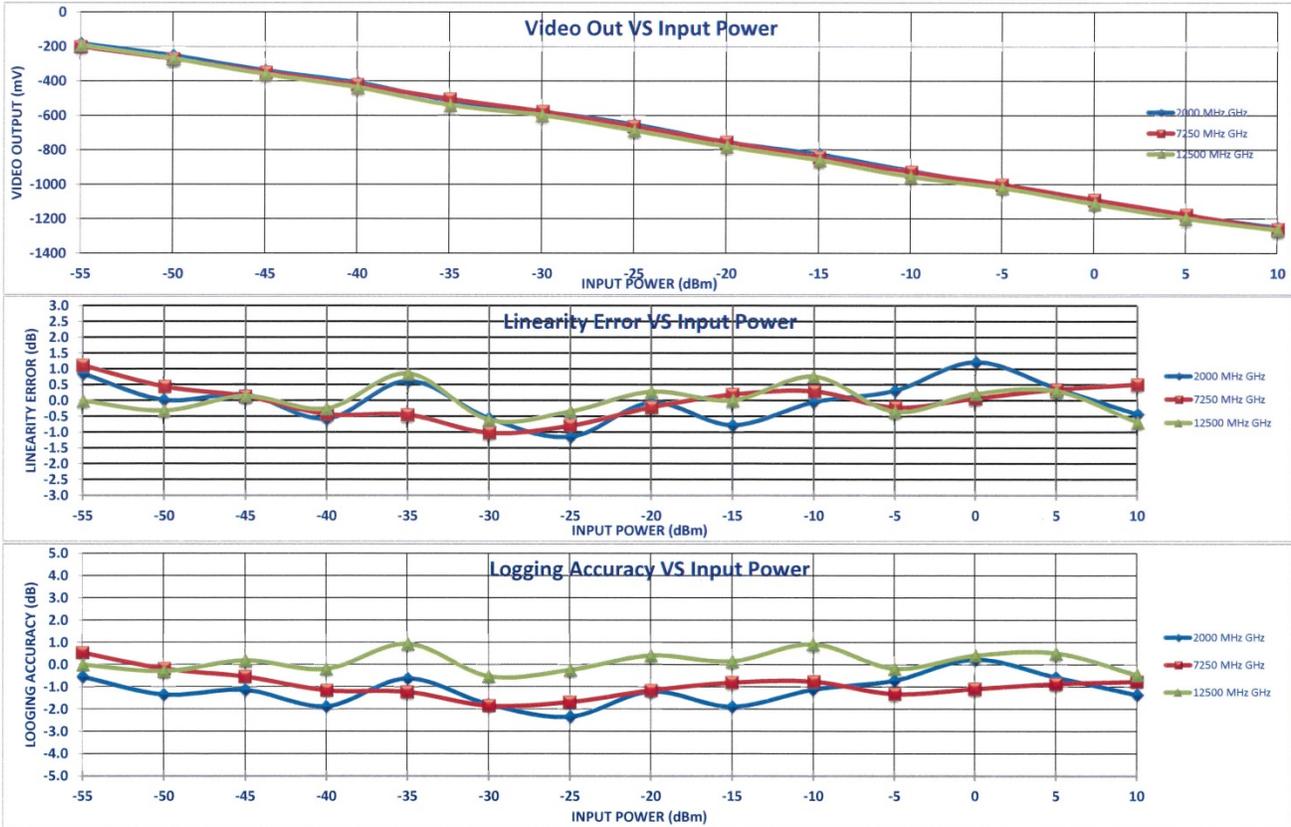
0.54	0.58	0.66	0.84	1.08	0.66	1.05	0.81	1.02	1.02	0.57	0.75	0.69	0.45
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RF Input Power (dBm)

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)
ACCURACY ERROR (dB)



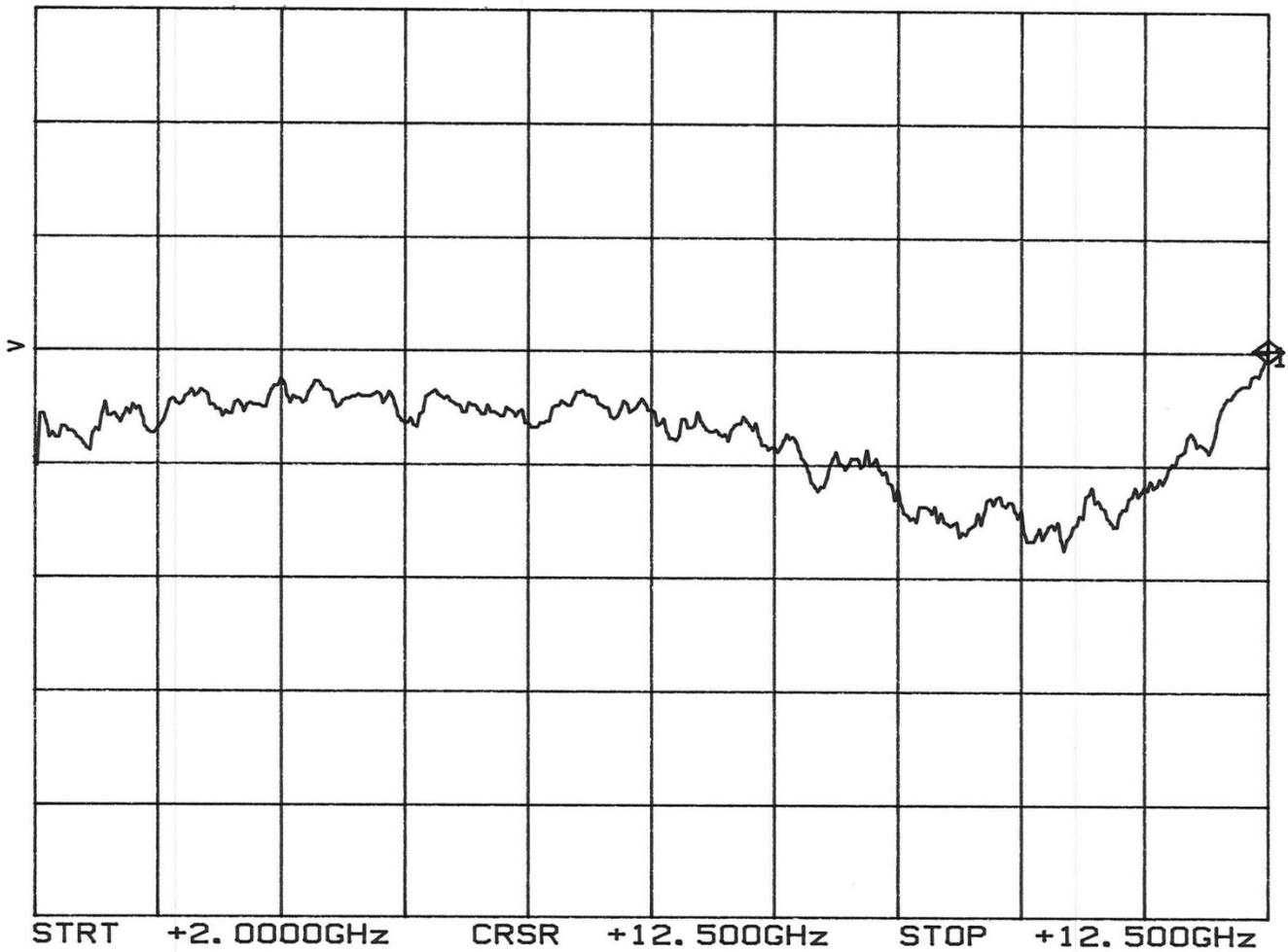


**TYPICAL CHARACTERISTICS
ON
SDLVA-212-65MV-12DBM**

S/N: PL15127

Graph #2
VSWR

CH1: A -M S - 9.95 dB
5.0 dB/ REF - 9.60 dB



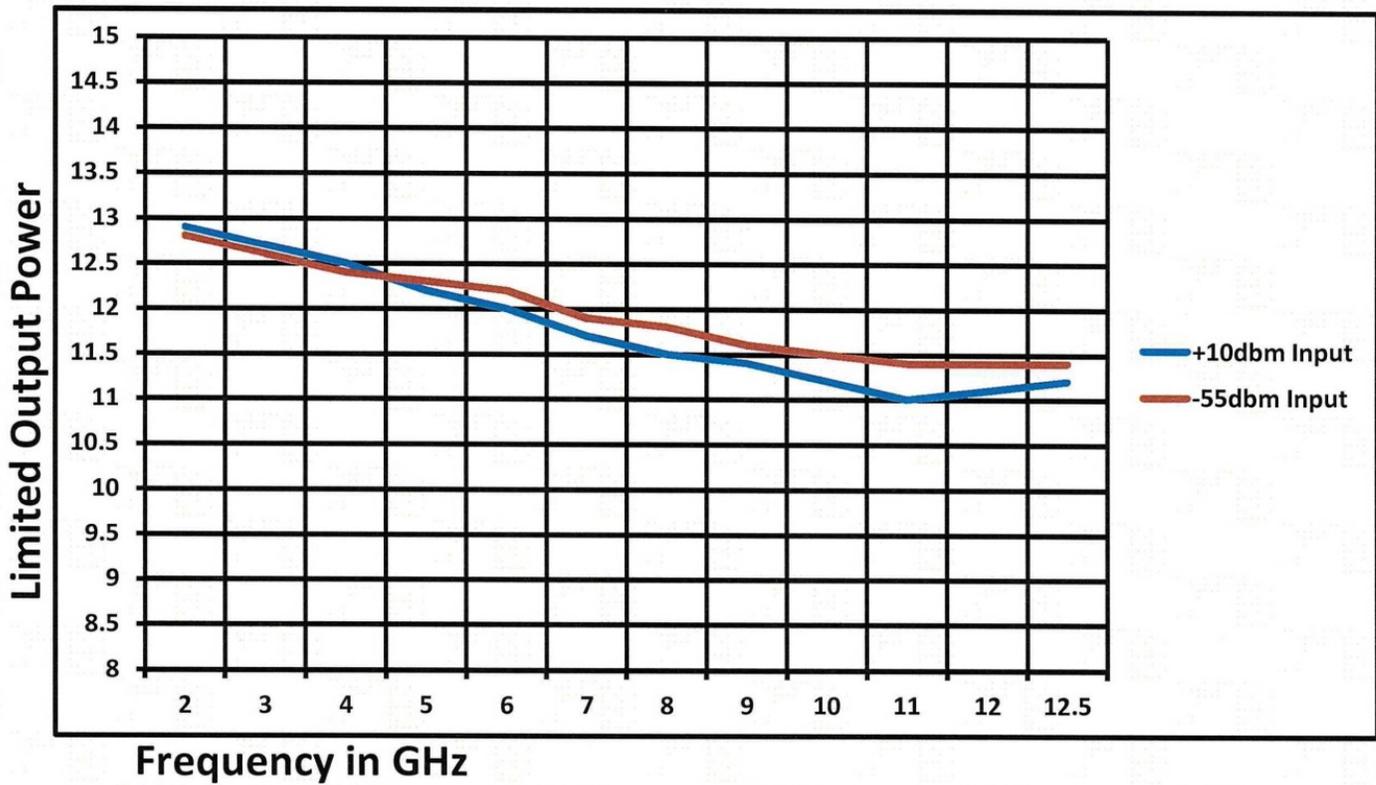


**TYPICAL CHARACTERISTICS
ON
SDLVA-212-65MV-12DBM**

S/N: PL15127

Graph #3
Limited Output Power

MODEL SDLVA-212-65-16MV-12DBM
Serial Number # PL15127

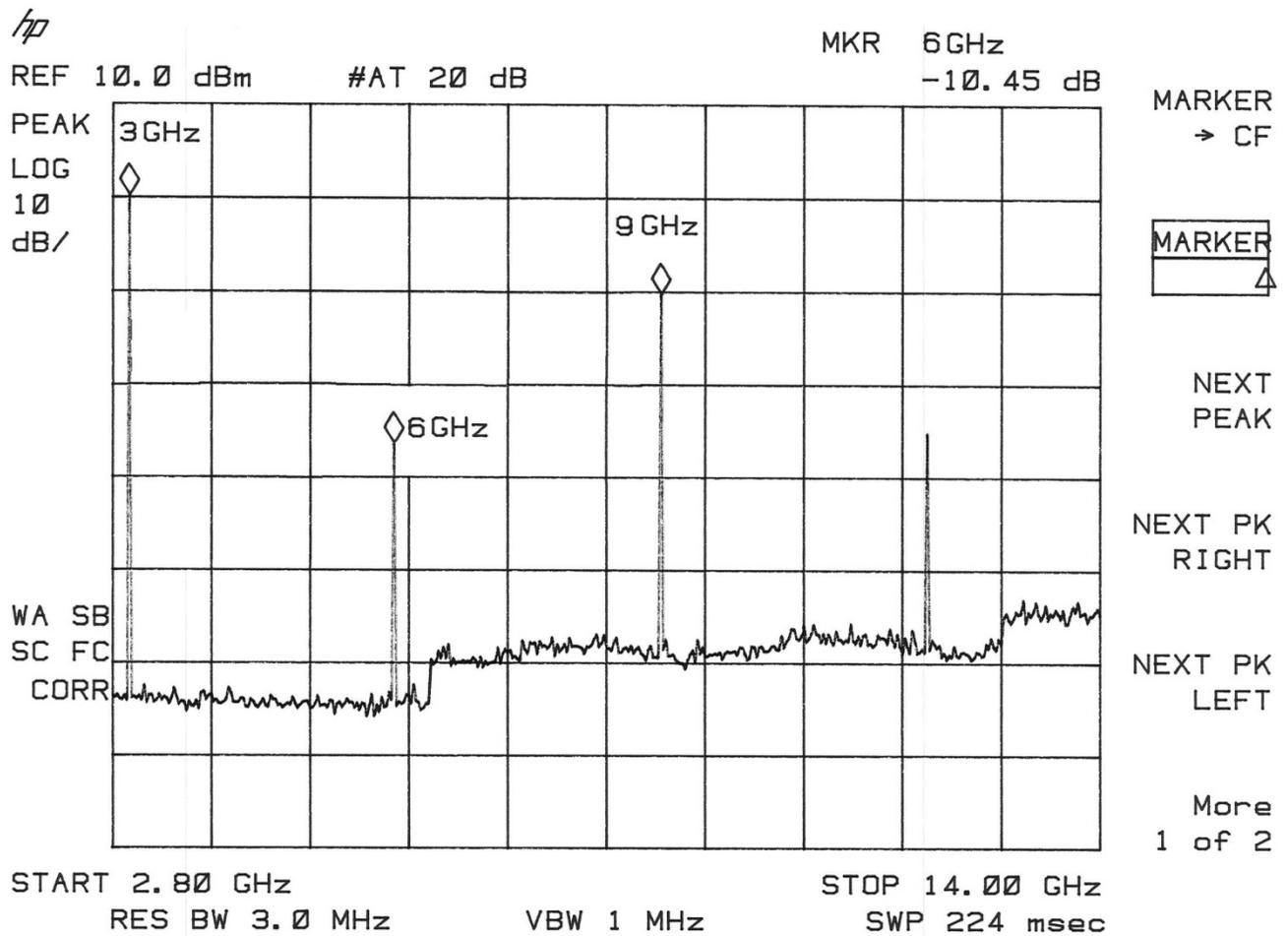




**TYPICAL CHARACTERISTICS
ON
SDLVA-212-65MV-12DBM**

S/N: PL15127

Graph #4
Harmonics



RF-IN @ 3GHz





**TYPICAL CHARACTERISTICS
ON
SDLVA-212-65MV-12DBM**

S/N: PL15127

Graph #5

SIMULTANEOUS SIGNAL SUPPRESSION

			SDLVA-212-65MV-DBM						
			P1OUT-P2OUT DBM						
			P2= -45DBM						
			F2 IN GHZ						
			2	4	6	8	10	12	12.5
P1 = -40DBM	F1 IN GHZ	2	X	-10	-10	-10	-10	-15	-15
		4	-9	X	-10	-10	-10	-12	-15
		6	-8	-7	X	-8	-9	-11	-18
		8	-9	-9	-9	X	-10	-12	-14
		10	-9	-9	-8	-7	X	-13	-14
		12	-7	-6.5	-7	-6	-5.5	X	-12
		12.5	-8	-8	-7	-5.5	-6.5	-9.5	X

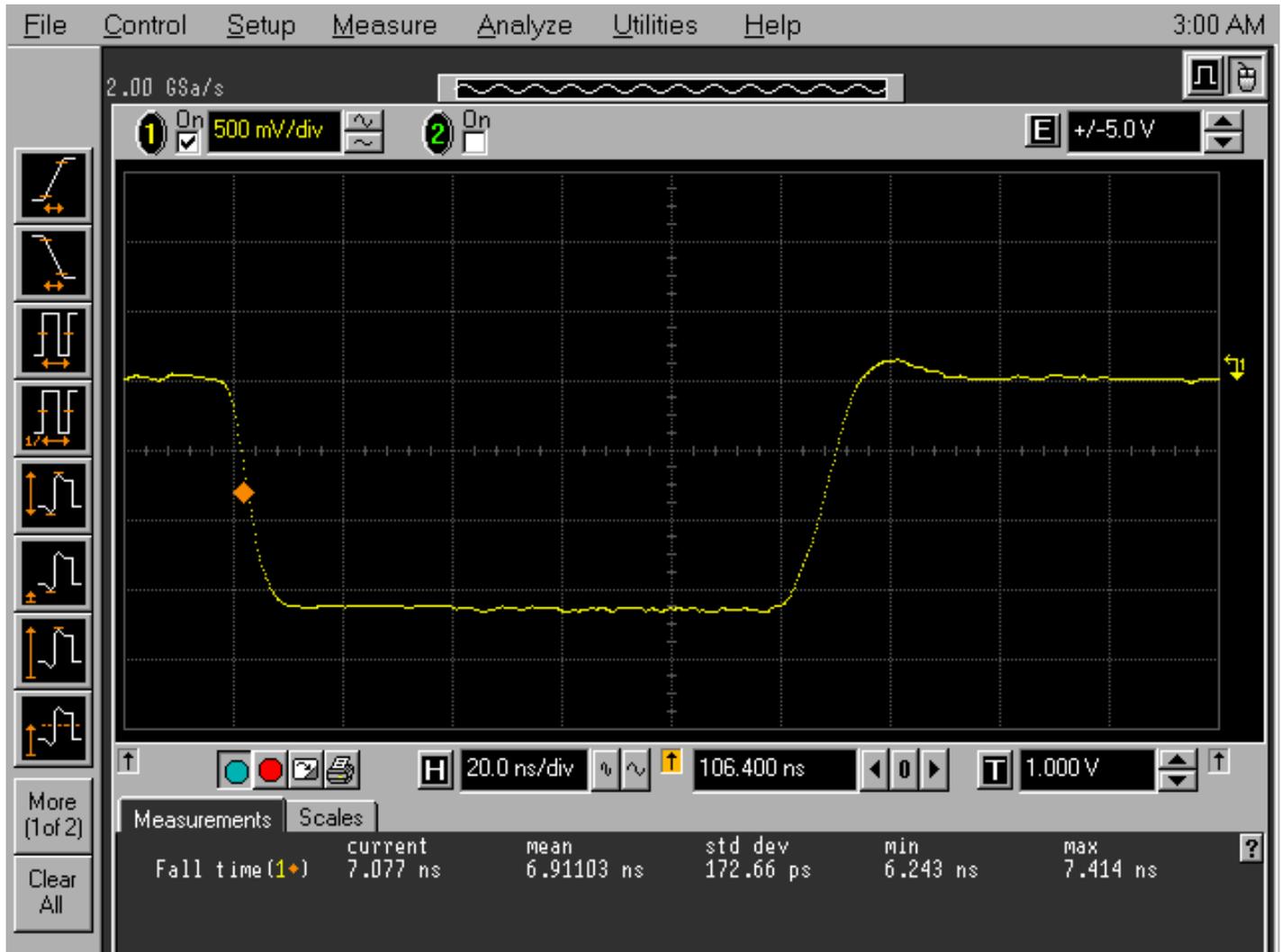




**TYPICAL CHARACTERISTICS
ON
SDLVA-212-65MV-12DBM**

S/N: PL15127

Photo #1
Rise Time @+10dBm

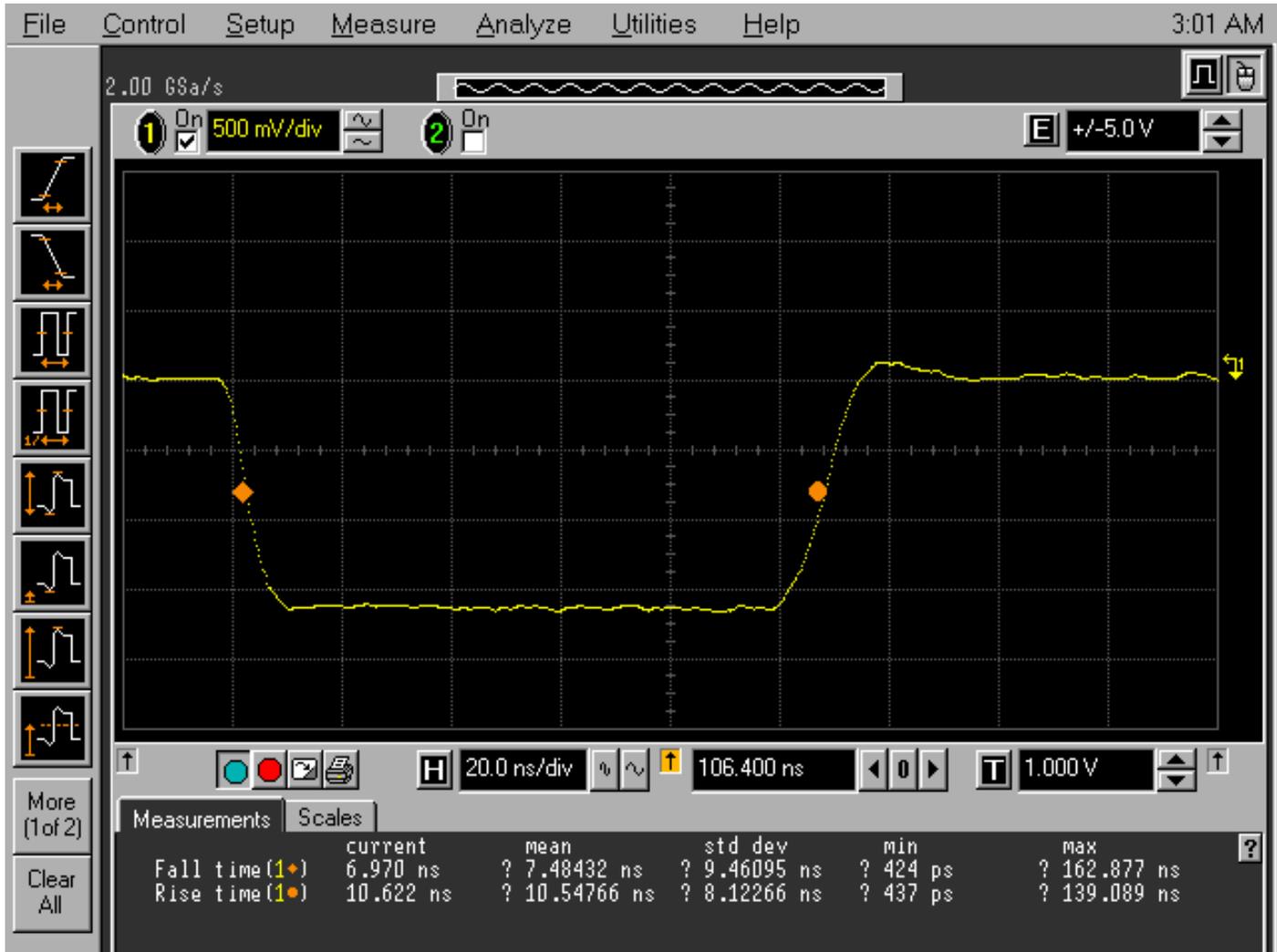




TYPICAL CHARACTERISTICS ON SDLVA-212-65MV-12DBM

S/N: PL15127

Photo #2
Fall Time @+10dBm





TYPICAL CHARACTERISTICS
ON
SDLVA-212-65MV-12DBM

S/N: PL15127

Photo #3
Recovery Time @+10dBm

