



**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

THE MODEL SDLVA-0120-70 OPTION: 100M2G, 10DBM IS A SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVA) THAT OPERATES BETWEEN THE 0.1 AND 2.0 GHZ FREQUENCY RANGE. IT HAS A DYNAMIC RANGE OF 70dB AND A TSS OF -65dBm. THIS UNIT OFFERS A MAXIMUM FAST RISE TIME OF 25 nSec AND A RAPID FALL TIME OF 30 nSec.



DESIGNED BY: DR. ASHOK GORWARA

TESTED & REPORTED BY: RANDY COMBS

AUGUST 20, 2013



TYPICAL CHARACTERISTICS ON SDLVA-0120-7- OPTION: 100M2G, 10dBm

DESCRIPTION

THE MODEL, SDLVA-0120-70 OPTION: 100M2G, 10DBM IS A SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVA) THAT OPERATES BETWEEN THE 0.1 TO 2.0 GHz FREQUENCY RANGE. IT HAS A DYNAMIC RANGE OF 70 dB MINIMUM AND A TSS OF -65 dBm. THIS UNIT OFFERS A MAXIMUM FAST RISE TIME OF 25 nsec AND A RAPID FALL TIME OF 30 nsec

SPECIFICATIONS

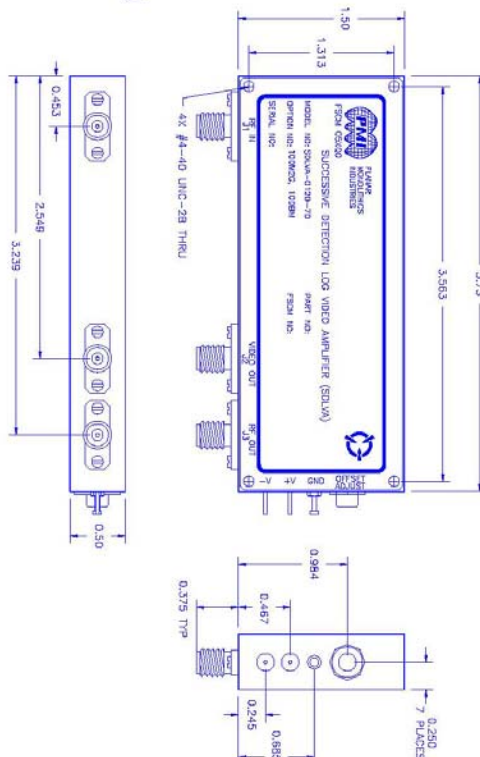
- FREQUENCY RANGE: 0.1 TO 2.0 GHz
- DYNAMIC RANGE: 70 dBm MINIMUM, 75 dB TYPICAL
- LOG LINEARITY: ± 2.0 dB MAXIMUM (-65 TO +5 dBm) AT 100 MHz; ± 2.0 dB MAXIMUM (-50 TO +5 dBm)
- MINIMUM LOGGING RANGE: -65 dBm
- MAXIMUM LOGGING RANGE: +5 dBm
- VSWR INPUT: 2.0:1 MAXIMUM (1.8:1 TYPICAL)
- TANGENTIAL SENSITIVITY: -65 dBm (-70 dBm TYPICAL)
- LIMITED IF OUTPUT: +10 dBm TYPICAL
- MAXIMUM RF INPUT POWER: +10 dBm
- LOG VIDEO OUTPUT:
 - OUTPUT COUPLING: DC
 - MAXIMUM OUTPUT VOLTAGE: 2.7 VOLTS
 - RISE TIME: 25 nsec Max
 - FALL TIME: 30 nsec Max
 - SETTLING TIME: 40 nsec Max
 - DC OFFSET: 0.1 V NOMINAL (ADJUSTABLE)
 - SLOPE: 25 mV/dB NOMINAL (at 1GHz)
 - LOG SLOPE VARIATION: ± 0.5 mV/dB TYPICAL (OVER 80 MHz RF BANDWIDTH)
 - LOG SLOPE VARIATION WITH TEMPERATURE: ± 0.5 mV/dB TYPICAL
 - PROPAGATION DELAY: 10 nsec TYPICAL
- VIDEO LOAD: 100 Ω $\pm$ 10%
- DC POWER SUPPLY:
 - +V: +7 TO +18V @ 300 mA
 - V: -7 TO -18V @ 150 mA
- SIZE: (L) 3.75" X (W) 1.50" X (H) 0.50"
- FINISH: GOLD PLATED

ENVIRONMENTAL RATINGS

- TEMPERATURE: -55°C TO +85°C (OPERATING)
-65°C TO +100°C (STORAGE)
- HUMIDITY: MIL-STD-202F, METHOD 103B COND. B
- SHOCK: MIL-STD-202F, METHOD 213B COND. B
- VIBRATION: MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE: MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE: MIL-STD-202F, METHOD 107D COND. A

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX .0020
X.XX3 .0010
WEIGHT 2.75 LB



PLANAR MONOLITHICS INDUSTRIES, INC.
7311-G GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-631-1579 FAX: 301-662-2029
WEBSITE: www.planarmonolithics.com
E-MAIL: sales@planarmonolithics.com
ISO 9001:2000 CERTIFIED

APPROVALS		DATE		TITLE	
DESIGN	JCL	8/29/06		PRODUCT FEATURE	SDLVA-0120-70
CHECKED				OPTION:	100M2G, 10DBM
RESED				SIZE FROM NO.	0.1 TO 2.0 GHz, SUCCESSIVE DETECTOR LOG VIDEO AMPLIFIER
				SIZE	A 05X00
				DWG NO.	27009481
				SCALE	N/S
				SHEET	1 OF 1

**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

SDLVA-0120-70 OPTION: 100M20G, 10dBm (Tabulated Data) @ 25°C

LOG TRANSFER VS FREQUENCY @ 25 °C
MODEL: SDLVA-0120-70 OPTION : 100M2G, 10DBM
TESTED BY: RCombs
SERIAL No. : PL8690

Friday, August 23, 2013
3:53 PM



PLANAR MONOLITHICS INDUSTRIES
7311-F GROVE ROAD, FREDERICK, MD 21704 USA
TEL: 301-662-5019 FAX: 301-662-1731
URL: WWW.PMI-RF.COM
EMAIL: SALES@PMI-RF.COM

Frequency

EMAIL: SALES@PMI-RF.COM

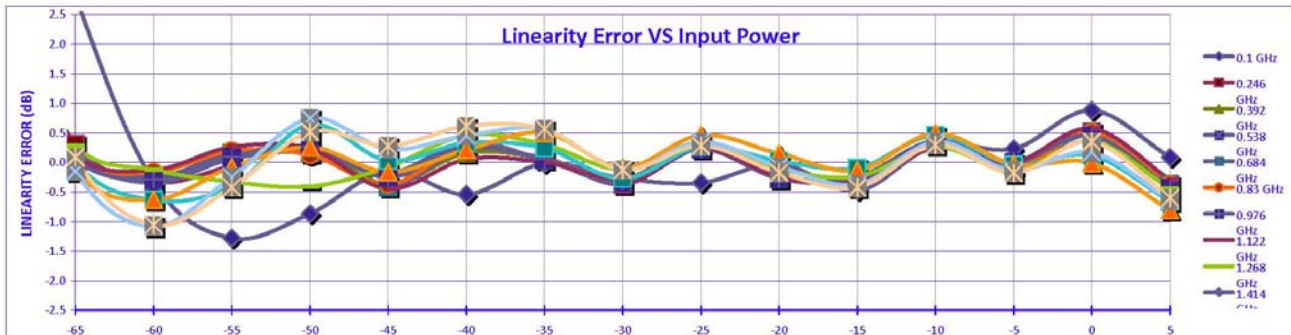
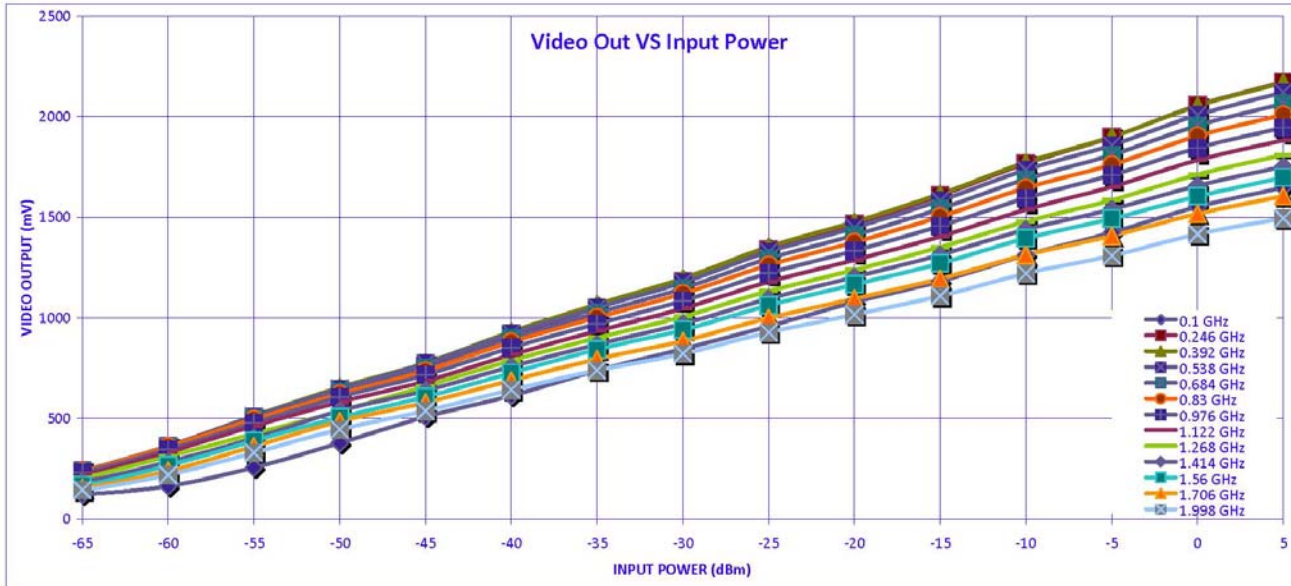
RF Input Power (dBm)

			-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5			
0.1 GHz	INTERCEPT (mV)	1532	106	121	163	266	377	507	612	737	845	957	1077	1181	1312	1424	1552	1647	Measured Value (mV)		
	SLOPE (mV/dB)	22.7	163	64	-8	-29	20	-3	-14	0	-6	-8	-1	-11	7	5	20	2	Error (mV)		
			7.16	2.82	-0.34	-1.28	-0.87	-0.14	-0.54	-0.02	-0.27	-0.34	-0.03	-0.48	0.29	0.23	0.88	0.08	LINEARITY ERROR (dB)		
0.246 GHz	INTERCEPT (mV)	2041	137	204	328	478	629	757	910	1049	1179	1338	1467	1607	1766	1898	2055	2172	Measured Value (mV)		
	SLOPE (mV/dB)	28.4	83	9	-9	-2	8	-7	5	2	-11	7	-6	-8	9	-1	15	-10	Error (mV)		
			2.94	0.31	-0.33	-0.06	0.28	-0.24	0.16	0.08	-0.37	0.24	-0.23	-0.28	0.33	-0.02	0.51	-0.37	LINEARITY ERROR (dB)		
0.392 GHz	INTERCEPT (mV)	2040	150	233	362	511	654	776	930	1067	1195	1353	1476	1614	1771	1899	2053	2169	Measured Value (mV)		
	SLOPE (mV/dB)	27.9	61	4	-7	4	7	-10	4	2	-9	9	-6	-8	10	-2	13	-11	Error (mV)		
			2.18	0.13	-0.25	0.14	0.24	-0.38	0.16	0.06	-0.32	0.33	-0.23	-0.27	0.37	-0.06	0.46	-0.38	LINEARITY ERROR (dB)		
0.538 GHz	INTERCEPT (mV)	1995	156	241	363	509	647	773	922	1050	1175	1328	1447	1582	1735	1857	2008	2120	Measured Value (mV)		
	SLOPE (mV/dB)	27	54	4	-9	2	5	-5	9	1	-9	9	-7	-8	10	-3	12	-10	Error (mV)		
			2.00	0.13	-0.34	0.06	0.17	-0.19	0.34	0.04	-0.33	0.33	-0.26	-0.28	0.36	-0.09	0.46	-0.39	LINEARITY ERROR (dB)		
0.684 GHz	INTERCEPT (mV)	1942	155	240	360	502	633	749	898	1024	1146	1294	1410	1541	1689	1809	1955	2064	Measured Value (mV)		
	SLOPE (mV/dB)	26.3	52	5	-7	4	4	-11	6	1	-8	9	-7	-7	10	-2	13	-10	Error (mV)		
			1.96	0.17	-0.26	0.16	0.21	-0.41	0.23	0.05	-0.30	0.33	-0.28	-0.26	0.37	-0.08	0.48	-0.37	LINEARITY ERROR (dB)		
0.83 GHz	INTERCEPT (mV)	1891	154	237	359	495	621	736	880	1001	1120	1262	1375	1503	1645	1761	1904	2009	Measured Value (mV)		
	SLOPE (mV/dB)	25.5	45	1	-4	5	3	-10	7	1	-7	8	-7	-6	8	-3	13	-10	Error (mV)		
			1.77	0.04	-0.17	0.19	0.12	-0.38	0.28	0.06	-0.29	0.30	-0.27	-0.25	0.33	-0.11	0.51	-0.38	LINEARITY ERROR (dB)		
0.976 GHz	INTERCEPT (mV)	1832	151	230	345	477	605	716	852	970	1085	1221	1332	1456	1594	1709	1844	1945	Measured Value (mV)		
	SLOPE (mV/dB)	24.7	46	1	-7	2	7	-6	7	1	-8	6	-7	-6	9	0	11	-11	Error (mV)		
			1.88	0.06	-0.28	0.09	0.27	-0.25	0.27	0.06	-0.30	0.23	-0.27	-0.24	0.36	0.01	0.45	-0.43	LINEARITY ERROR (dB)		
1.122 GHz	INTERCEPT (mV)	1770	146	220	333	462	581	694	815	934	1046	1178	1296	1423	1537	1651	1784	1892	Measured Value (mV)		
	SLOPE (mV/dB)	23.9	49	3	-3	6	6	-11	1	0	-7	6	-6	-8	6	0	14	-7	Error (mV)		
			2.04	0.12	-0.13	0.26	0.23	-0.45	0.05	0.00	-0.28	0.25	-0.24	-0.34	0.24	0.01	0.57	-0.30	LINEARITY ERROR (dB)		
1.268 GHz	INTERCEPT (mV)	1703	138	204	311	422	536	659	788	900	1006	1132	1239	1350	1478	1584	1711	1809	Measured Value (mV)		
	SLOPE (mV/dB)	23.2	55	6	-3	8	-9	-2	11	7	-3	8	-3	-6	6	-3	9	-10	Error (mV)		
			2.39	0.27	-0.13	-0.33	-0.41	-0.08	0.46	0.30	-0.12	0.34	-0.11	-0.24	0.26	0.13	0.36	-0.45	LINEARITY ERROR (dB)		
1.414 GHz	INTERCEPT (mV)	1653	129	185	283	401	538	637	757	868	969	1094	1202	1312	1438	1539	1656	1751	Measured Value (mV)		
	SLOPE (mV/dB)	22.6	57	0	-14	-9	14	1	7	5	-6	6	1	-2	10	-1	3	-15	Error (mV)		
			2.53	0.01	-0.64	-0.40	0.64	0.03	0.33	0.24	-0.27	0.27	0.02	-0.10	0.46	-0.04	0.12	-0.66	LINEARITY ERROR (dB)		
1.56 GHz	INTERCEPT (mV)	1604	121	167	265	388	506	607	726	842	940	1062	1166	1270	1394	1493	1603	1696	Measured Value (mV)		
	SLOPE (mV/dB)	22.1	63	-3	-14	-2	6	-4	5	11	-2	10	3	-3	11	-1	0	-18	Error (mV)		
			2.84	-0.11	-0.64	-0.08	0.25	-0.16	0.21	0.50	-0.09	0.46	0.15	-0.14	0.50	-0.04	-0.01	-0.81	LINEARITY ERROR (dB)		
1.706 GHz	INTERCEPT (mV)	1514	117	154	239	360	465	579	688	795	885	999	1095	1193	1312	1407	1517	1605	Measured Value (mV)		
	SLOPE (mV/dB)	20.9	64	-3	-23	-5	16	5	9	12	-3	7	-2	-8	7	-3	4	-13	Error (mV)		
			3.09	-0.15	-1.08	-0.25	0.75	0.23	0.45	0.56	-0.13	0.35	-0.08	-0.38	0.35	-0.14	0.17	-0.64	LINEARITY ERROR (dB)		
1.998 GHz	INTERCEPT (mV)	1409	114	144	219	329	445	537	641	738	822	927	1016	1108	1220	1308	1416	1495	Measured Value (mV)		
	SLOPE (mV/dB)	19.5	69	2	-21	-8	10	5	12	11	-2	5	-3	-8	5	-3	7	-12	Error (mV)		
			3.53	0.09	-1.06	-0.42	0.51	0.28	0.61	0.56	-0.12	0.28	-0.17	-0.42	0.30	-0.18	0.35	-0.60	LINEARITY ERROR (dB)		
Average Slope			24.2																		
Flatness + dB																					
Average Offset			198.3																		
			106	121	163	265	377	507	612	737	822	927	1016	1108	1220	1308	1416	1495			
			156	241	363	511	654	776	930	1067	1195	1353	1476	1614	1771	1899	2055	2172			



**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

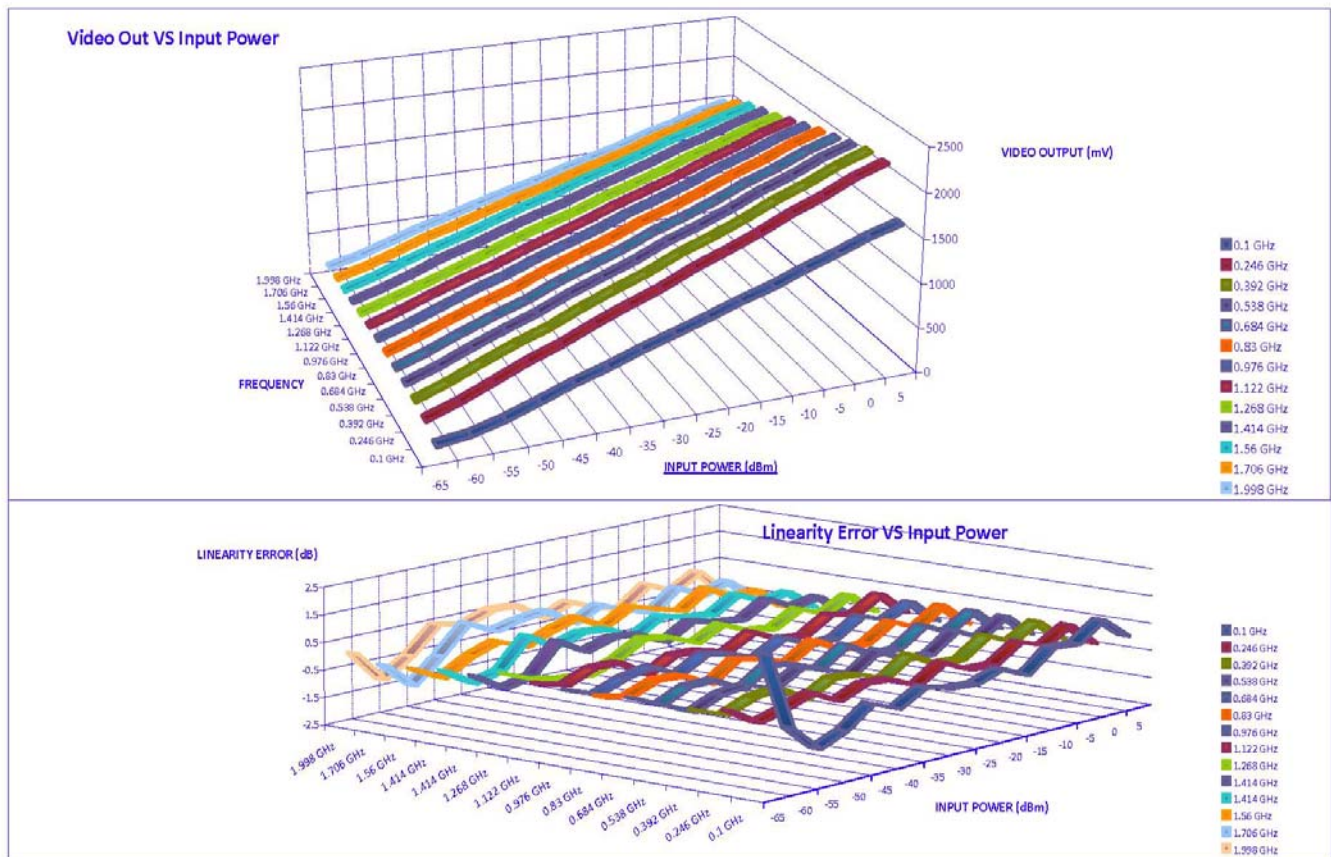
SDLVA-0120-70 OPTION: 100M20G, 10dBm (2D Graphs) @ 25°C





**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

SDLVA-0120-70 OPTION: 100M20G, 10dBm (3D Graphs) @ 25°C





TYPICAL CHARACTERISTICS ON SDLVA-0120-7- OPTION: 100M2G, 10dBm

SDLVA-0120-70 OPTION: 100M20G, 10dBm (Tabulated Data) @ 85°C

LOG TRANSFER VS FREQUENCY @ 85°C
MODEL: SDLVA-0120-70 OPTION: 100M2G, 10DBM
TESTED BY: RCombs
SERIAL No.: PL8690

Friday, August 23, 2013
3:58 PM



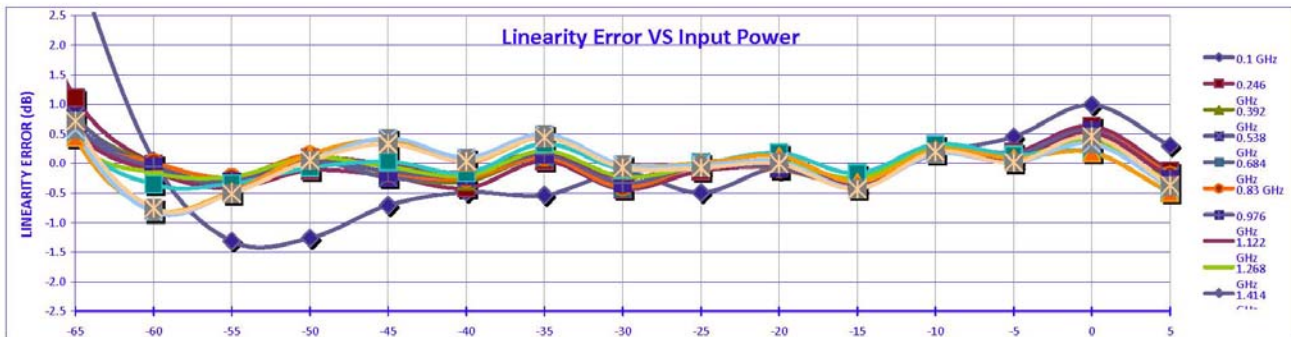
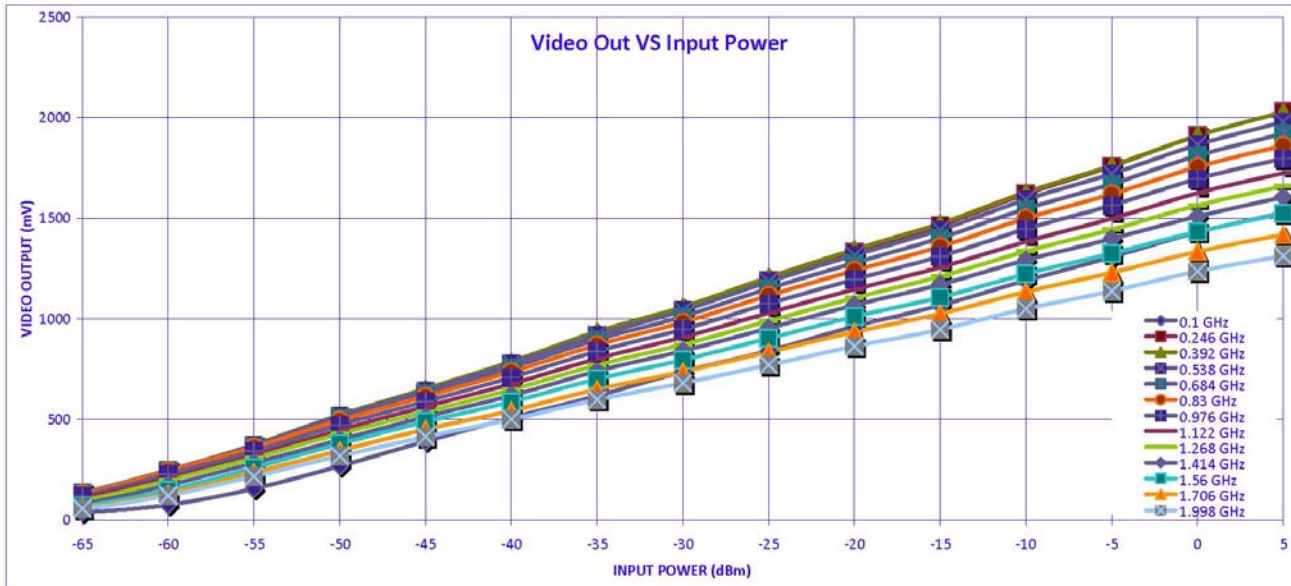
PLANAR MONOLITHICS INDUSTRIES
7311-F GROVE ROAD, FREDERICK, MD 21704 USA
TEL: 301-662-5019 FAX: 301-662-1731
URL: WWW.PMI-RF.COM
EMAIL: SALES@PMI-RF.COM

Frequency			EMAIL: SALES@PMI-RF.COM																		
			RF Input Power (dBm)																		
			-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5			
0.1 GHz	INTERCEPT (mV)	1409	26	38	74	155	267	391	507	617	737	841	962	1067	1190	1307	1431	1527	Measured Value (mV)		
	SLOPE (mV/dB)	22.3	176	77	1	-29	-28	-16	-11	-12	-4	-11	-2	-8	4	10	22	7	Error (mV)		
			7.90	3.46	0.05	-1.31	-1.26	-0.71	-0.49	-0.54	-0.16	-0.50	-0.07	-0.35	0.16	0.45	0.99	0.30	LINEARITY ERROR (dB)		
0.246 GHz	INTERCEPT (mV)	1892	50	106	215	344	491	628	762	915	1041	1190	1331	1464	1621	1758	1910	2028	Measured Value (mV)		
	SLOPE (mV/dB)	27.9	115	31	0	-11	-3	-6	-12	1	-12	-4	-2	-9	8	5	18	-4	Error (mV)		
			4.10	1.11	-0.01	-0.40	-0.12	-0.21	-0.42	0.04	-0.44	-0.13	-0.07	-0.32	0.29	0.19	0.63	-0.13	LINEARITY ERROR (dB)		
0.392 GHz	INTERCEPT (mV)	1895	61	130	245	373	521	651	787	935	1059	1207	1344	1474	1628	1761	1910	2027	Measured Value (mV)		
	SLOPE (mV/dB)	27.5	91	22	0	-10	-1	-6	-8	3	-11	-1	-1	-9	8	4	15	-5	Error (mV)		
			3.29	0.81	-0.01	-0.36	0.03	-0.23	-0.31	0.10	-0.42	-0.04	-0.05	-0.32	0.31	0.13	0.54	-0.19	LINEARITY ERROR (dB)		
0.538 GHz	INTERCEPT (mV)	1851	65	136	246	371	517	643	776	921	1040	1184	1316	1442	1593	1720	1885	1979	Measured Value (mV)		
	SLOPE (mV/dB)	26.7	84	21	-2	-11	-1	-6	-7	4	-10	1	-1	-9	8	3	14	-6	Error (mV)		
			3.13	0.80	-0.08	-0.40	0.03	-0.24	-0.25	0.16	-0.37	0.02	-0.05	-0.33	0.31	0.09	0.53	-0.23	LINEARITY ERROR (dB)		
0.684 GHz	INTERCEPT (mV)	1797	65	136	247	368	508	631	758	896	1011	1151	1278	1401	1546	1670	1811	1920	Measured Value (mV)		
	SLOPE (mV/dB)	25.8	75	17	-1	-9	3	-4	-6	3	-11	0	-2	-9	8	2	14	-5	Error (mV)		
			2.91	0.66	-0.03	-0.35	0.10	-0.15	-0.22	0.11	-0.41	-0.01	-0.09	-0.34	0.30	0.10	0.55	-0.21	LINEARITY ERROR (dB)		
0.83 GHz	INTERCEPT (mV)	1741	62	131	243	362	496	613	736	870	982	1116	1239	1358	1498	1619	1755	1881	Measured Value (mV)		
	SLOPE (mV/dB)	25	69	13	0	-6	4	-4	-6	3	-10	-1	-3	-8	7	3	14	-5	Error (mV)		
			2.77	0.53	0.01	-0.24	0.14	-0.16	-0.26	0.11	-0.40	-0.04	-0.10	-0.33	0.29	0.10	0.55	-0.21	LINEARITY ERROR (dB)		
0.976 GHz	INTERCEPT (mV)	1682	58	122	227	342	472	588	708	838	947	1075	1195	1310	1446	1564	1695	1797	Measured Value (mV)		
	SLOPE (mV/dB)	24.2	72	15	-1	-7	-1	3	-5	4	-8	-1	-2	-8	6	3	13	-6	Error (mV)		
			2.99	0.61	-0.06	-0.31	0.06	-0.14	-0.21	0.15	-0.33	-0.05	-0.09	-0.34	0.24	0.14	0.55	-0.26	LINEARITY ERROR (dB)		
1.122 GHz	INTERCEPT (mV)	1613	53	111	211	321	448	563	677	801	908	1039	1146	1255	1384	1497	1624	1724	Measured Value (mV)		
	SLOPE (mV/dB)	23.3	72	14	-3	-10	-1	0	-4	4	-6	0	-1	-8	4	1	12	-6	Error (mV)		
			3.11	0.58	-0.14	-0.42	0.06	-0.01	-0.15	0.19	-0.25	-0.01	-0.03	-0.33	0.18	0.05	0.51	-0.24	LINEARITY ERROR (dB)		
1.268 GHz	INTERCEPT (mV)	1554	47	97	197	308	428	537	647	769	872	989	1104	1210	1335	1444	1563	1680	Measured Value (mV)		
	SLOPE (mV/dB)	22.6	72	10	-4	-5	2	-1	-5	5	-5	-1	1	-6	6	2	8	-7	Error (mV)		
			3.19	0.43	-0.16	-0.23	0.10	-0.06	-0.22	0.21	-0.23	-0.05	0.03	-0.25	0.27	0.10	0.37	-0.31	LINEARITY ERROR (dB)		
1.414 GHz	INTERCEPT (mV)	1505	40	81	173	283	399	512	618	740	840	953	1067	1170	1291	1398	1509	1604	Measured Value (mV)		
	SLOPE (mV/dB)	22.1	81	11	-8	-9	-2	1	-4	7	-2	0	-4	-4	-7	3	4	-11	Error (mV)		
			3.65	0.51	-0.36	-0.34	-0.08	0.03	-0.16	0.33	-0.10	0.00	0.18	-0.17	0.32	0.14	0.20	-0.50	LINEARITY ERROR (dB)		
1.56 GHz	INTERCEPT (mV)	1428	36	68	148	260	378	489	596	706	796	902	1010	1106	1223	1325	1432	1523	Measured Value (mV)		
	SLOPE (mV/dB)	21.1	82	9	-16	-10	3	8	0	9	0	0	3	-7	5	2	4	-10	Error (mV)		
			3.89	0.44	-0.77	-0.48	0.15	0.39	0.02	0.44	-0.02	0.01	0.12	-0.32	0.23	0.09	0.19	-0.49	LINEARITY ERROR (dB)		
1.706 GHz	INTERCEPT (mV)	1327	33	61	132	236	345	451	543	649	737	835	935	1024	1134	1229	1334	1418	Measured Value (mV)		
	SLOPE (mV/dB)	19.7	82	11	-16	-10	-1	8	2	10	0	0	1	-5	3	0	7	-8	Error (mV)		
			4.16	0.57	-0.82	-0.51	0.06	0.43	0.10	0.50	-0.02	-0.02	0.03	-0.42	0.16	0.02	0.33	-0.40	LINEARITY ERROR (dB)		
1.998 GHz	INTERCEPT (mV)	1228	32	57	121	216	318	414	500	598	680	771	863	947	1049	1137	1236	1312	Measured Value (mV)		
	SLOPE (mV/dB)	18.2	79	13	14	-9	-1	6	1	8	-1	-1	0	-2	4	0	9	-7	Error (mV)		
			4.36	0.72	-0.76	-0.51	0.05	0.33	0.03	0.44	-0.07	-0.08	-0.01	-0.44	0.19	0.02	0.45	-0.37	LINEARITY ERROR (dB)		
Average Slope			23.6																		
Flatness ± dB																					
Average Offset			98.04																		
			26	38	74	155	267	391	500	598	680	771	863	947	1049	1137	1236	1312			
			65	136	247	373	521	651	787	935	1059	1207	1344	1474	1628	1761	1910	2028			



**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

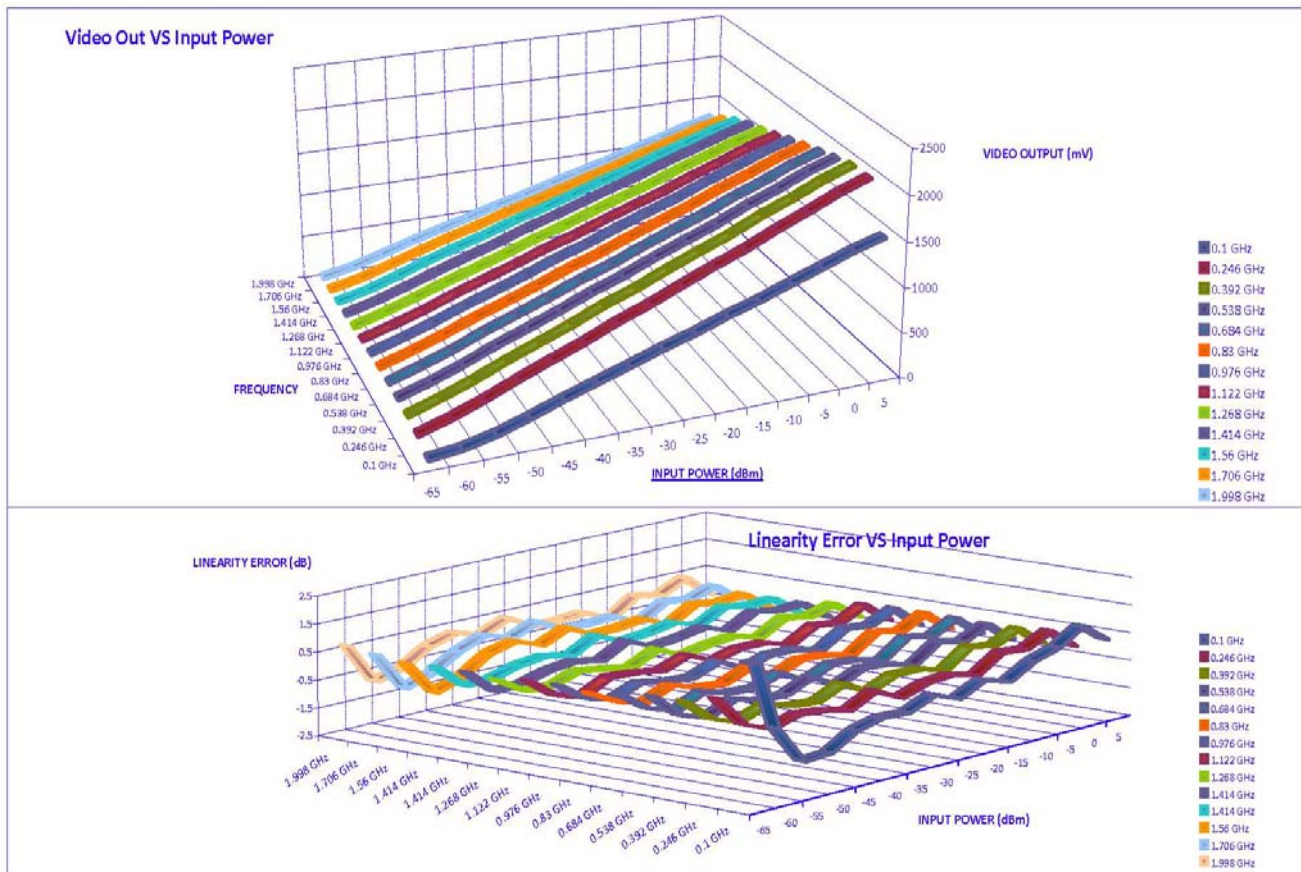
SDLVA-0120-70 OPTION: 100M20G, 10dBm (2D Graphs) @ 85°C





**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

SDLVA-0120-70 OPTION: 100M20G, 10dBm (3D Graphs) @ 85°C





TYPICAL CHARACTERISTICS ON SDLVA-0120-7- OPTION: 100M2G, 10dBm

SDLVA-0120-70 OPTION: 100M20G, 10dBm (Tabulated Data) @ -55°C

LOG TRANSFER VS FREQUENCY @ -55 °C
MODEL: SDLVA-0120-70 OPTION : 100M2G, 10DBM
TESTED BY: RCombs
SERIAL No. : PL8690

Friday, August 23, 2013
4:00 PM



PLANAR MONOLITHICS INDUSTRIES
7311-F GROVE ROAD, FREDERICK, MD 21704 USA
TEL: 301-662-5019 FAX: 301-662-1731
URL: WWW.PMI-RF.COM
EMAIL: SALES@PMI-RF.COM

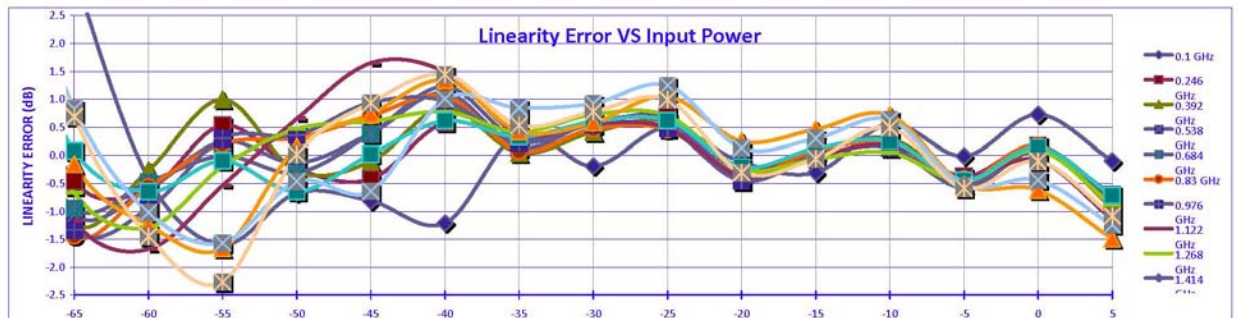
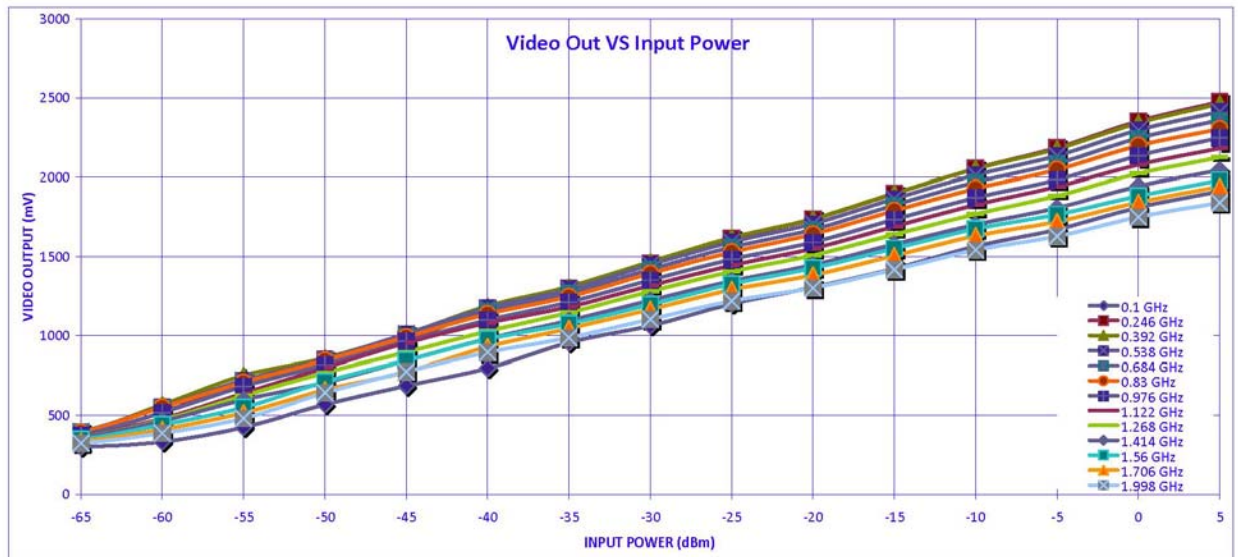
Frequency

		-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
0.1 GHz	INTERCEPT (mV)	290	299	331	424	567	684	796	956	1062	1200	1306	1422	1564	1671	1810	1911	Measured Value (mV)
	SLOPE (mV/dB)	190	79	-10	-39	-16	-20	-29	10	-5	12	-3	-7	14	0	18	-2	Error (mV)
		7.87	3.26	-0.42	-1.60	-0.67	-0.81	-1.21	0.40	-0.19	0.50	-0.12	-0.31	0.56	-0.01	0.73	-0.10	LINEARITY ERROR (dB)
0.246 GHz	INTERCEPT (mV)	314	371	518	703	831	976	1157	1299	1458	1613	1735	1896	2053	2185	2352	2474	Measured Value (mV)
	SLOPE (mV/dB)	90	-14	-18	16	-7	-13	18	9	17	21	-8	2	8	-11	5	-24	Error (mV)
		2.64	-0.46	-0.60	0.53	-0.24	-0.42	0.58	0.29	0.55	0.70	-0.26	0.06	0.27	-0.37	0.17	-0.80	LINEARITY ERROR (dB)
0.392 GHz	INTERCEPT (mV)	320	390	566	750	859	1011	1187	1309	1467	1619	1738	1898	2052	2177	2341	2462	Measured Value (mV)
	SLOPE (mV/dB)	40	-36	-8	29	-8	-3	25	1	12	17	-11	2	9	-12	5	-22	Error (mV)
		1.36	-1.24	-0.26	0.99	-0.29	-0.11	0.86	0.04	0.41	0.59	-0.36	0.07	0.30	-0.42	0.16	-0.73	LINEARITY ERROR (dB)
0.538 GHz	INTERCEPT (mV)	322	395	552	720	853	1011	1176	1292	1449	1593	1708	1865	2014	2135	2296	2412	Measured Value (mV)
	SLOPE (mV/dB)	40	-31	-17	7	-4	11	32	4	17	18	-11	2	8	-15	3	-25	Error (mV)
		1.40	-1.06	-0.59	0.24	-0.13	0.39	1.12	0.14	0.59	0.62	-0.38	0.08	0.27	-0.51	0.11	-0.86	LINEARITY ERROR (dB)
0.684 GHz	INTERCEPT (mV)	321	396	549	702	834	993	1157	1270	1419	1558	1671	1824	1969	2086	2244	2356	Measured Value (mV)
	SLOPE (mV/dB)	38	-26	-13	0	-9	11	34	8	17	17	-11	2	7	-15	3	-24	Error (mV)
		1.37	-0.95	-0.48	-0.01	-0.31	0.38	1.23	0.28	0.60	0.59	-0.39	0.09	0.25	-0.54	0.11	-0.85	LINEARITY ERROR (dB)
0.83 GHz	INTERCEPT (mV)	317	390	550	707	845	991	1137	1246	1392	1527	1641	1789	1928	2046	2198	2300	Measured Value (mV)
	SLOPE (mV/dB)	23	-39	-15	6	8	19	29	2	13	12	-10	2	6	-11	5	-26	Error (mV)
		0.86	-1.44	-0.57	0.21	0.31	0.70	1.06	0.08	0.47	0.45	-0.37	0.09	0.21	-0.42	0.17	-0.95	LINEARITY ERROR (dB)
0.976 GHz	INTERCEPT (mV)	312	374	517	683	817	964	1098	1211	1351	1482	1590	1734	1871	1984	2134	2246	Measured Value (mV)
	SLOPE (mV/dB)	34	-35	-25	8	10	25	26	6	14	13	-12	-1	4	-15	2	-18	Error (mV)
		1.29	-1.34	-0.95	0.30	0.36	0.94	0.97	0.23	0.54	0.47	-0.45	-0.02	0.14	-0.58	0.09	-0.69	LINEARITY ERROR (dB)
1.122 GHz	INTERCEPT (mV)	309	362	478	638	798	954	1080	1181	1316	1444	1551	1690	1825	1941	2078	2180	Measured Value (mV)
	SLOPE (mV/dB)	47	-30	-44	-14	17	43	39	10	15	13	-10	-1	5	-10	-2	-30	Error (mV)
		1.80	-1.17	-1.68	-0.54	0.65	1.65	1.49	0.38	0.57	0.48	-0.38	-0.02	0.18	-0.38	-0.09	-1.15	LINEARITY ERROR (dB)
1.268 GHz	INTERCEPT (mV)	309	369	470	624	767	897	1028	1145	1279	1405	1508	1639	1768	1882	2022	2124	Measured Value (mV)
	SLOPE (mV/dB)	60	-17	-32	-5	12	15	20	10	18	18	-6	-2	1	-12	2	-22	Error (mV)
		2.35	-0.67	-1.28	-0.20	0.47	0.60	0.77	0.41	0.73	0.71	-0.25	-0.06	0.05	-0.46	0.09	-0.89	LINEARITY ERROR (dB)
1.414 GHz	INTERCEPT (mV)	310	358	462	597	706	843	980	1095	1223	1345	1447	1577	1702	1807	1943	2044	Measured Value (mV)
	SLOPE (mV/dB)	76	2	-16	-2	-16	0	15	8	15	15	-5	3	6	-11	3	-18	Error (mV)
		3.11	0.08	-0.65	-0.10	-0.65	0.01	0.61	0.32	0.60	0.62	-0.20	0.12	0.25	-0.44	0.14	-0.72	LINEARITY ERROR (dB)
1.56 GHz	INTERCEPT (mV)	307	347	440	549	711	844	977	1074	1196	1327	1426	1550	1675	1765	1881	1979	Measured Value (mV)
	SLOPE (mV/dB)	75	-4	-30	-40	4	17	32	10	14	25	6	11	17	-12	-15	-36	Error (mV)
		3.17	-0.16	-1.25	-1.67	0.15	0.74	1.34	0.43	0.58	1.05	0.25	0.46	0.71	-0.52	-0.62	-1.49	LINEARITY ERROR (dB)
1.706 GHz	INTERCEPT (mV)	302	335	409	514	659	773	930	1044	1164	1290	1382	1504	1630	1721	1841	1940	Measured Value (mV)
	SLOPE (mV/dB)	105	20	-24	-37	-11	-15	24	20	22	29	3	7	15	-13	-10	-29	Error (mV)
		4.45	0.83	-1.02	-1.57	-0.46	-0.64	1.01	0.84	0.92	1.25	0.13	0.30	0.63	-0.53	-0.44	-1.24	LINEARITY ERROR (dB)
1.998 GHz	INTERCEPT (mV)	298	324	387	480	642	773	896	987	1103	1219	1301	1418	1541	1628	1750	1839	Measured Value (mV)
	SLOPE (mV/dB)	101	15	-32	-50	0	21	32	12	17	22	-7	-1	11	-13	-2	-24	Error (mV)
		4.55	0.68	-1.45	-2.27	0.01	0.93	1.44	0.53	0.78	0.99	-0.31	-0.06	0.49	-0.59	-0.10	-1.09	LINEARITY ERROR (dB)
Average Slope		26.1																
Flatness ± dB		0.6																
Average Offset		361.6																
		290	299	331	424	567	684	796	956	1062	1200	1301	1418	1541	1628	1750	1839	
		322	396	566	790	859	1011	1187	1309	1467	1619	1738	1898	2053	2185	2352	2474	



**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

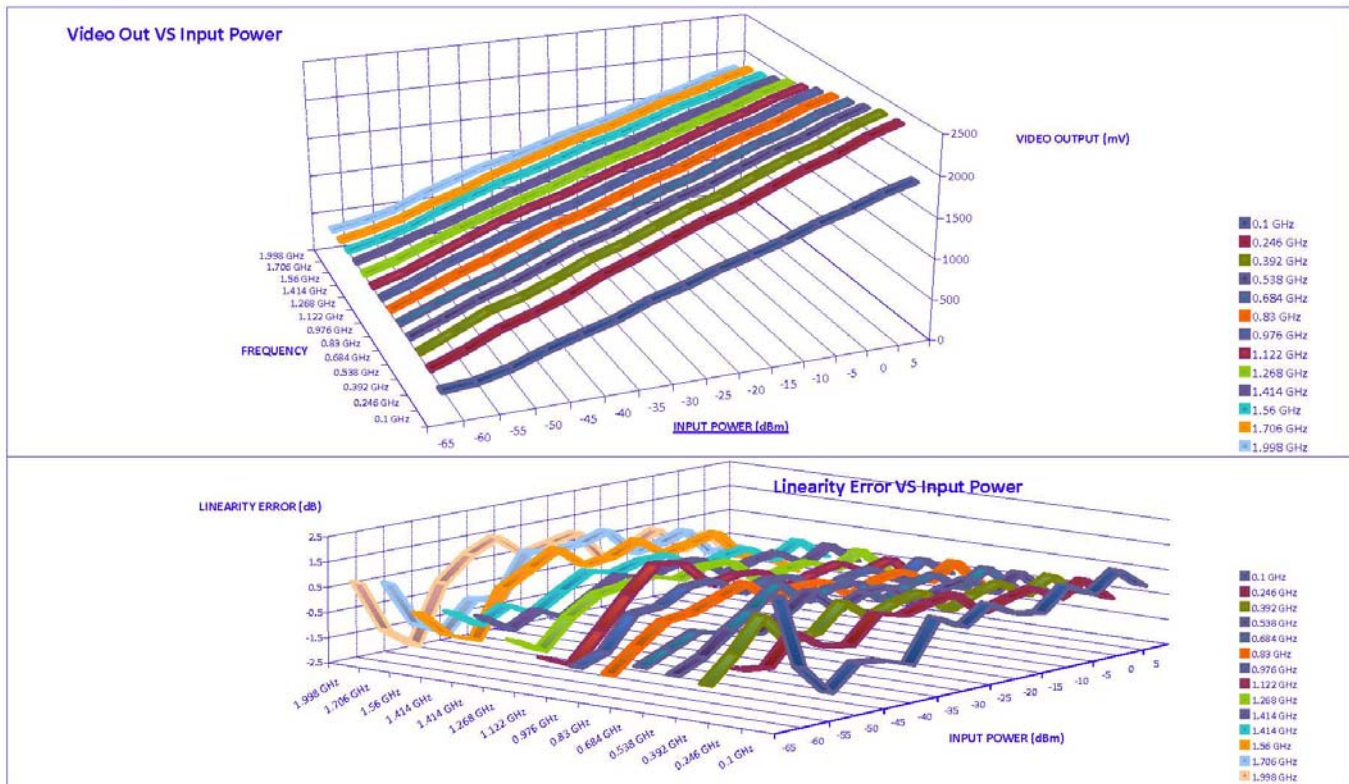
SDLVA-0120-70 OPTION: 100M20G, 10dBm (2D Graphs) @ -55°C





**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

SDLVA-0120-70 OPTION: 100M20G, 10dBm (3D Graphs) @ 85°C

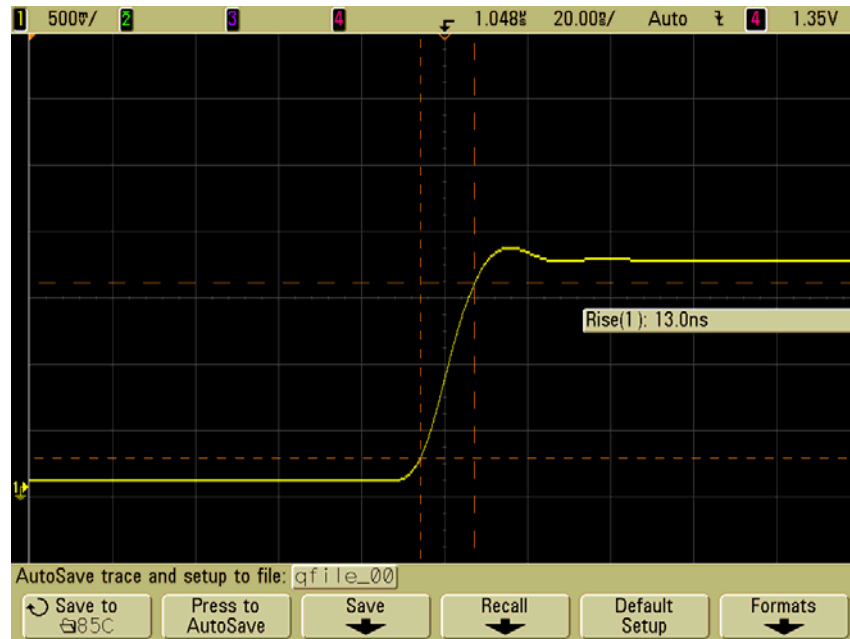




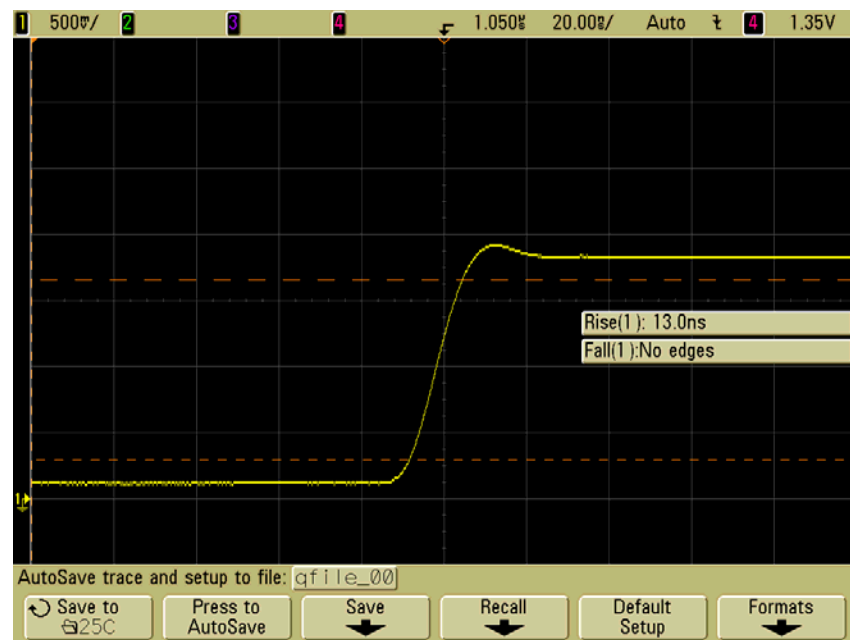
**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

RISE TIME PLOTS

Rise Time (10%Video to 90%Video), 1GHz +5dBm RF Input @ 25°C



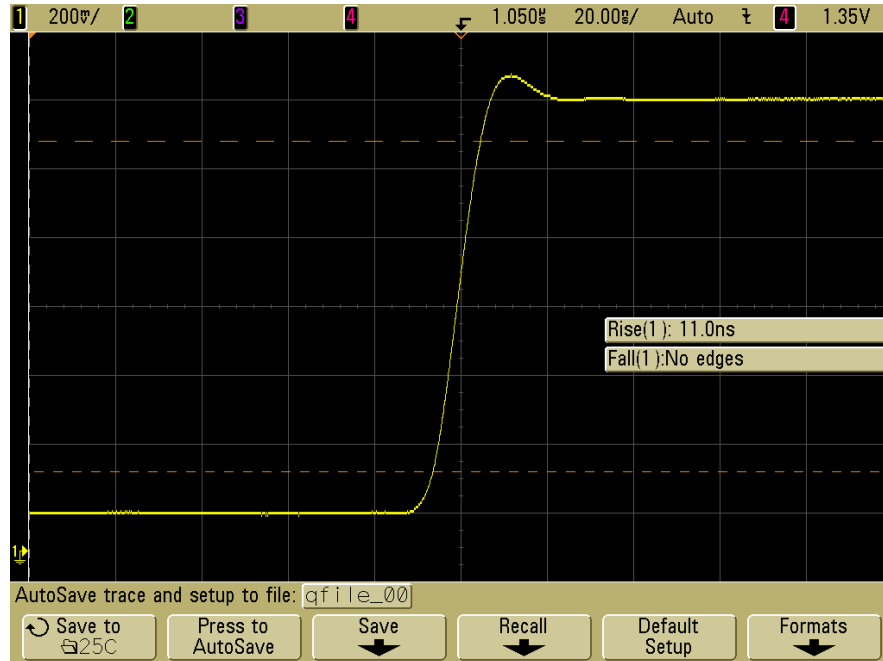
Rise Time (10%Video to 90%Video), 1GHz 0dBm RF Input @ 25°C



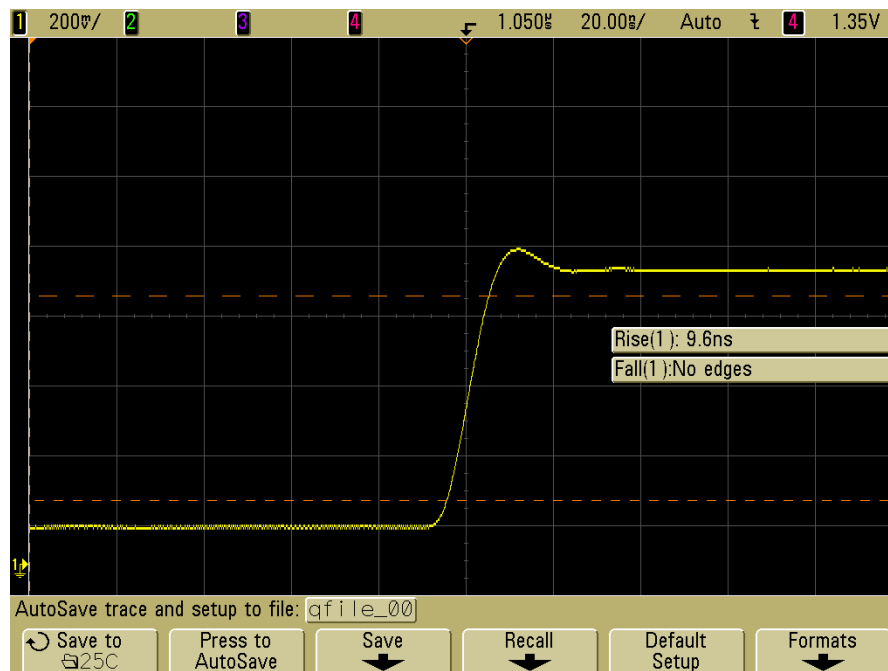


**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

Rise Time (10%Video to 90%Video), 1GHz -20dBm RF Input @ 25°C



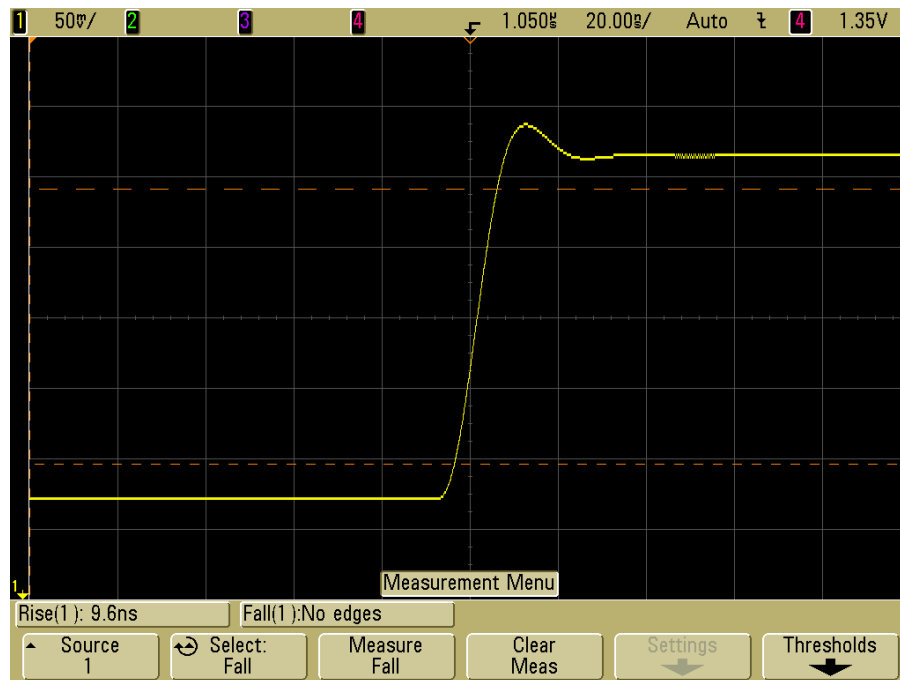
Rise Time (10%Video to 90%Video), 1GHz -40dBm RF Input @ 25°C





**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

Rise Time (10%Video to 90%Video), 1GHz -60dBm RF Input @ 25°C

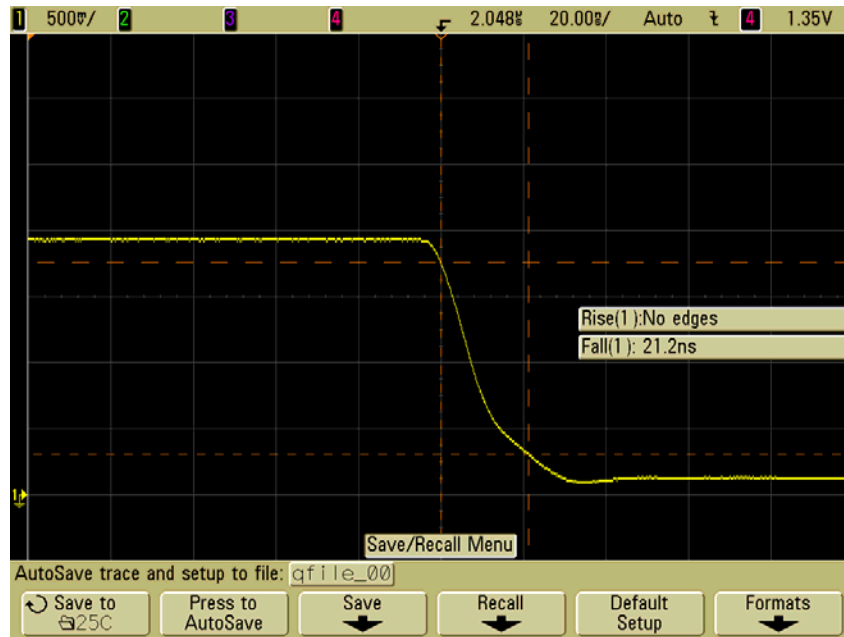




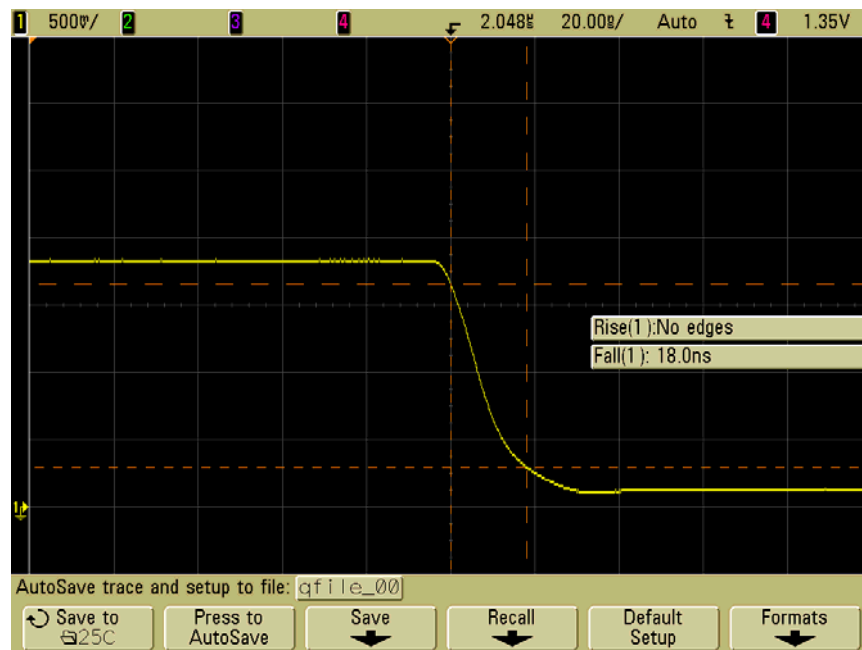
**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

FALL TIME PLOTS

Fall Time (90%Video to 10%Video), 1GHz +5dBm RF Input @ 25°C



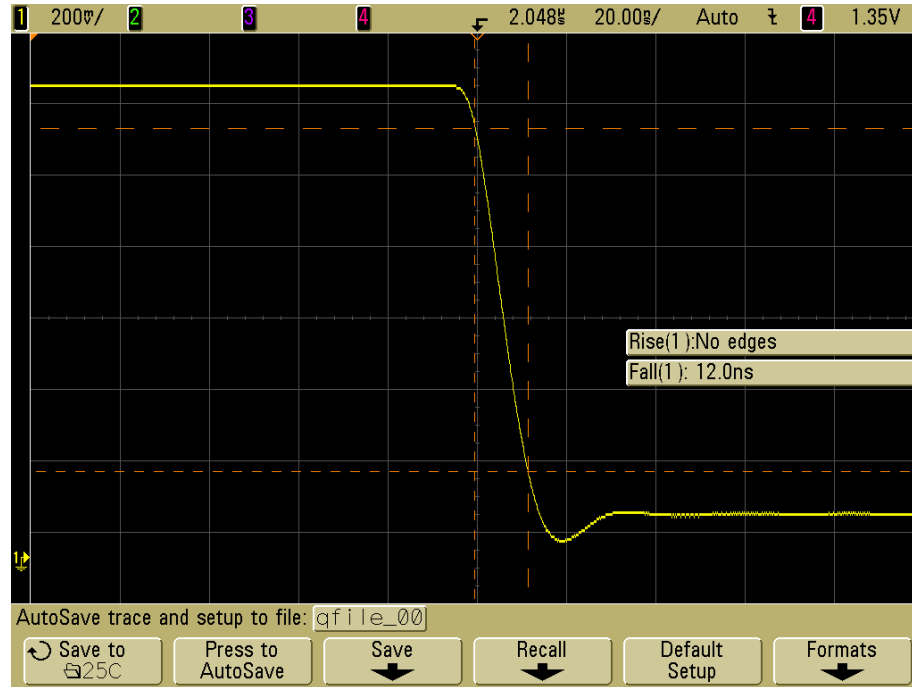
Fall Time (90%Video to 10%Video), 1GHz 0dBm RF Input @ 25°C



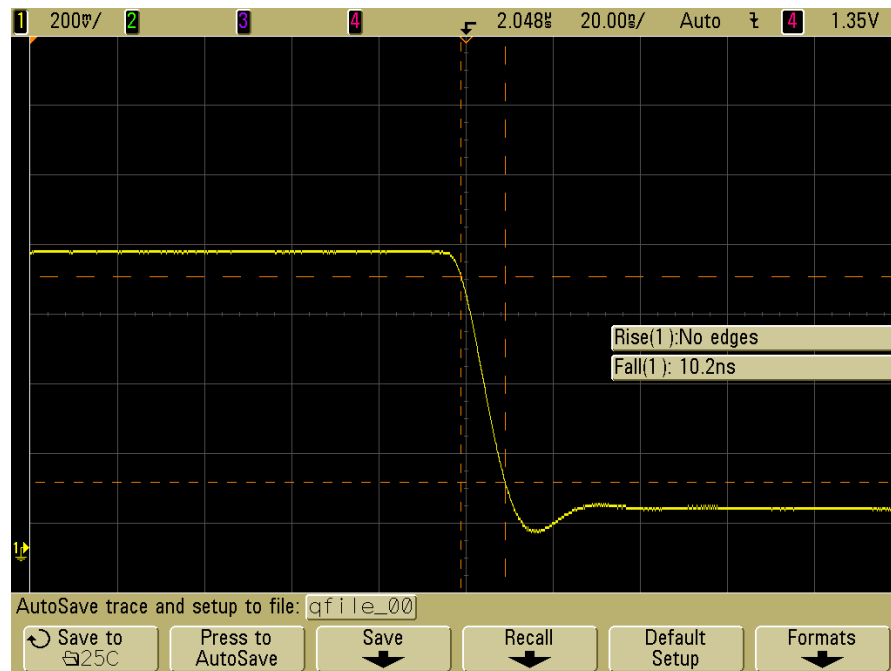


**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

Fall Time (90%Video to 10%Video), 1GHz -20dBm RF Input @ 25°C



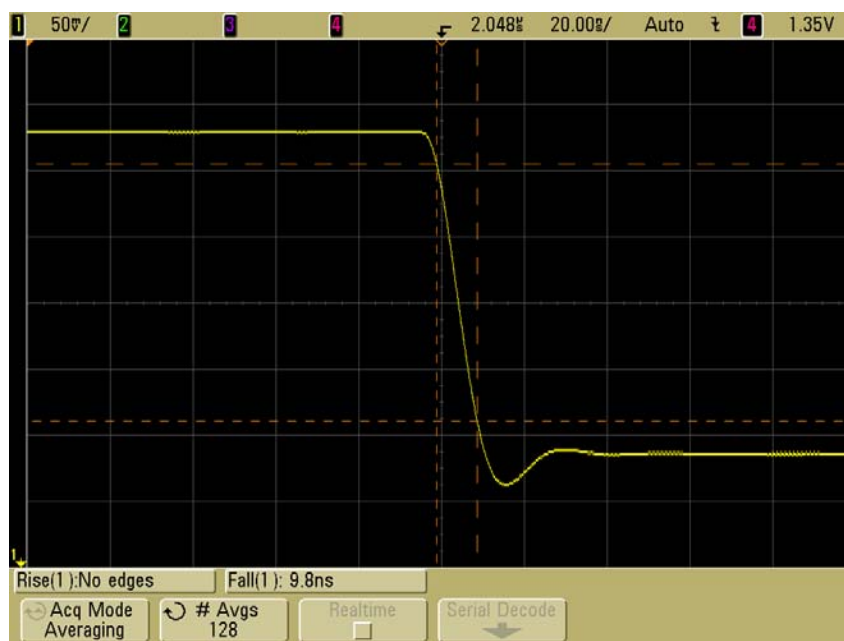
Fall Time (90%Video to 10%Video), 1GHz -40dBm RF Input @ 25°C





**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

Fall Time (90%Video to 10%Video), 1GHz -60dBm RF Input @ 25°C

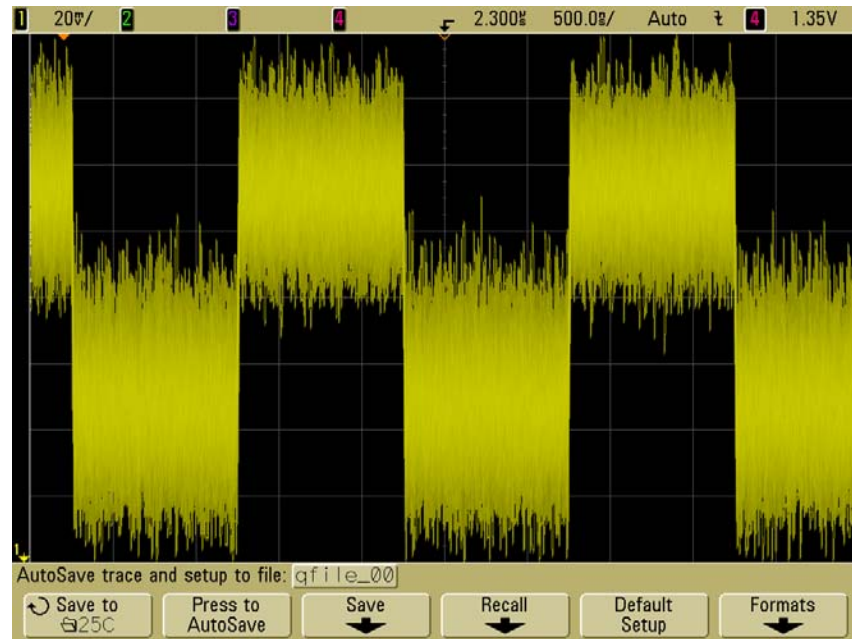




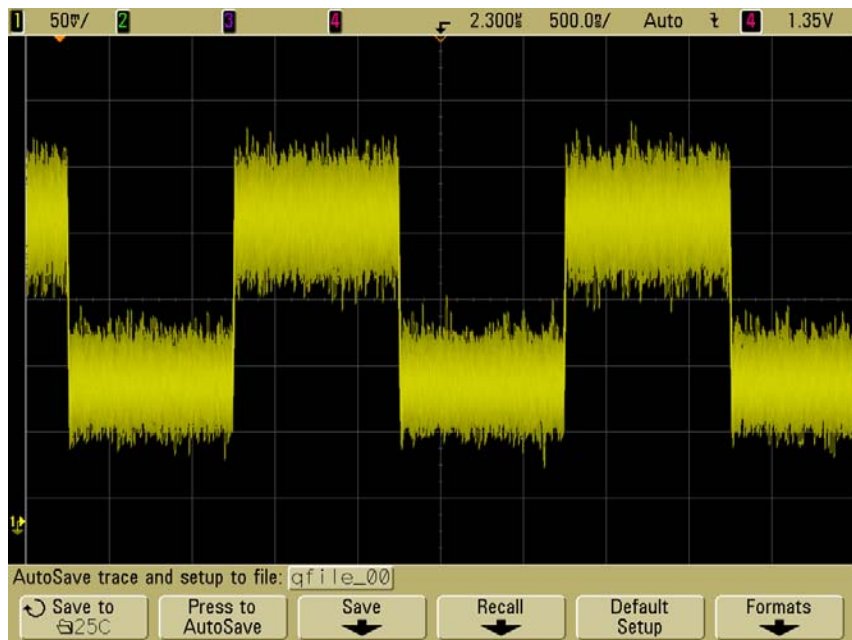
**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

Tangential Signal Sensitivity (TSS) PLOTS

TSS, 100mHz, -60dBm @ 25°C



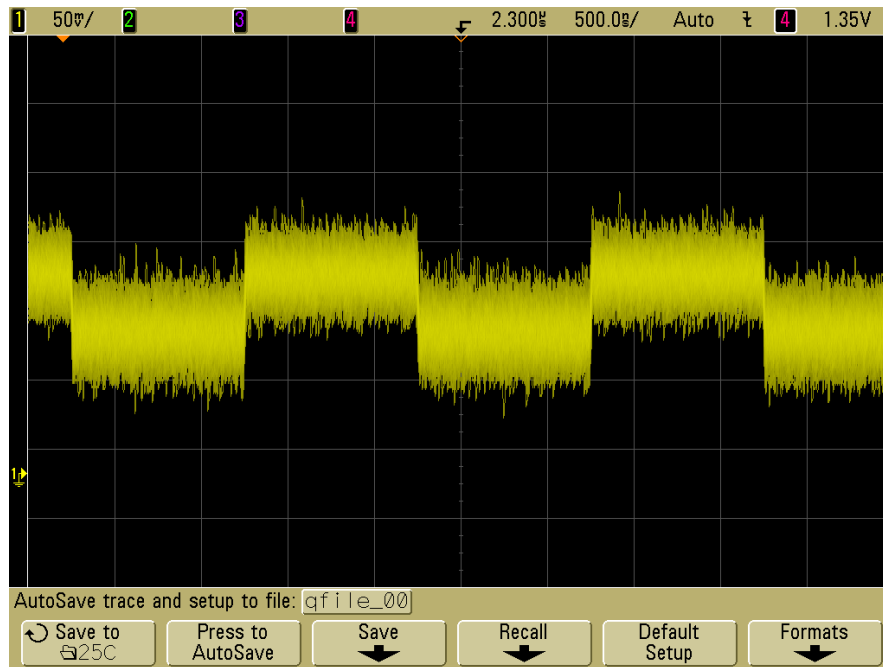
TSS, 1.050GHz, -65dBm @ 25°C





**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

TSS, 2.0GHz, -65dBm @ 25°C

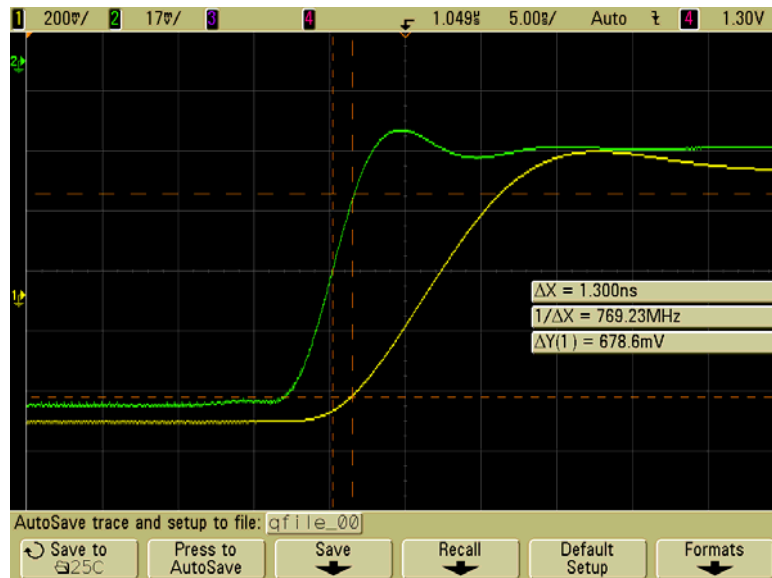




**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

PROPAGATION DELAY PLOTS

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



Delay Time Off (50%RF to 90%Video), 1GHz @ 25°C



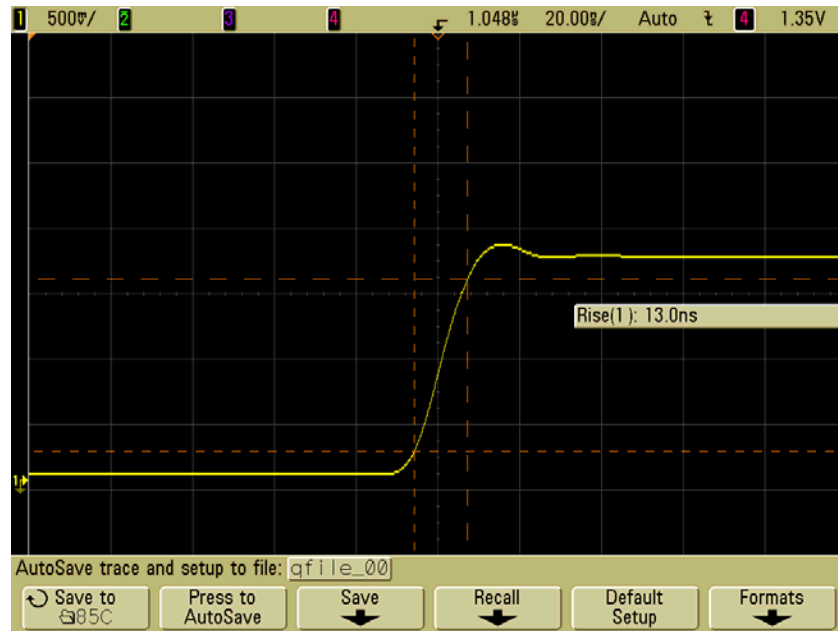
Green Trace: TTL Signal
Yellow Trace: VIDEO Signal



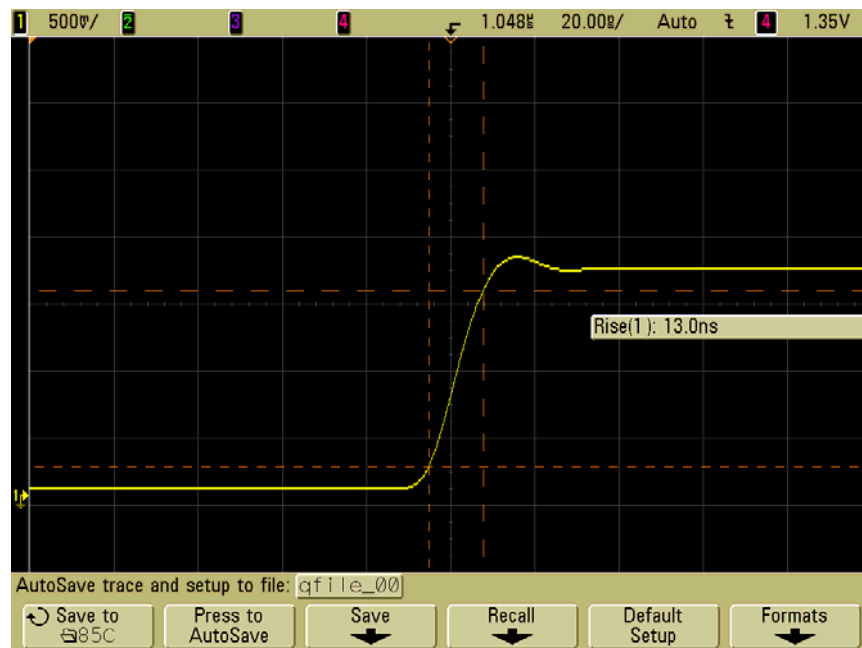
**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

RISE TIME PLOTS

Rise Time (10%Video to 90%Video), 1GHz +5dBm RF Input @ 85°C



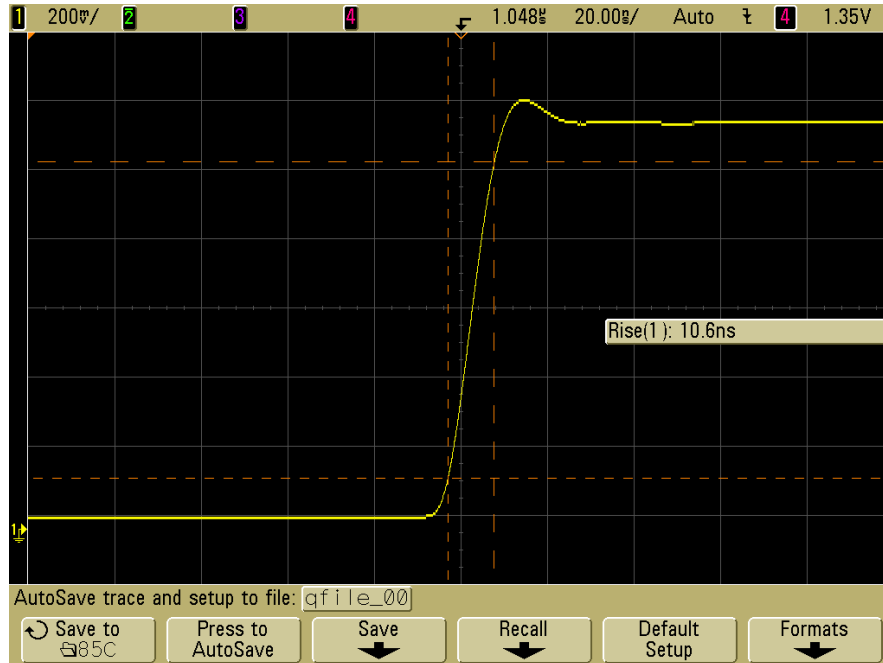
Rise Time (10%Video to 90%Video), 1GHz 0dBm RF Input @ 85°C



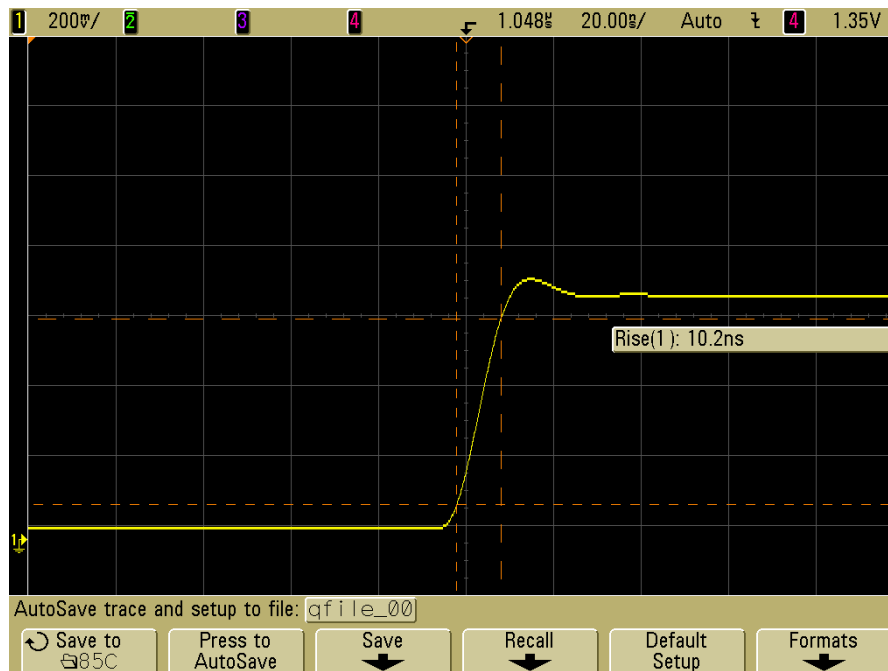


**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

Rise Time (10%Video to 90%Video), 1GHz -20dBm RF Input @ 85°C



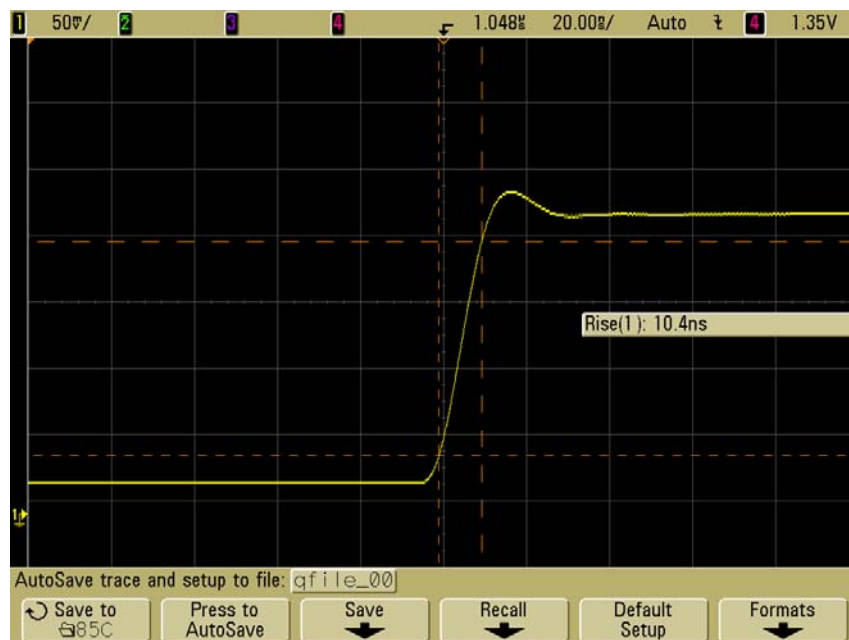
Rise Time (10%Video to 90%Video), 1GHz -40dBm RF Input @ 85°C





**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

Rise Time (10%Video to 90%Video), 1GHz -60dBm RF Input @ 85°C

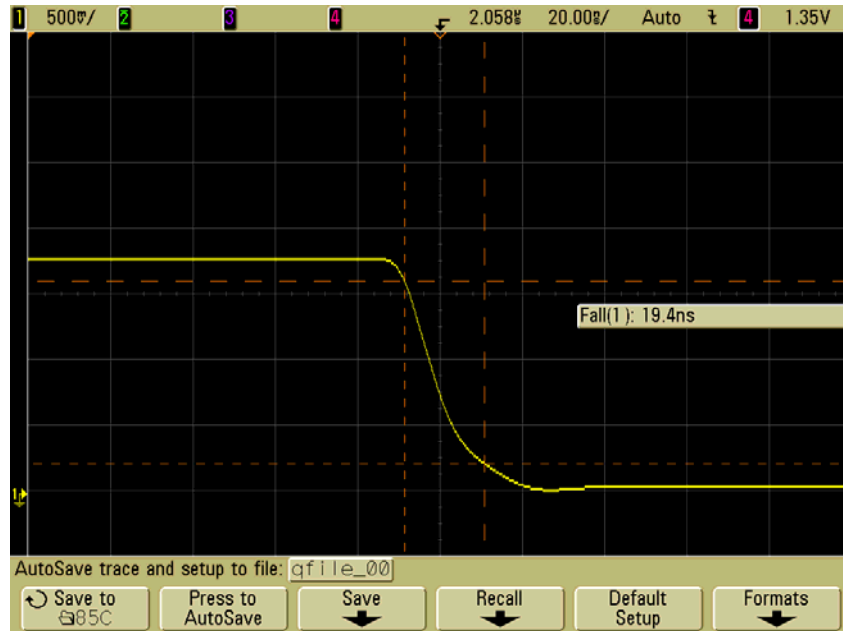




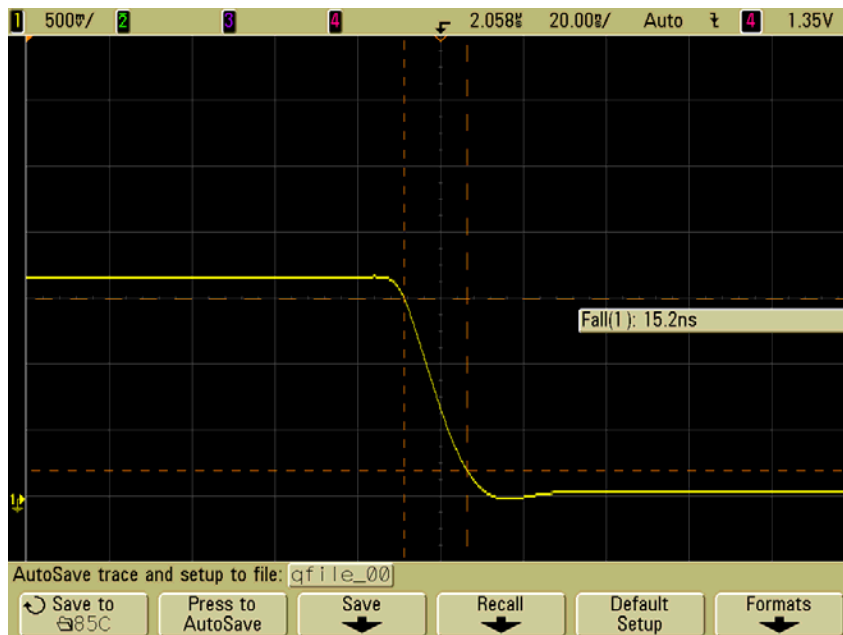
**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

FALL TIME PLOTS

Fall Time (90%Video to 10%Video), 1GHz +5dBm RF Input @ 85°C



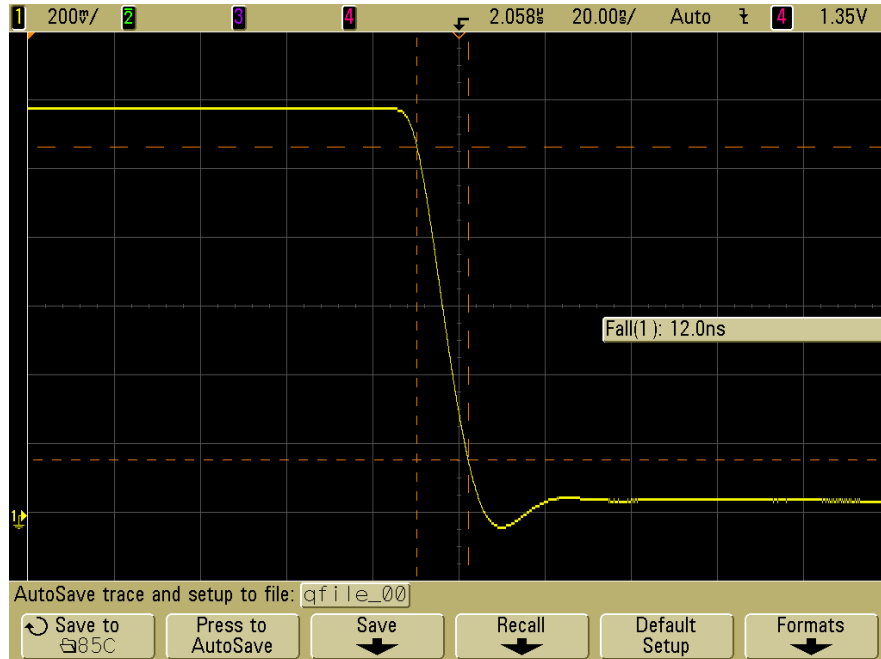
Fall Time (90%Video to 10%Video), 1GHz 0dBm RF Input @ 85°C



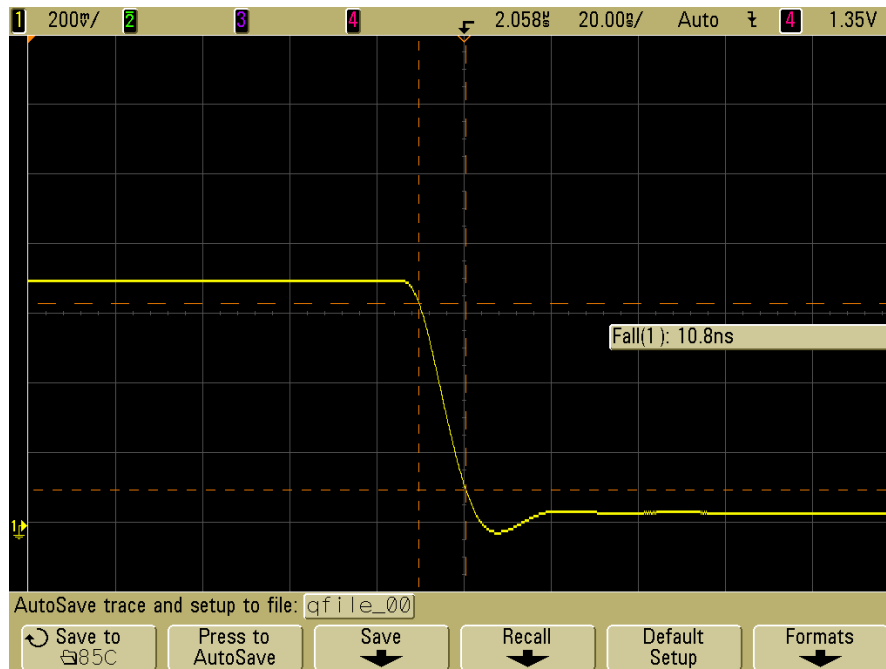


**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

Fall Time (90%Video to 10%Video), 1GHz -20dBm RF Input @ 85°C



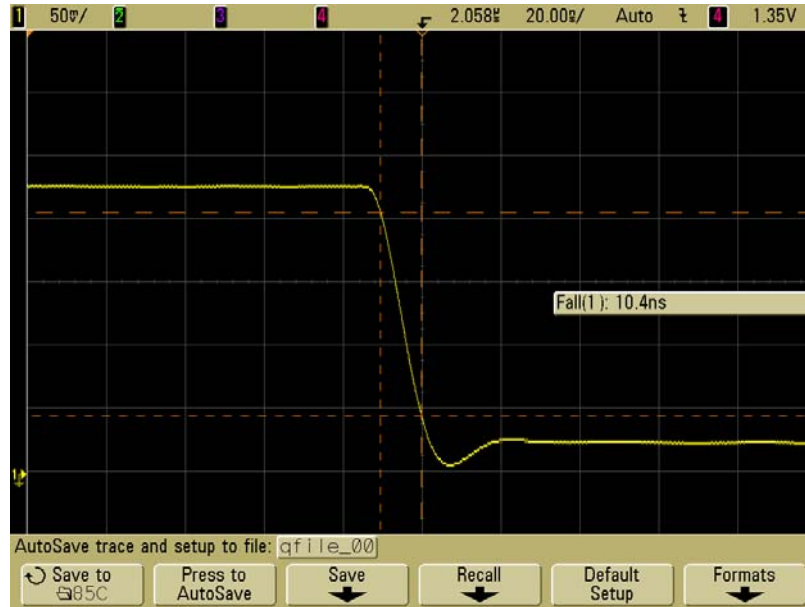
Fall Time (90%Video to 10%Video), 1GHz -40dBm RF Input @ 85°C





**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

Fall Time (90%Video to 10%Video), 1GHz -60dBm RF Input @ 85°C

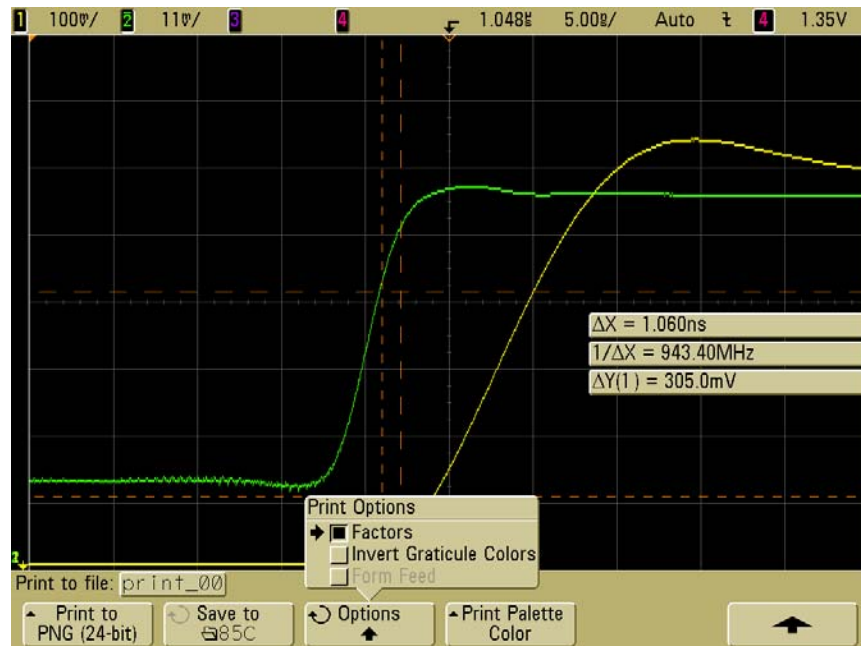




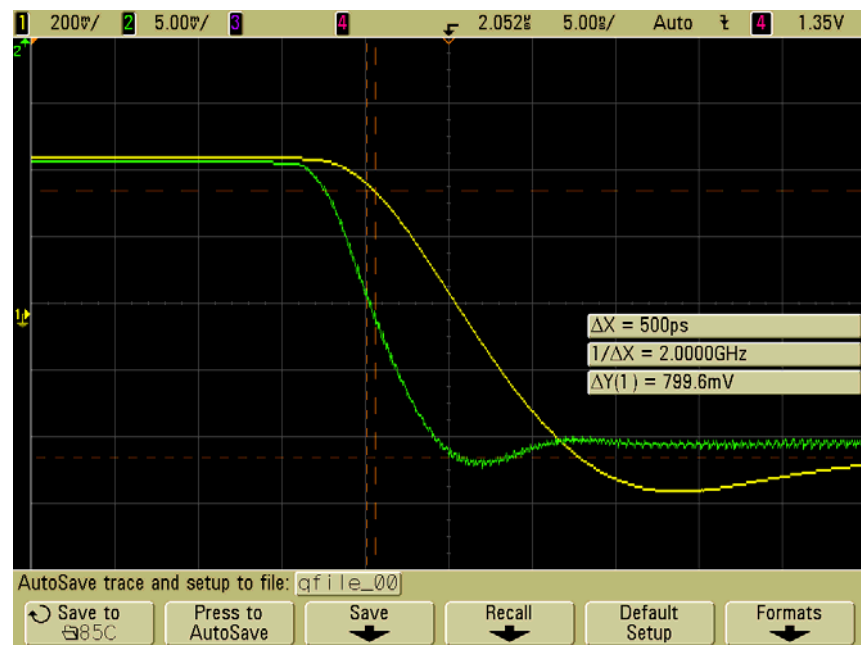
**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

PROPAGATION DELAY PLOTS

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



Delay Time Off (50%RF to 90%Video), 1GHz @ 85°C

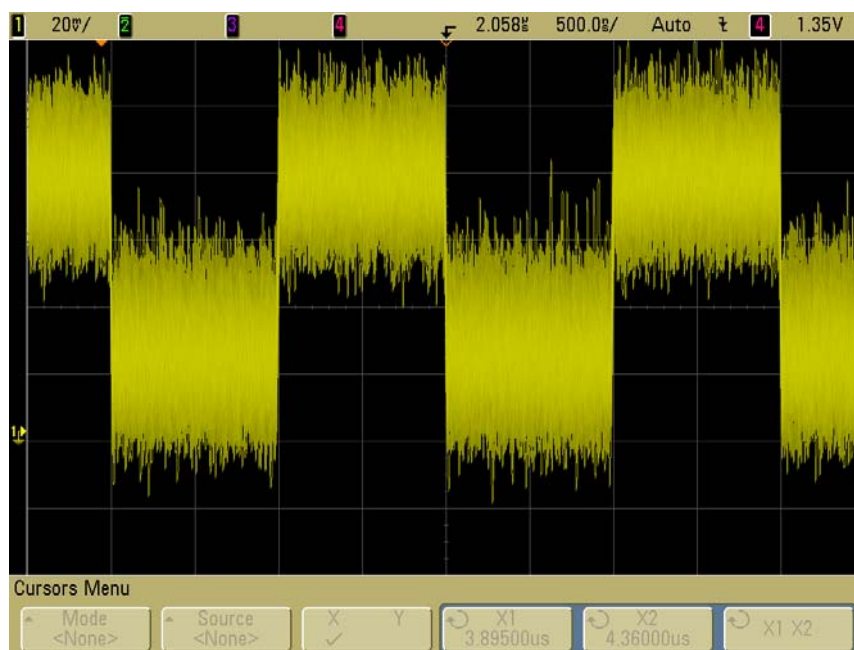




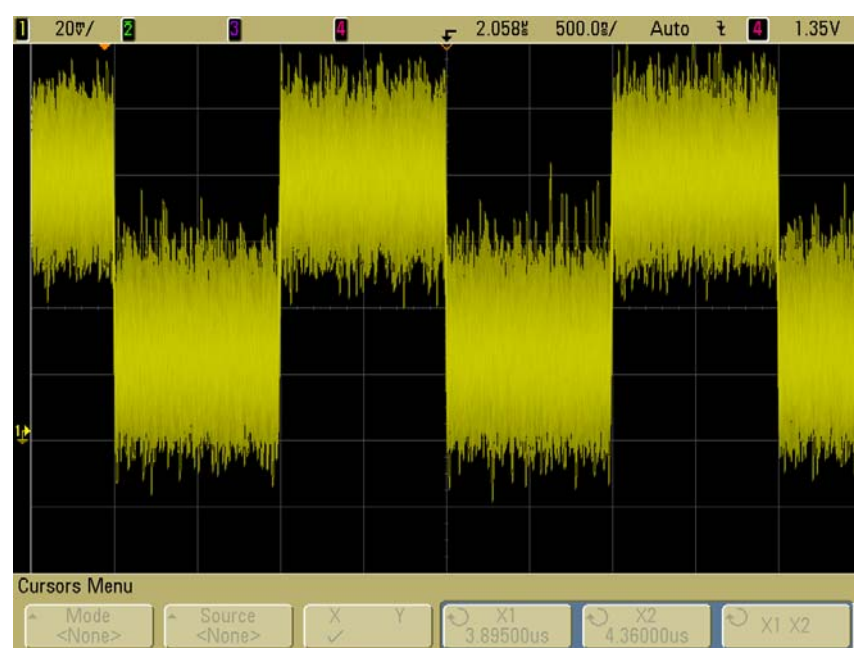
**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

Tangential Signal Sensitivity (TSS) PLOTS

TSS, 100mHz, -60dBm @ 85°C



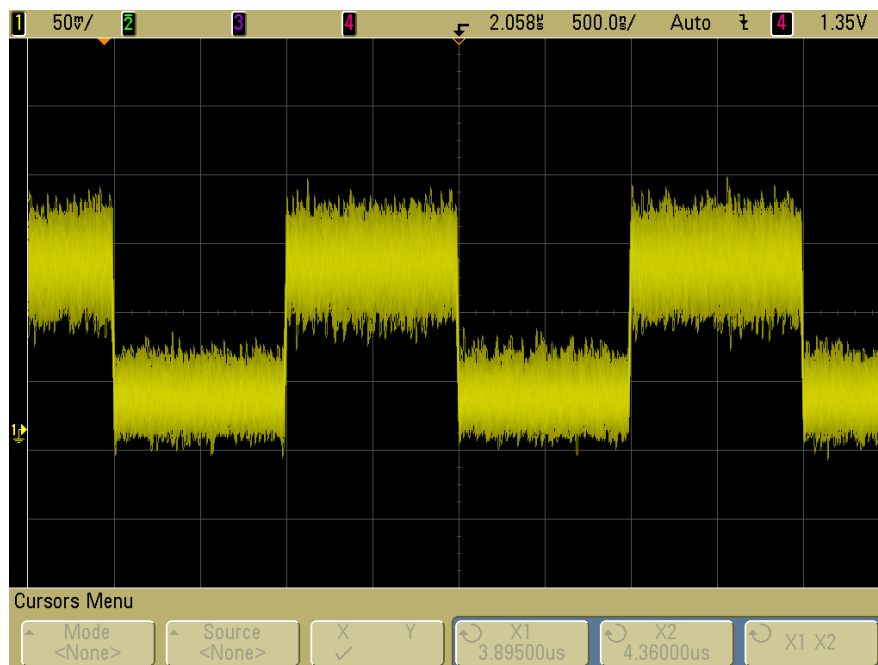
TSS, 100mHz, -60dBm @ 85°C



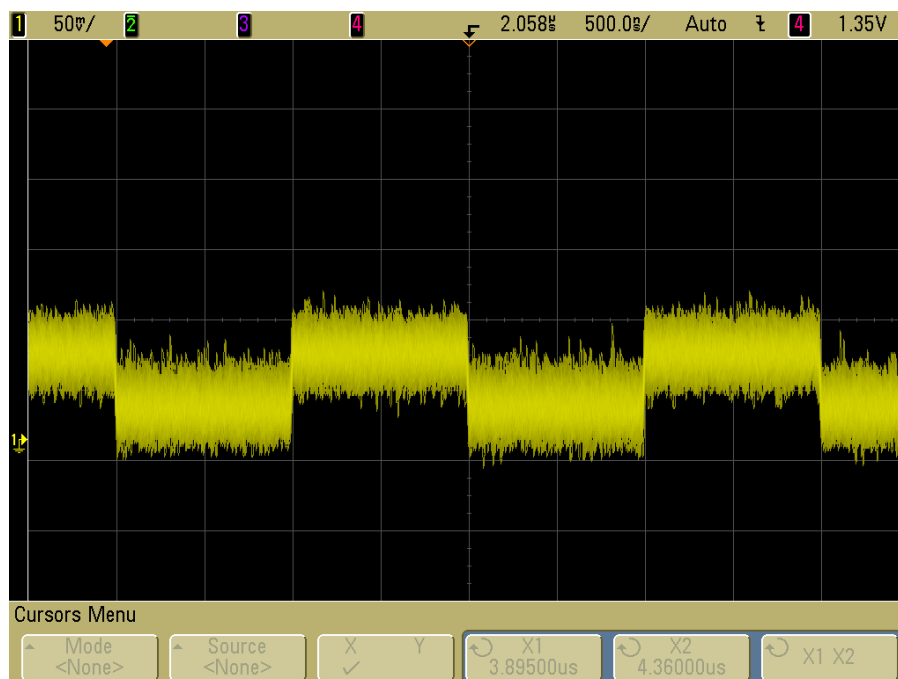


**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

TSS, 1.050GHz, -65dBm @ 85°C



TSS, 2.0GHz, -65dBm @ 85°C

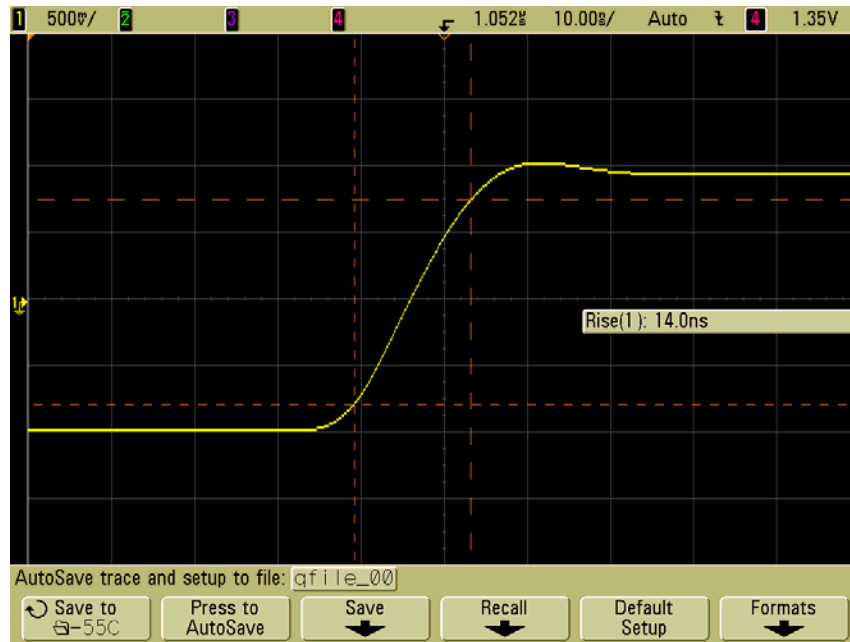




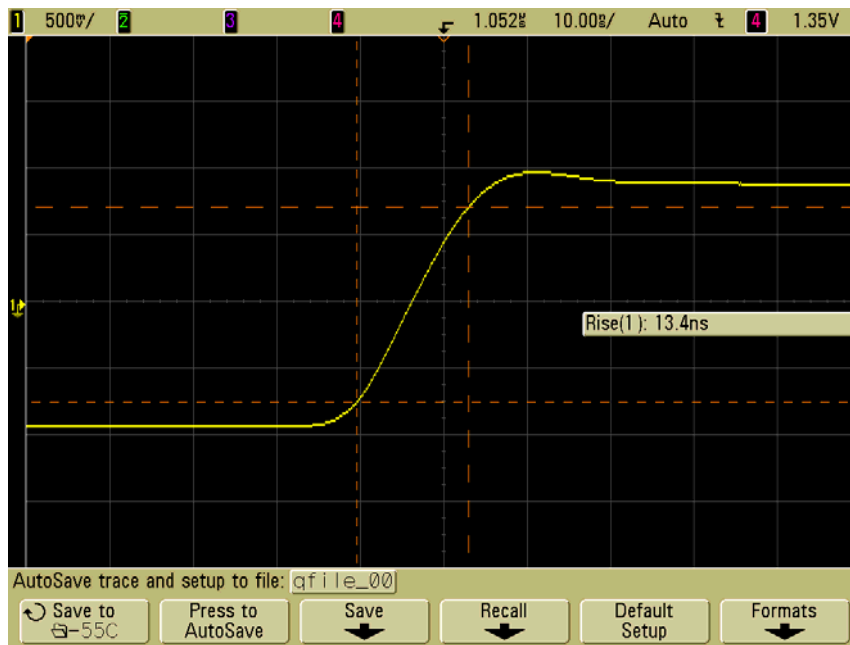
**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

RISE TIME PLOTS

Rise Time (10%Video to 90%Video), 1GHz +5dBm RF Input @ -55°C



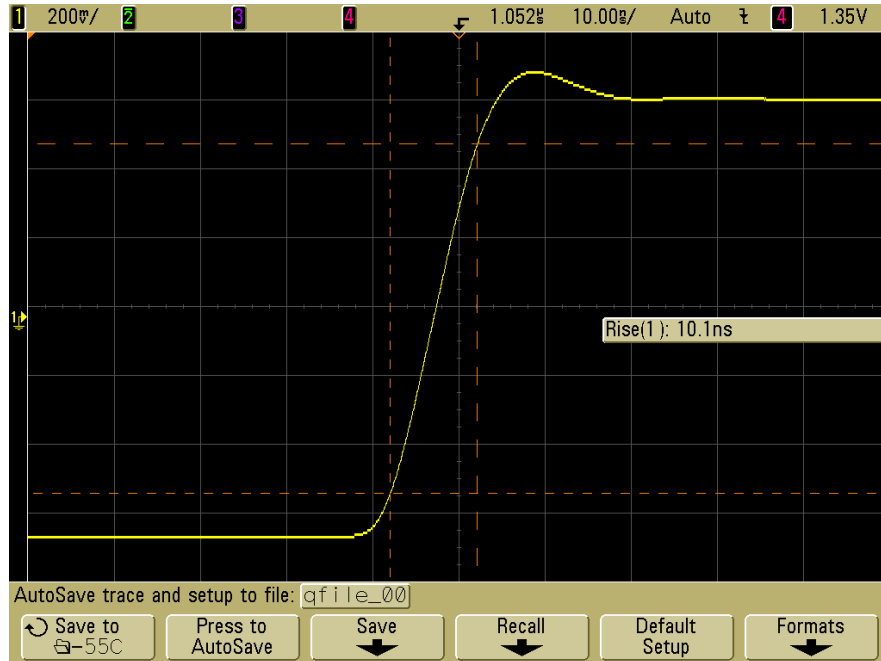
Rise Time (10%Video to 90%Video), 1GHz 0dBm RF Input @ -55°C



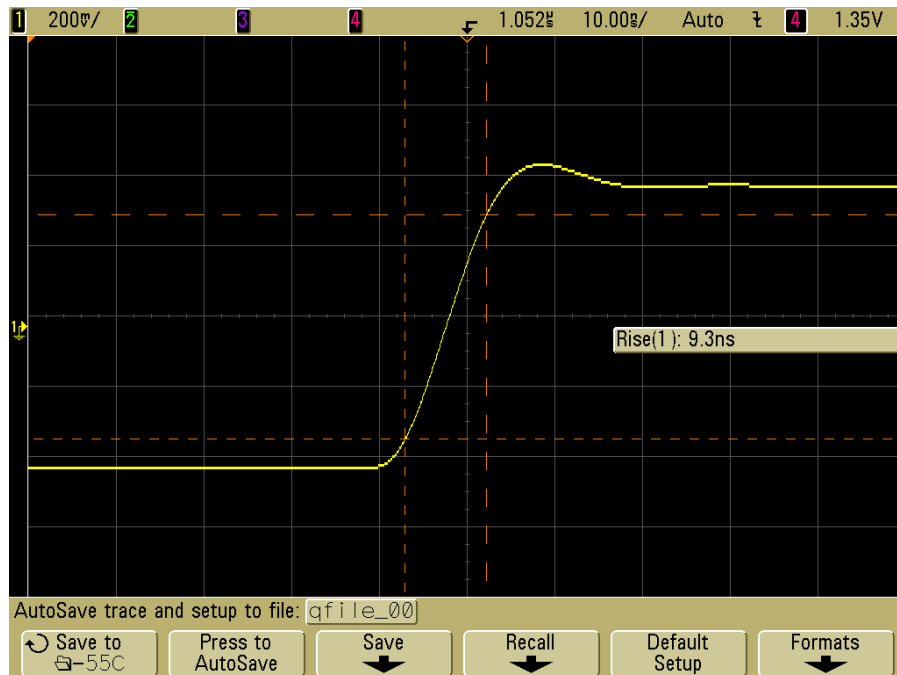


**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

Rise Time (10%Video to 90%Video), 1GHz -20dBm RF Input @ -55°C



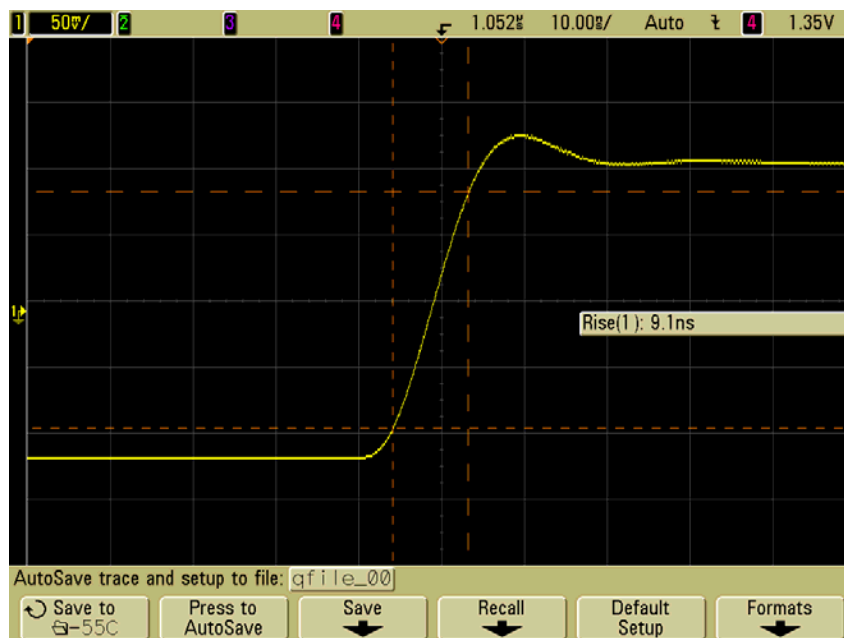
Rise Time (10%Video to 90%Video), 1GHz -40dBm RF Input @ -55°C





**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

Rise Time (10%Video to 90%Video), 1GHz -60dBm RF Input @ -55°C

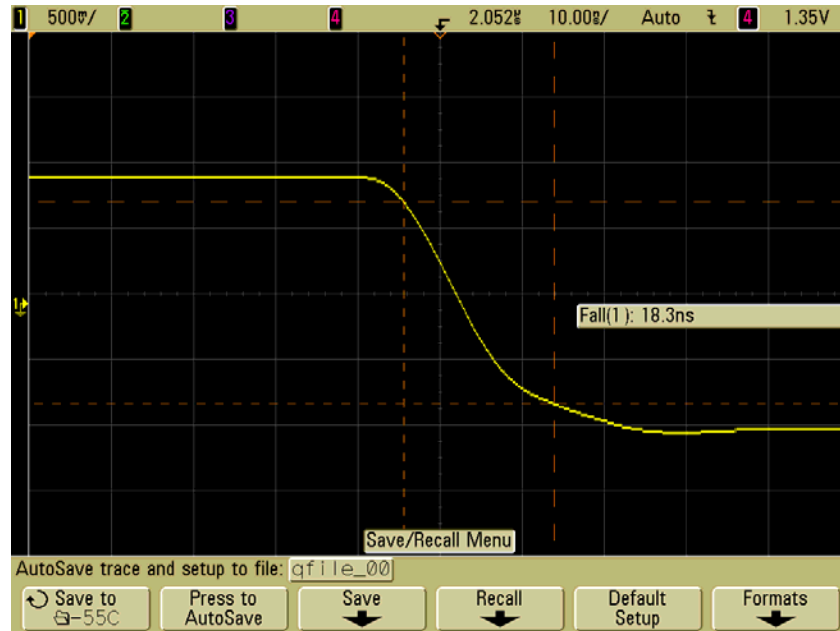




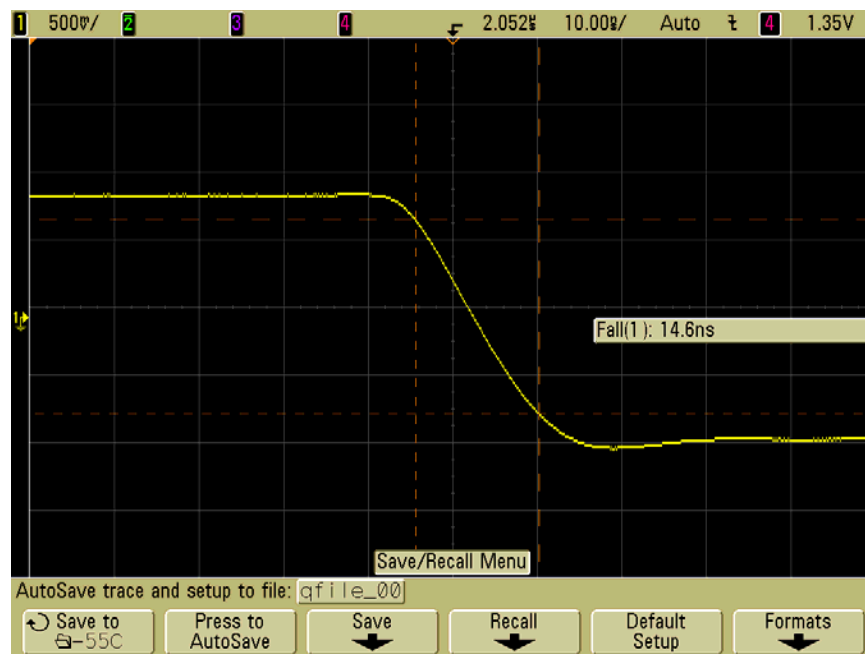
**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

FALL TIME PLOTS

Fall Time (90%Video to 10%Video), 1GHz +5dBm RF Input @ -55°C



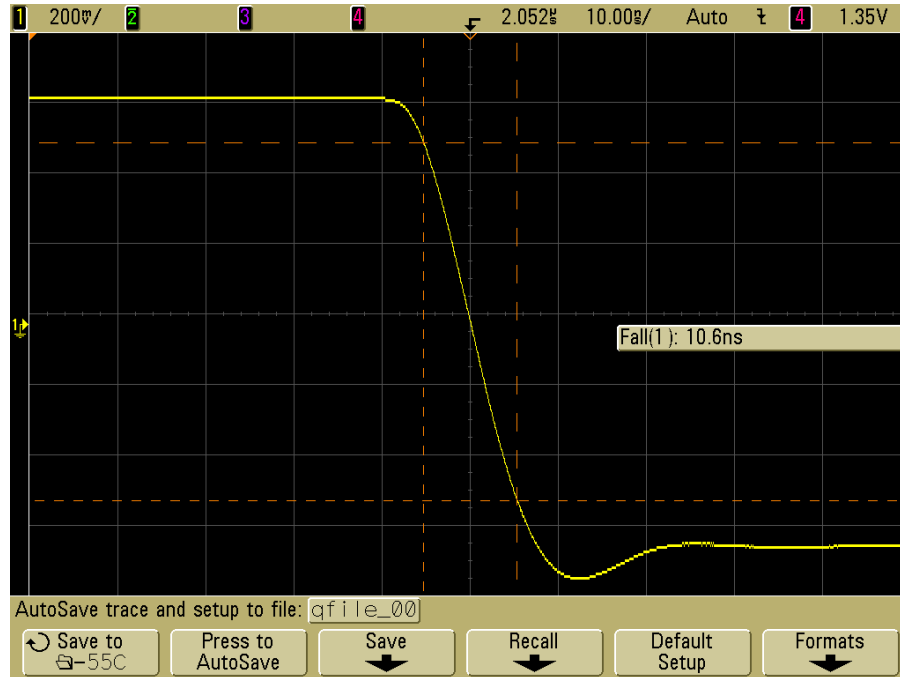
Fall Time (90%Video to 10%Video), 1GHz 0dBm RF Input @ -55°C



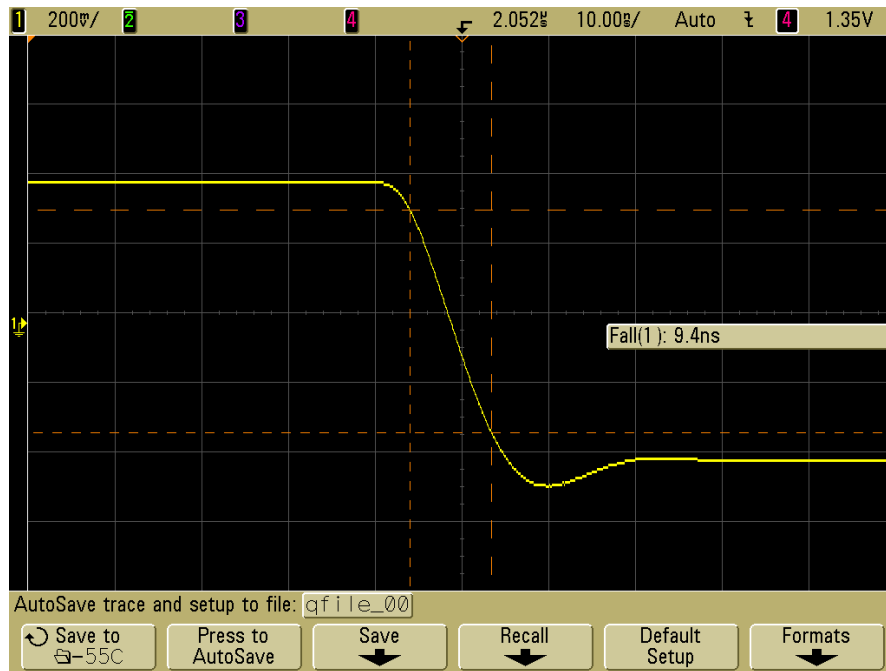


**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

Fall Time (90%Video to 10%Video), 1GHz -20dBm RF Input @ -55°C



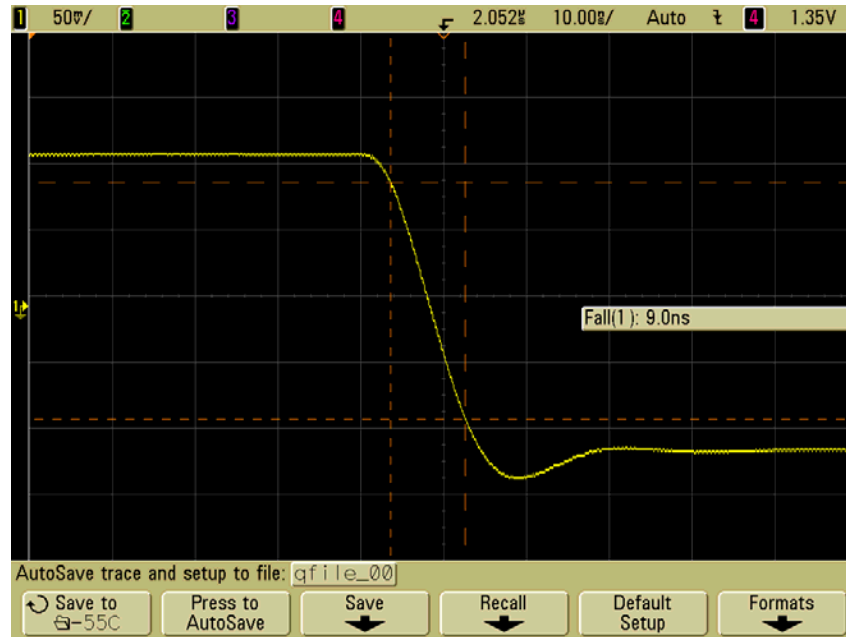
Fall Time (90%Video to 10%Video), 1GHz -40dBm RF Input @ -55°C





**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

Fall Time (90%Video to 10%Video), 1GHz -60dBm RF Input @ -55°C

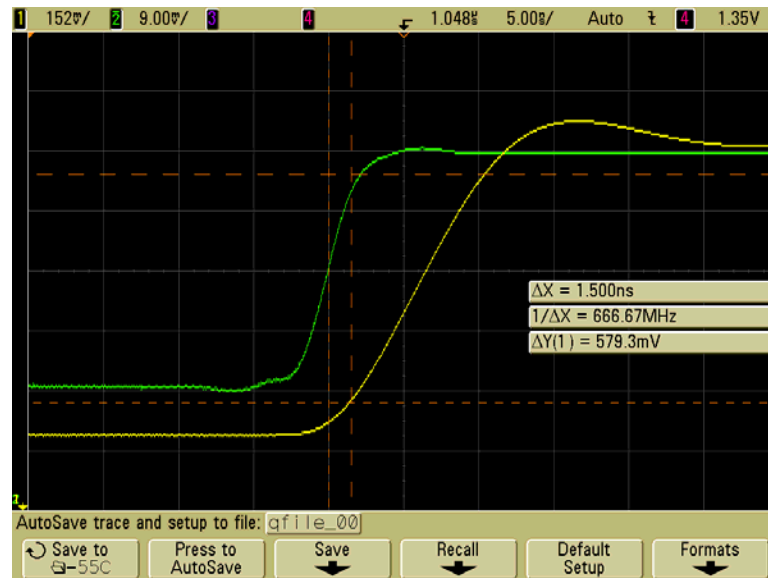




**TYPICAL CHARACTERISTICS
ON
SDLVA-0120-7- OPTION:
100M2G, 10dBm**

PROPAGATION DELAY PLOTS

Delay Time On (50%RF to 10%Video), 1GHz @ -55°C



Delay Time Off (50%RF to 90%Video), 1GHz @ -55°C



**Green Trace: TTL Signal
Yellow Trace: VIDEO Signal**