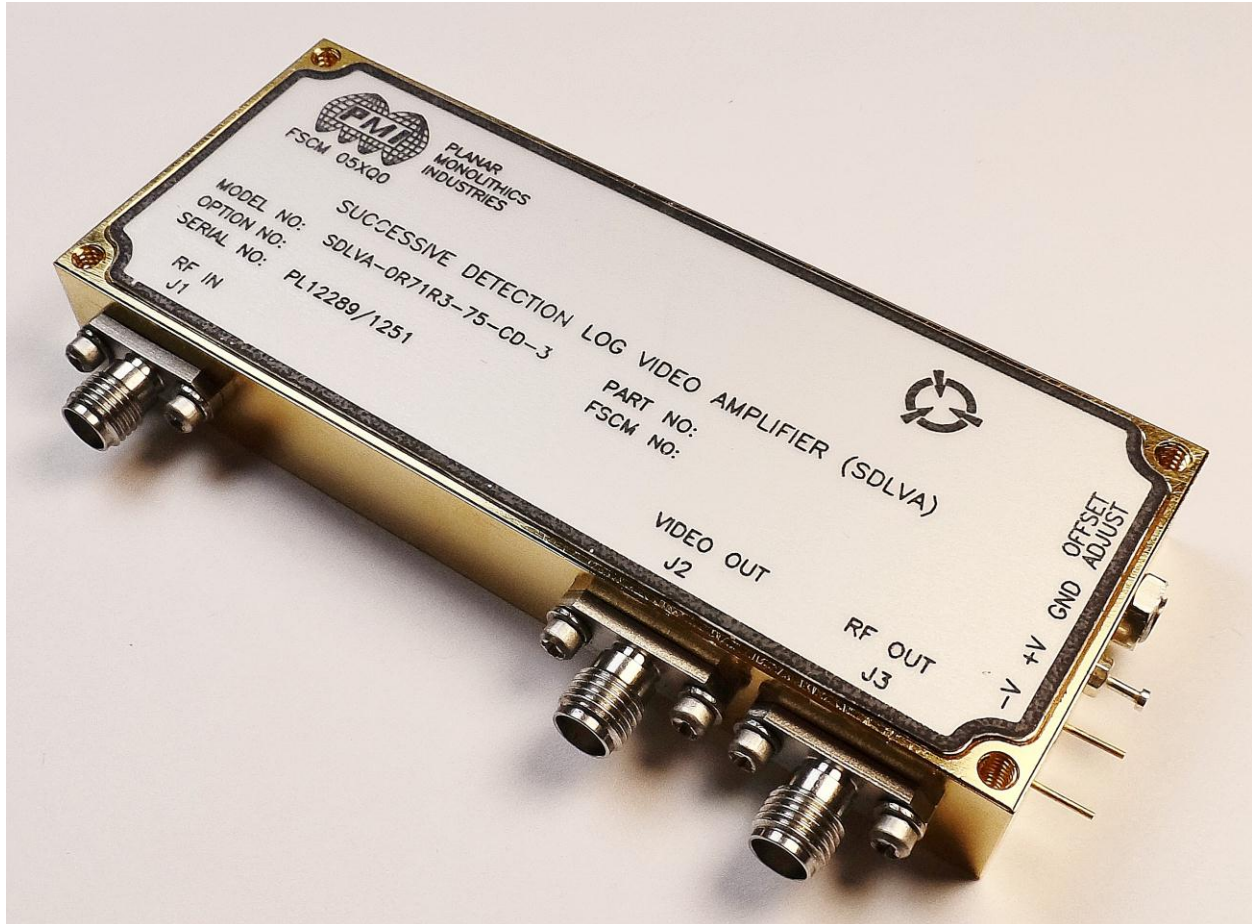




**Typical Characteristics
For
SDLVA-0R71R3-75-CD-3**



December 19, 2012
Designed by: Paul Kuhn
Drafted by: Simon Kuhn
Tested by: Michael McKay/ Paul Kuhn
Reported by: Michael McKay/ Paul Kuhn



Typical Characteristics For SDLVA-0R71R3-75-CD-3

SUMMARY TEST DATA @ 25°C

CUSTOMER: _____ MODEL NO: <u>SDLVA-0R71R3-75-CD-3</u> OPTION NO: _____ SERIAL NO: _____	JOB NO: _____ TESTED BY: <u>P. Kuhn/ M. McKay</u> TEMPERATURE: <u>+25°C</u> DATE: <u>12/19/12</u>
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TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	FREQUENCY RANGE	700 MHz TO 1300 MHz	700 MHz TO 1300 MHz	
2	INPUT VSWR:	1.8:1 (MAXIMUM)	1.57 : 1 SEE TYPICAL PLOT	
3	LOGGING RANGE	-70 dBm TO +5 dBm PLOTS ATTACHED	-70 dBm TO +5 dBm SEE PLOT	
4	TSS:	-70 dBm (TYPICAL)	-70 dBm SEE TYPICAL PLOT	
5	LOG SLOPE:	40mV/dB NOMINAL	38.9 mv/dB 40.7 mv/dB	
6	LOG LINEARITY @ -65dB TO +5dBm	± 1.5 dB MAXIMUM	± 0.41 dB	
7	RISE TIME: (10% TO 90% POINTS)	15nSec (TYPICAL) 25nSec (MAXIMUM)	9.0 nSec	
8	FALL TIME: (90% TO 10% POINTS)	15nSec (TYPICAL) 30nSec (MAXIMUM)	25.3 nSec	
9	LIMITED IF OUTPUT	+5 dBm Typical	2.7 dBm 3.3 dBm	
10	DC POWER @ +15V NO LOAD	200mA (MAXIMUM)	133 mA	
11	DC POWER @ -15V NO LOAD	190mA (MAXIMUM)	137 mA	

QA/QC APPROVAL: _____ DATE: _____



Typical Characteristics For SDLVA-0R71R3-75-CD-3

SUMMARY TEST DATA @ -54°C

CUSTOMER: _____ **JOB NO:** _____
MODEL NO: SDLVA-0R71R3-75-CD-3 **TESTED BY:** P. Kuhn/ M. McKay
OPTION NO: _____ **TEMPERATURE:** -54°C
SERIAL NO: _____ **DATE:** 12/19/12

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	FREQUENCY RANGE	700 MHz TO 1300 MHz	700 MHz TO 1300 MHz	
2	INPUT VSWR:	1.8:1 (MAXIMUM)	1.54 : 1 SEE TYPICAL PLOT	
3	LOGGING RANGE	-70 dBm TO +5 dBm PLOTS ATTACHED	-70 dBm TO +5 dBm SEE PLOT	
4	TSS:	-70 dBm (TYPICAL)	-70 dBm SEE TYPICAL PLOT	
5	LOG SLOPE:	40mV/dB NOMINAL	38.5 mv/dB 39.5 mv/dB	
6	LOG LINEARITY @ -65dB TO +5dBm	± 1.5 dB MAXIMUM	± 0.65 dB	
7	RISE TIME: (10% TO 90% POINTS)	15nSec (TYPICAL) 25nSec (MAXIMUM)	8.3 nSec	
8	FALL TIME: (90% TO 10% POINTS)	15nSec (TYPICAL) 30nSec (MAXIMUM)	23.8 nSec	
9	LIMITED IF OUTPUT	+5 dBm Typical	3.4 dBm 3.8 dBm	
10	DC POWER @ +15V NO LOAD	200mA (MAXIMUM)	126 mA	
11	DC POWER @ -15V NO LOAD	190mA (MAXIMUM)	127 mA	

QA/QC APPROVAL: _____ **DATE:** _____



**Typical Characteristics
For
SDLVA-0R71R3-75-CD-3**

SUMMARY TEST DATA @ 85°C

CUSTOMER: _____ JOB NO: _____
 MODEL NO: SDLVA-0R71R3-75-CD-3 TESTED BY: P. Kuhn/ M. McKay
 OPTION NO: _____ TEMPERATURE: +85°C
 SERIAL NO: _____ DATE: 12/19/12

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	FREQUENCY RANGE	700 MHz TO 1300 MHz	700 MHz TO 1300 MHz	
2	INPUT VSWR:	1.8:1 (MAXIMUM)	1.58 : 1 SEE TYPICAL PLOT	
3	LOGGING RANGE	-70 dBm TO +5 dBm PLOTS ATTACHED	-70 dBm TO +5 dBm SEE PLOT	
4	TSS:	-70 dBm (TYPICAL)	-70 dBm SEE TYPICAL PLOT	
5	LOG SLOPE:	40mV/dB NOMINAL	38.7 mv/dB 40.4 mv/dB	
6	LOG LINEARITY @ -65dB TO +5dBm	± 1.5 dB MAXIMUM	± 0.61 dB	
7	RISE TIME: (10% TO 90% POINTS)	15nSec (TYPICAL) 25nSec (MAXIMUM)	9.5 nSec	
8	FALL TIME: (90% TO 10% POINTS)	15nSec (TYPICAL) 30nSec (MAXIMUM)	27.0 nSec	
9	LIMITED IF OUTPUT	+5 dBm Typical	2.4 dBm 3.0 dBm	
10	DC POWER @ +15V NO LOAD	200mA (MAXIMUM)	147 mA	
11	DC POWER @ -15V NO LOAD	190mA (MAXIMUM)	134 mA	

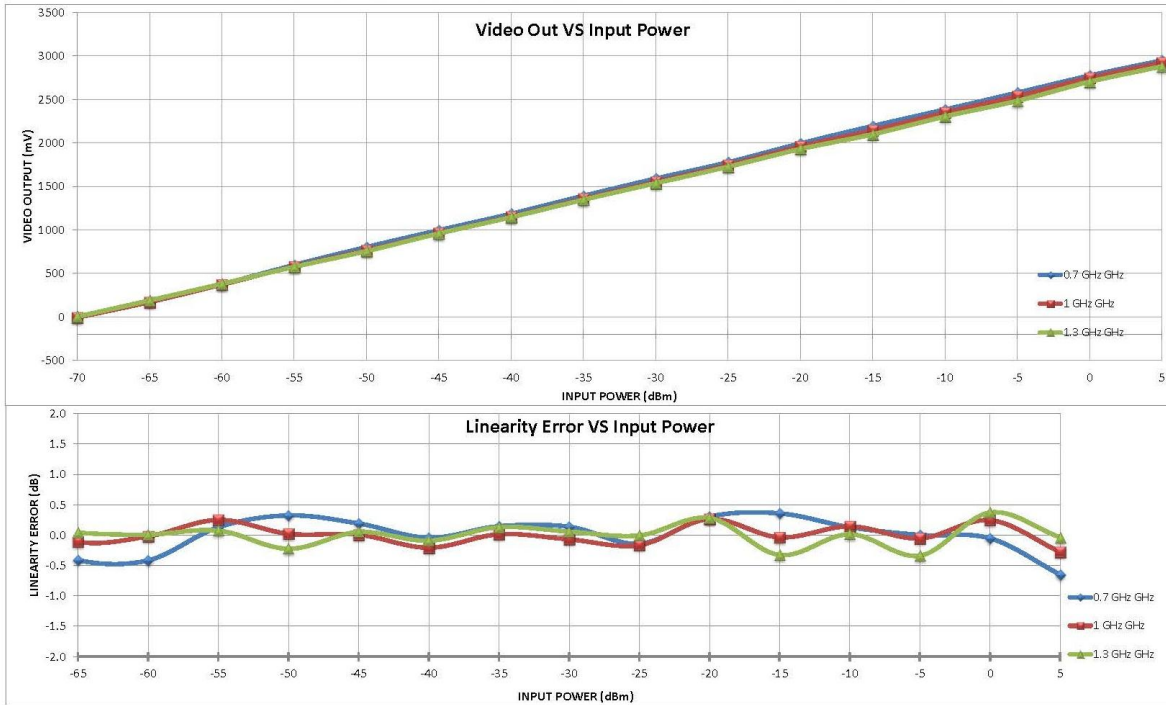
QA/QC APPROVAL: _____ DATE: _____



Typical Characteristics For SDLVA-0R71R3-75-CD-3

SDLVA-0R71R3-75-CD-3 (Tabulated Data) @ -54°C

		-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
0.7 GHz	INTERCEPT (mV)	-4	176	375	595	801	995	1184	1391	1589	1777	1993	2194	2384	2577	2774	2949	Measured Value (mV)
	SLOPE (mV/dB)	2	-16	-17	5	13	8	-2	6	5	-6	12	14	5	0	-2	-26	Error (mV)
		0.05	-0.41	-0.42	0.13	0.32	0.19	-0.04	0.15	0.14	-0.14	0.30	0.36	0.13	0.00	-0.05	-0.65	LINEARITY ERROR (dB)
1 GHz	INTERCEPT (mV)	-8	170	370	578	767	963	1152	1358	1552	1745	1960	2145	2349	2539	2748	2925	Measured Value (mV)
	SLOPE (mV/dB)	15	-4	-1	10	1	0	-8	1	-3	-7	10	-1	6	-2	10	-11	Error (mV)
		0.38	-0.11	-0.02	0.25	0.02	0.01	-0.21	0.01	-0.07	-0.17	0.27	-0.04	0.14	-0.05	0.24	-0.28	LINEARITY ERROR (dB)
1.3 GHz	INTERCEPT (mV)	1	188	379	574	755	958	1145	1346	1536	1726	1930	2099	2305	2484	2703	2880	Measured Value (mV)
	SLOPE (mV/dB)	7	2	0	3	-9	2	-4	5	2	0	11	-13	1	-13	14	-1	Error (mV)
		0.19	0.04	0.01	0.07	-0.23	0.05	-0.09	0.13	0.06	-0.01	0.28	-0.33	0.01	-0.34	0.37	-0.04	LINEARITY ERROR (dB)
Flatness dB		0.1	0.2	0.1	0.3	0.6	0.5	0.5	0.6	0.7	0.6	0.8	1.2	1	1.2	0.9	0.9	
Max IF Output dBm		0.8	3.1	4.6	5.4	5.6	5.1	4.9	4.7	4.5	4.2	4.1	4.0	4.0	3.9	3.9	3.8	
Min IF Output dBm		0.0	2.4	4.3	5.1	5.0	4.7	4.5	4.3	4.0	3.7	3.6	3.5	3.4	3.4	3.4	3.4	

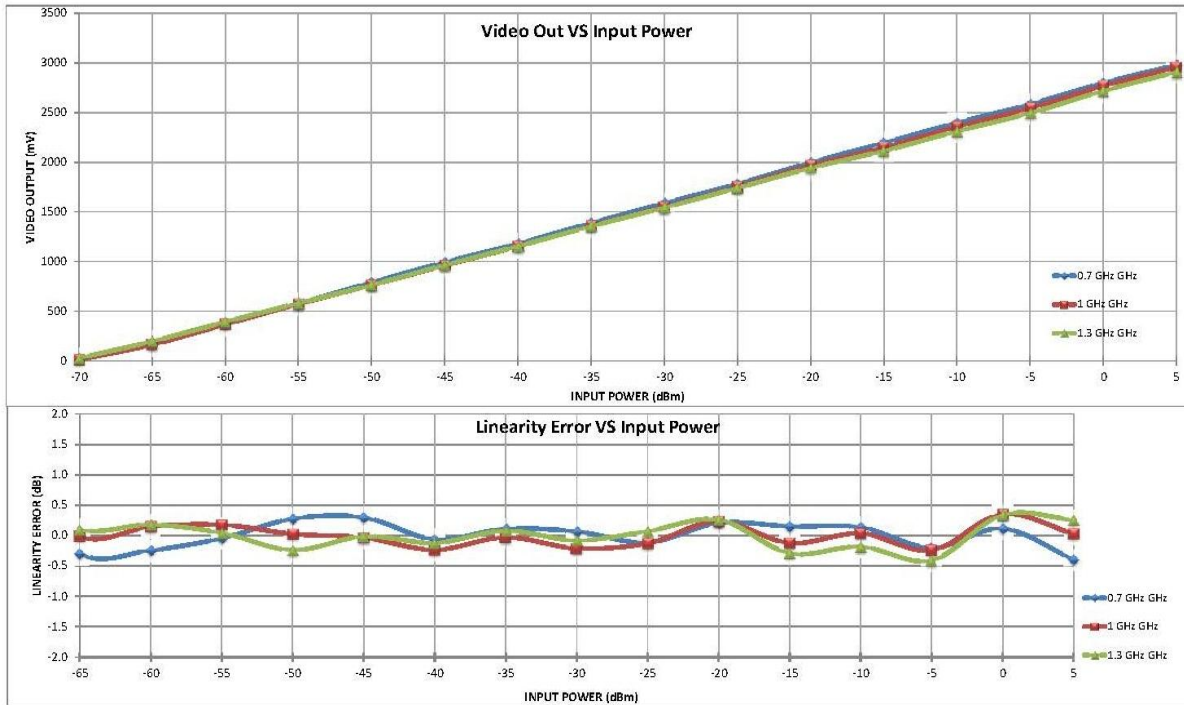




Typical Characteristics For SDLVA-0R71R3-75-CD-3

SDLVA-0R71R3-75-CD-3 (Tabulated Data) @ -5°C

		-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
0.7 GHz	INTERCEPT (mV)	2794																Measured Value (mV)
	SLOPE (mV/dB)	40.3																Error (mV)
																		LINEARITY ERROR (dB)
																	Measured Value (mV)	
																	Error (mV)	
																	LINEARITY ERROR (dB)	
1 GHz	INTERCEPT (mV)	2754																Measured Value (mV)
	SLOPE (mV/dB)	39.8																Error (mV)
																		LINEARITY ERROR (dB)
																	Measured Value (mV)	
																	Error (mV)	
																	LINEARITY ERROR (dB)	
1.3 GHz	INTERCEPT (mV)	2705																Measured Value (mV)
	SLOPE (mV/dB)	38.7																Error (mV)
																		LINEARITY ERROR (dB)
																	Measured Value (mV)	
																	Error (mV)	
																	LINEARITY ERROR (dB)	
Flatness dB		0.2																Measured Value (mV)
Max IF Output dBm		0.8																Error (mV)
Min IF Output dBm		-0.1																LINEARITY ERROR (dB)

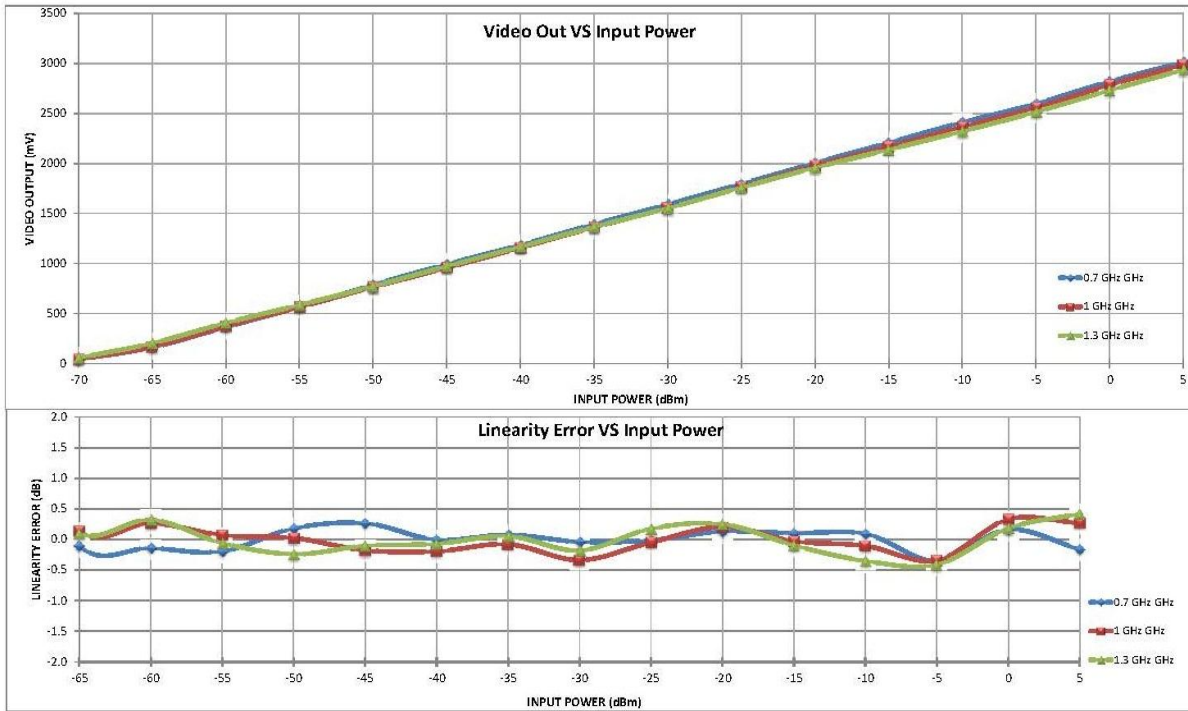




Typical Characteristics For SDLVA-0R71R3-75-CD-3

SDLVA-0R71R3-75-CD-3 (Tabulated Data) @ 25°C

		-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
0.7 GHz	INTERCEPT (mV)	2815																Measured Value (mV)
	SLOPE (mV/dB)	40.7																Error (mV)
		41	162	364	566	785	992	1185	1392	1591	1795	2005	2208	2411	2597	2821	3012	LINEARITY ERROR (dB)
		78	-4	-6	-8	7	11	0	3	-2	-1	5	4	4	-14	7	-7	
		1.92	-0.11	-0.14	-0.19	0.18	0.27	-0.01	0.08	-0.04	-0.01	0.13	0.10	0.09	-0.35	0.16	-0.16	
1 GHz	INTERCEPT (mV)	2774																Measured Value (mV)
	SLOPE (mV/dB)	40.2																Error (mV)
		42	166	372	565	764	957	1158	1363	1554	1766	1978	2169	2367	2559	2787	2985	LINEARITY ERROR (dB)
		83	6	11	3	1	-7	-8	-3	-14	-2	8	-1	-4	-14	13	11	
		2.06	0.14	0.27	0.07	0.02	-0.18	-0.19	-0.08	-0.34	-0.05	0.21	-0.03	-0.10	-0.34	0.33	0.27	
1.3 GHz	INTERCEPT (mV)	2725																Measured Value (mV)
	SLOPE (mV/dB)	38.9																Error (mV)
		57	203	406	585	773	972	1168	1367	1552	1760	1958	2139	2323	2515	2732	2936	LINEARITY ERROR (dB)
		52	4	13	-2	9	-4	-3	2	7	10	-4	14	-16	7	16		
		1.34	0.10	0.32	-0.06	-0.24	-0.10	-0.07	0.05	-0.18	0.18	0.25	-0.09	-0.35	-0.41	0.18	0.42	
Flatness dB		0.2	0.5	0.5	0.3	0.3	0.4	0.3	0.4	0.5	0.4	0.6	0.9	1.1	1	1.1	0.9	
Max IF Output dBm		0.6	2.5	4.1	4.7	4.8	4.5	4.3	4.2	4.0	3.6	3.5	3.4	3.4	3.3	3.3	3.3	
Min IF Output dBm		-0.5	1.5	3.4	4.5	4.6	4.2	3.9	3.7	3.3	2.9	2.8	2.7	2.7	2.7	2.7	2.7	

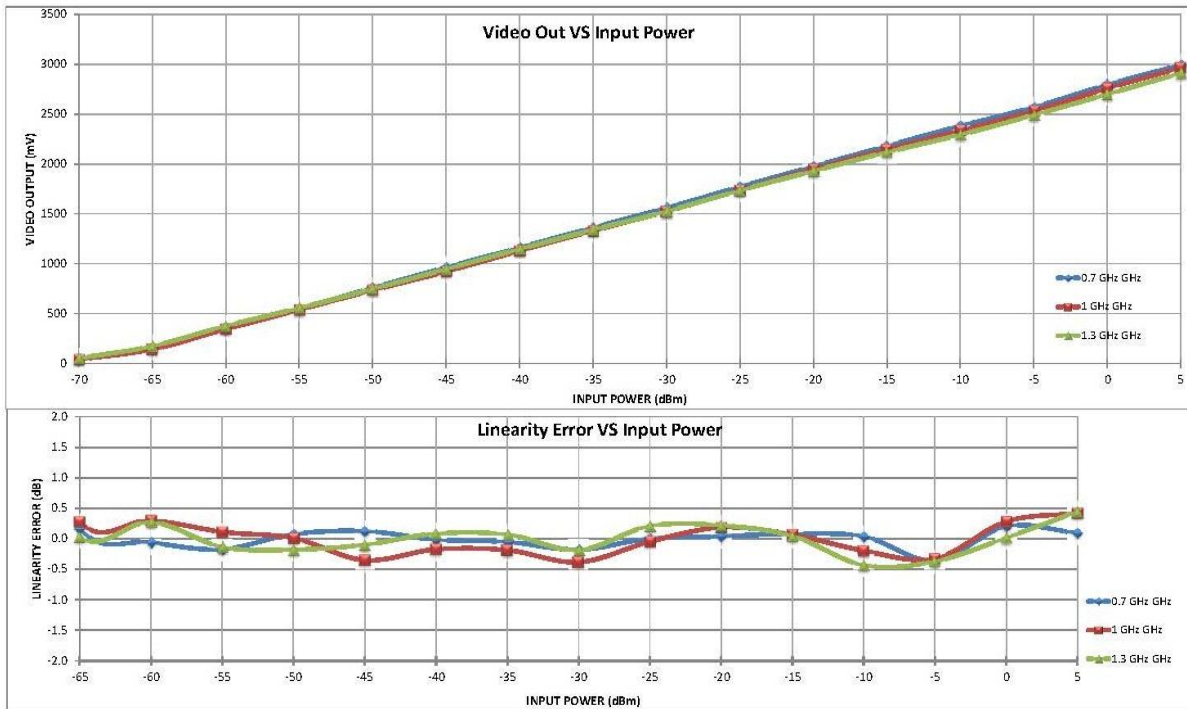




Typical Characteristics For SDLVA-0R71R3-75-CD-3

SDLVA-0R71R3-75-CD-3 (Tabulated Data) @ 55°C

			-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
0.7 GHz	INTERCEPT (mV)	2787	47	151	345	544	757	963	1160	1362	1560	1771	1976	2190	2382	2569	2795	2994	Measured Value (mV)
	SLOPE (mV/dB)	40.7	106	7	-2	-7	3	5	-1	-2	-7	0	2	3	2	-15	8	4	Error (mV)
			2.61	0.17	-0.06	-0.17	0.08	0.13	-0.01	-0.05	-0.18	0.01	0.04	0.08	0.04	-0.36	0.20	0.09	LINEARITY ERROR (dB)
1 GHz	INTERCEPT (mV)	2747	40	141	344	537	734	921	1130	1331	1524	1739	1949	2146	2337	2533	2758	2965	Measured Value (mV)
	SLOPE (mV/dB)	40.3	112	11	12	5	0	-14	-7	-7	-15	-2	8	3	-8	-13	11	17	Error (mV)
			2.77	0.28	0.30	0.11	0.01	-0.35	-0.17	-0.19	-0.38	-0.05	0.19	0.07	-0.20	-0.33	0.28	0.42	LINEARITY ERROR (dB)
1.3 GHz	INTERCEPT (mV)	2700	52	172	376	555	748	945	1147	1341	1526	1735	1930	2118	2294	2491	2700	2912	Measured Value (mV)
	SLOPE (mV/dB)	38.9	75	1	11	5	7	-4	3	3	7	8	8	2	17	14	1	17	Error (mV)
			1.93	0.03	0.28	-0.13	-0.18	-0.10	0.09	0.07	-0.18	0.21	0.22	0.05	-0.43	-0.37	0.02	0.45	LINEARITY ERROR (dB)
Flatness dB			0.1	0.4	0.4	0.2	0.3	0.5	0.4	0.4	0.4	0.4	0.6	0.8	1.1	1	1.2	1	
Max IF Output dBm			0.3	2.4	4.0	4.6	4.7	4.4	4.1	4.0	3.8	3.5	3.3	3.3	3.2	3.2	3.2	3.2	
Min IF Output dBm			-0.7	1.3	3.2	4.3	4.5	4.0	3.7	3.5	3.1	2.7	2.6	2.6	2.5	2.5	2.5	2.5	

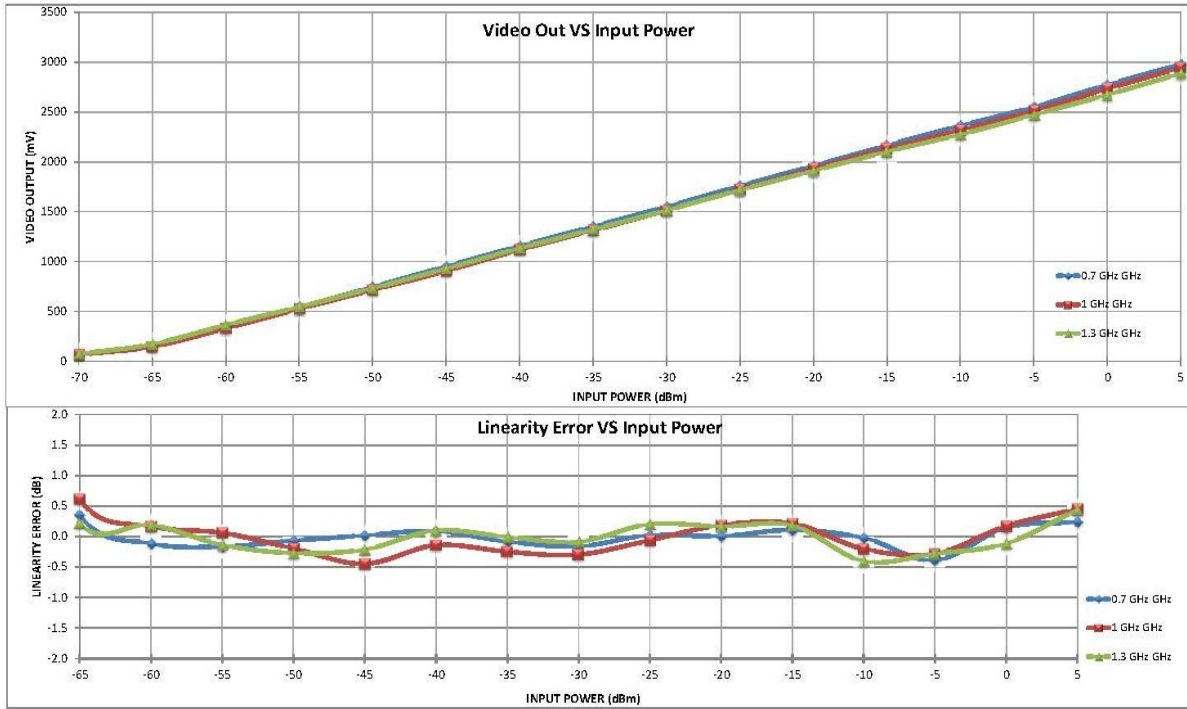




Typical Characteristics For SDLVA-0R71R3-75-CD-3

SDLVA-0R71R3-75-CD-3 (Tabulated Data) @ 85°C

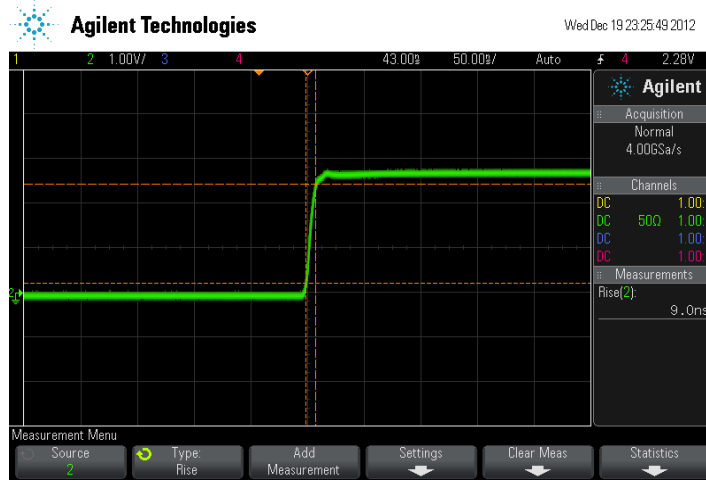
		-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
0.7 GHz	INTERCEPT (mV)	2767																Measured Value (mV)
	SLOPE (mV/dB)	40.4																Error (mV)
		72	157	340	540	745	951	1156	1350	1549	1759	1960	2166	2362	2549	2773	2979	LINEARITY ERROR (dB)
		131	14	-5	-7	-3	1	4	-3	-6	1	0	4	-1	-16	6	10	
		3.25	0.36	-0.11	-0.16	-0.07	0.02	0.09	-0.08	-0.16	0.02	0.01	0.11	-0.02	-0.39	0.15	0.24	
1 GHz	INTERCEPT (mV)	2727																Measured Value (mV)
	SLOPE (mV/dB)	40.1																Error (mV)
		65	147	329	526	716	906	1119	1315	1513	1723	1933	2135	2318	2516	2734	2946	LINEARITY ERROR (dB)
		143	25	7	2	-8	-18	-6	-10	-12	-2	8	9	-8	-11	7	18	
		3.58	0.61	0.17	0.06	-0.20	-0.45	-0.14	-0.25	-0.30	-0.06	0.19	0.21	-0.20	-0.28	0.17	0.45	
1.3 GHz	INTERCEPT (mV)	2677																Measured Value (mV)
	SLOPE (mV/dB)	38.7																Error (mV)
		73	171	364	545	733	928	1134	1323	1514	1718	1910	2104	2275	2473	2673	2888	LINEARITY ERROR (dB)
		104	8	7	5	11	8	4	0	3	8	6	7	15	11	4	17	
		2.68	0.22	0.19	-0.13	-0.27	-0.21	0.10	-0.01	-0.08	0.20	0.17	0.18	-0.40	-0.28	-0.11	0.44	
Flatness dB		0.1	0.3	0.4	0.2	0.4	0.6	0.5	0.4	0.5	0.5	0.6	0.8	1.1	1	1.2	1.1	
Max IF Output dBm		0.2	2.2	3.8	4.4	4.5	4.2	4.0	3.9	3.7	3.3	3.2	3.1	3.1	3.0	3.0	3.0	
Min IF Output dBm		-0.8	1.2	3.1	4.2	4.3	3.9	3.6	3.4	3.0	2.6	2.5	2.4	2.4	2.4	2.4	2.4	



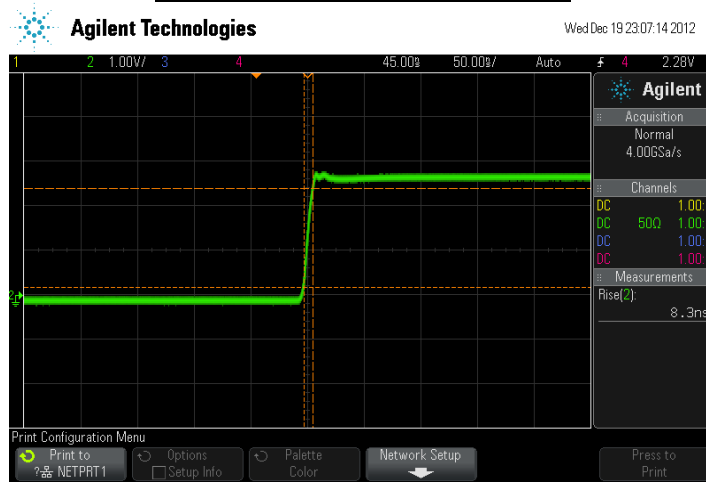


Typical Characteristics For SDLVA-0R71R3-75-CD-3

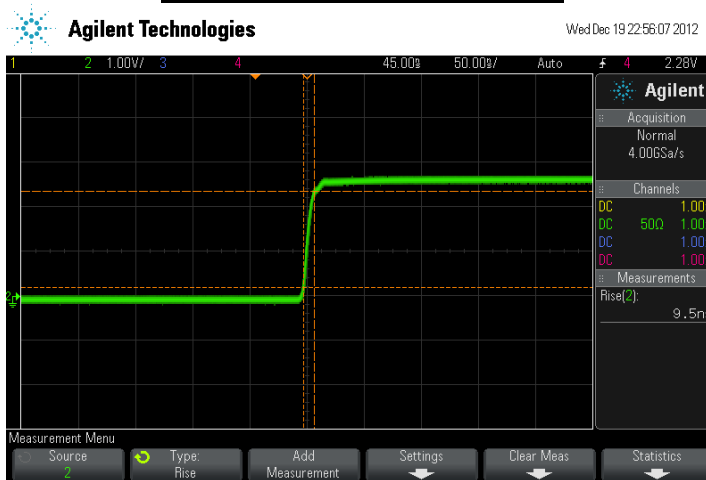
Rise Time, 1GHz @ 25°C



Rise Time, 1GHz @ -54°C



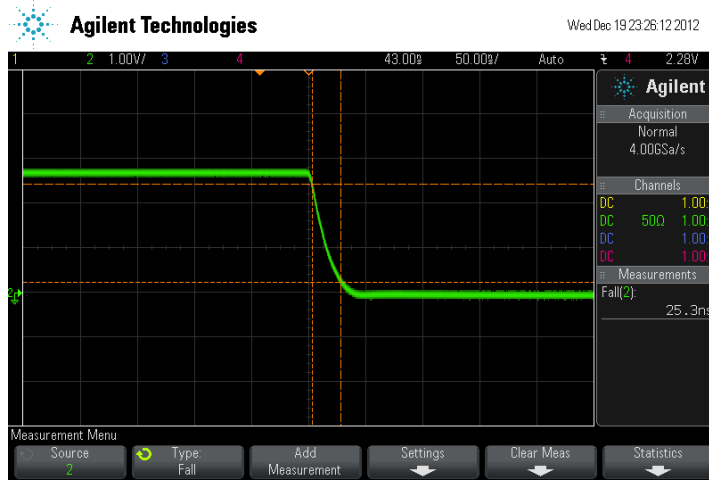
Rise Time, 1GHz @ 85°C



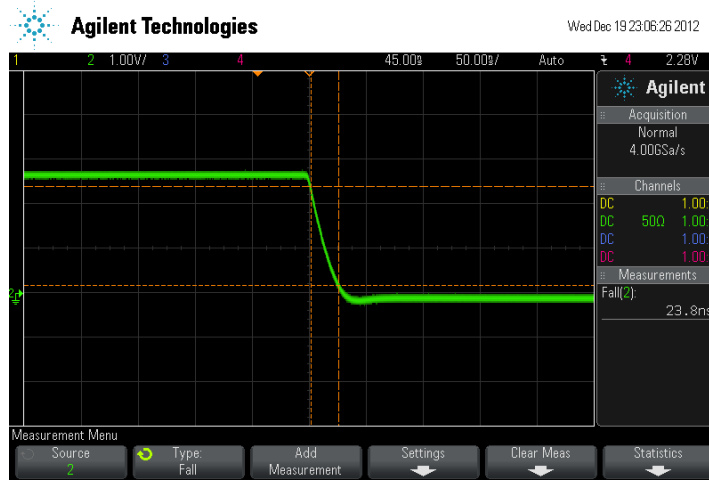


Typical Characteristics For SDLVA-0R71R3-75-CD-3

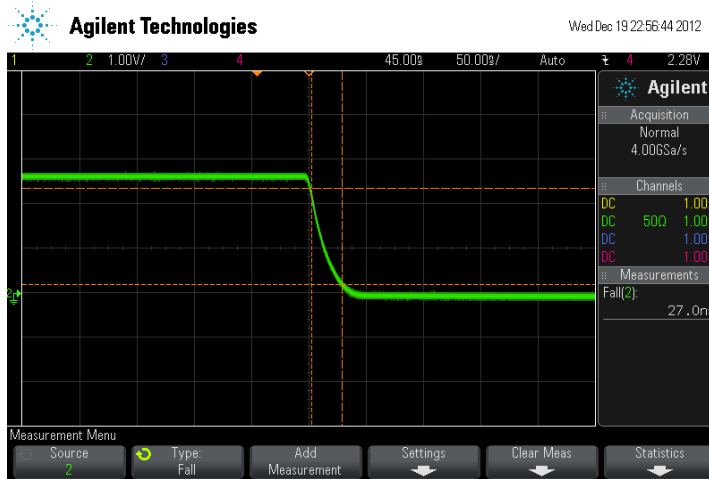
Fall & Recovery Time, 1GHz @ 25°C



Fall & Recovery Time, 1GHz @ -54°C



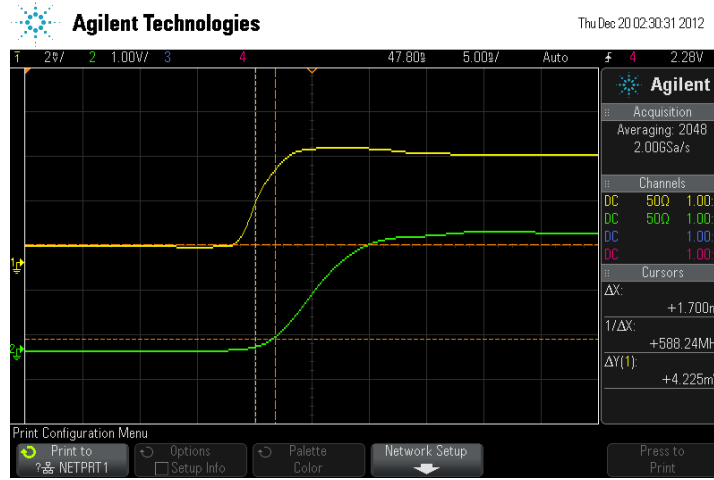
Fall & Recovery Time, 1GHz @ 85°C



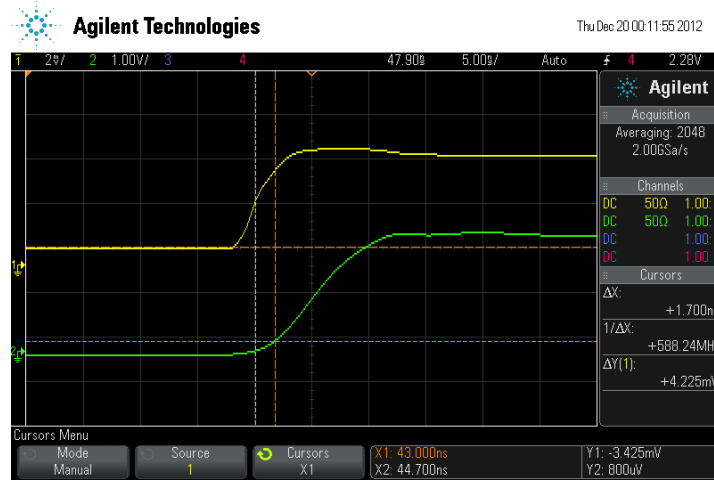


Typical Characteristics For SDLVA-0R71R3-75-CD-3

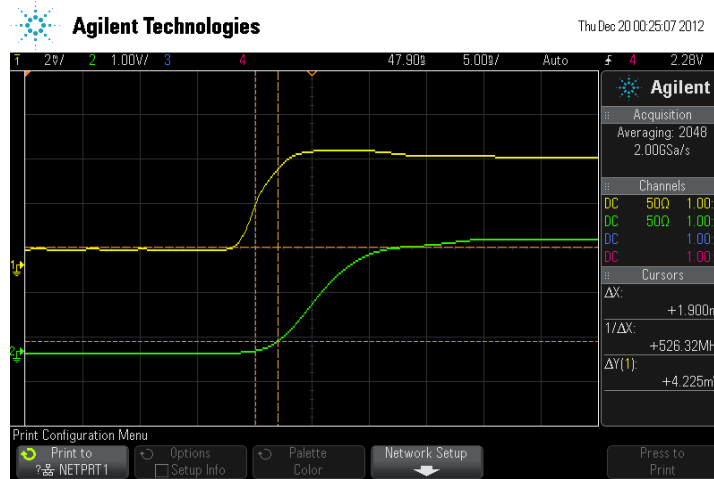
Delay Time (50%RF to 10%Video), 1GHz @ 25°C



Delay Time (50%RF to 10%Video), 1GHz @ -54°C



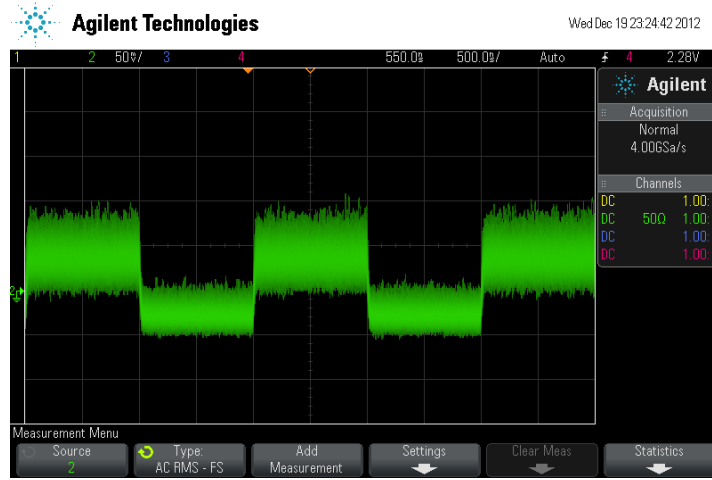
Delay Time (50%RF to 10%Video), 1GHz @ 85°C



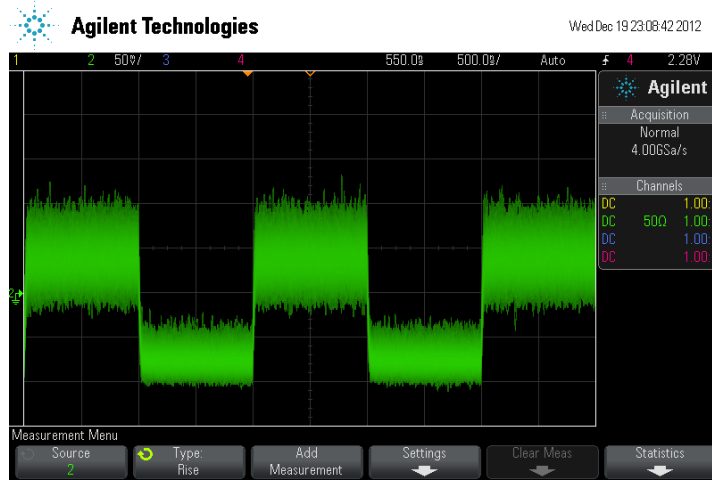


Typical Characteristics For SDLVA-0R71R3-75-CD-3

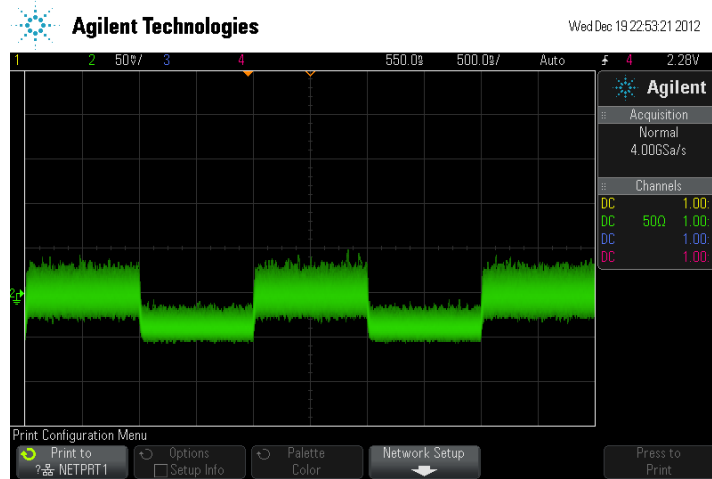
Tangential Signal Sensitivity (TSS), 1GHz, -70dBm @ 25°C



Tangential Signal Sensitivity (TSS), 1GHz, -70dBm @ -54°C



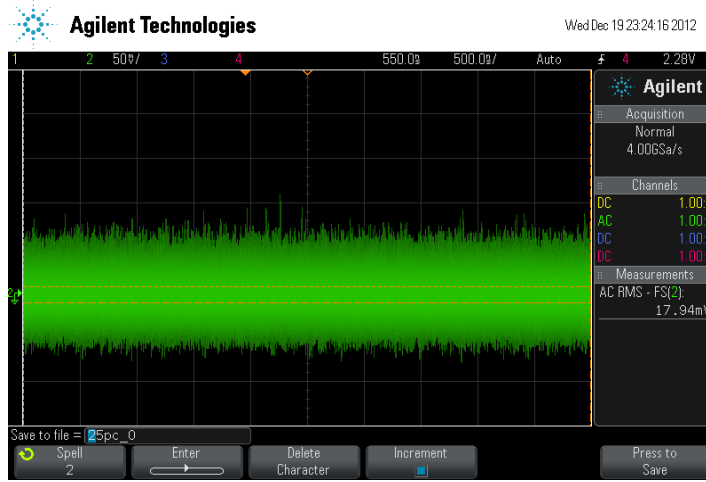
Tangential Signal Sensitivity (TSS), 1GHz, -70dBm @ 85°C



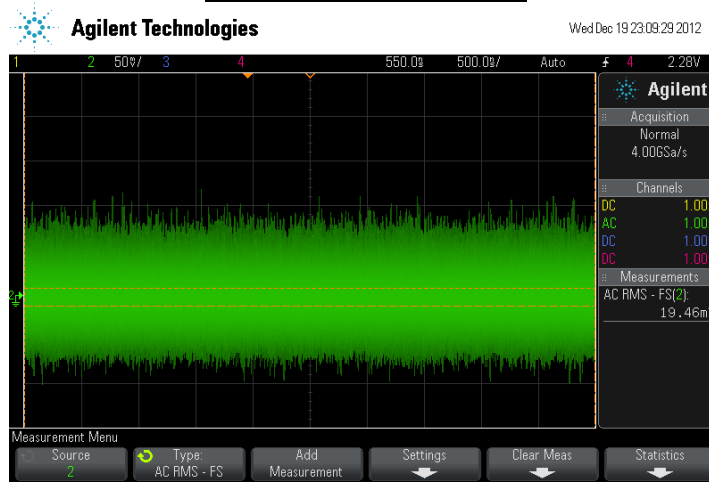


Typical Characteristics For SDLVA-0R71R3-75-CD-3

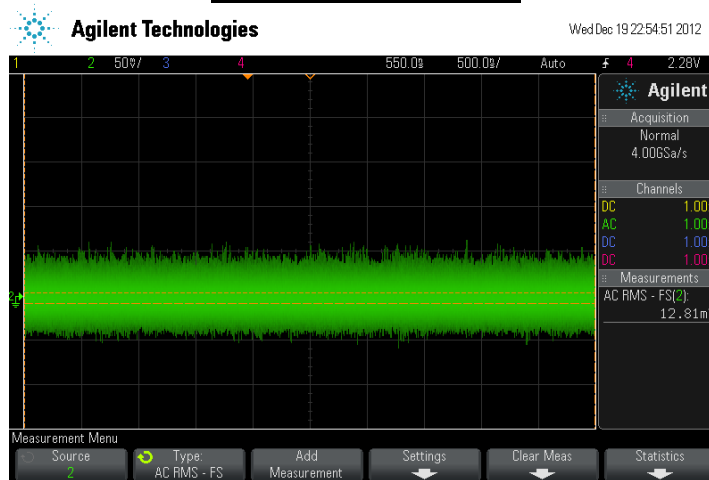
RMS Noise @ 25°C



RMS Noise @ -54°C



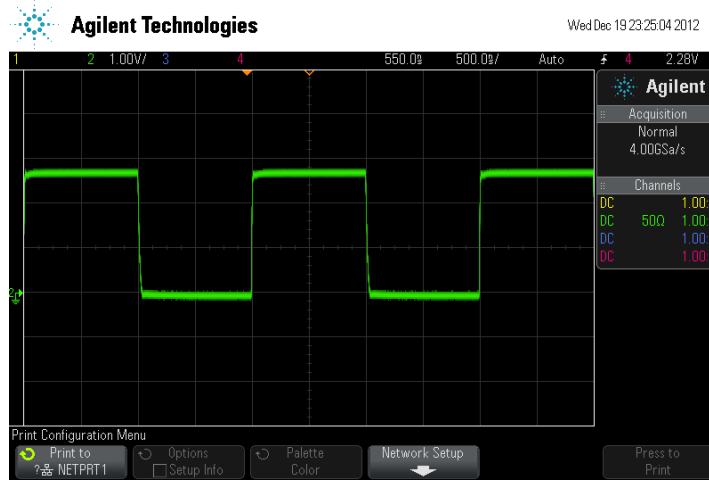
RMS Noise @ 85°C



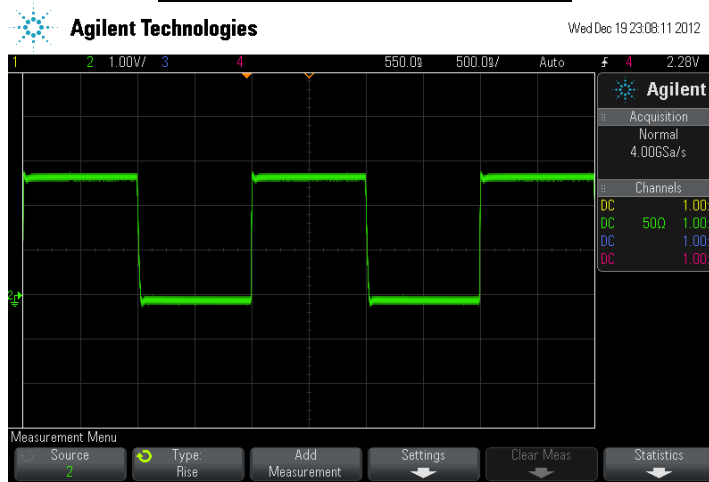


Typical Characteristics For SDLVA-0R71R3-75-CD-3

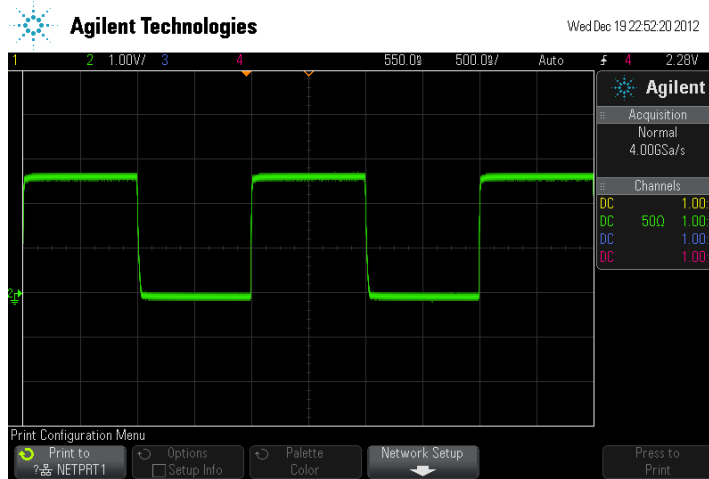
Full Pulse, 1GHz @ 25°C



Full Pulse, 1GHz @ -54°C



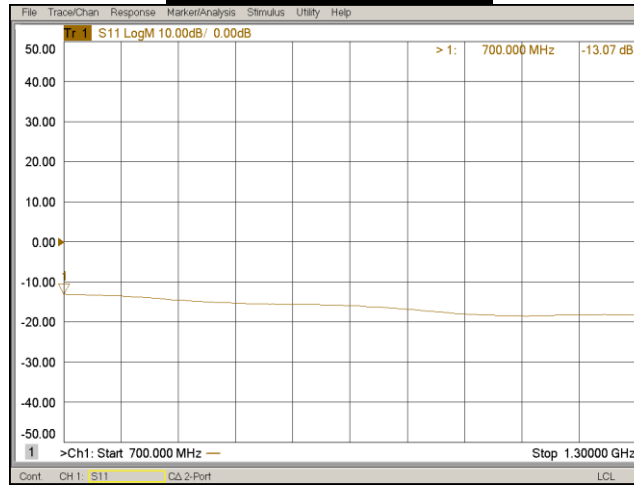
Full Pulse, 1GHz @ 85°C



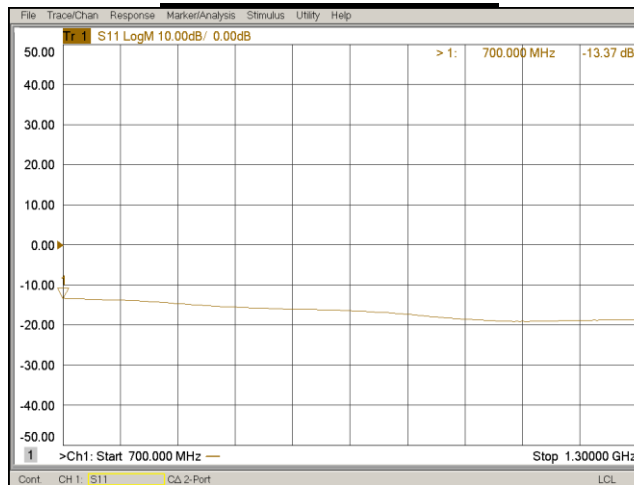


Typical Characteristics For SDLVA-0R71R3-75-CD-3

Return Loss @ 25°C



Return Loss @ -54°C



Return Loss @ 85°C

