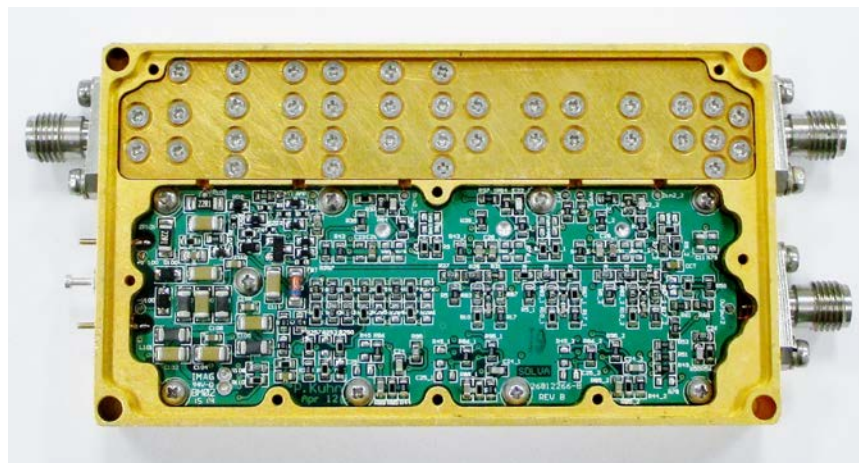




Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

PMI MODEL NUMBER SDLVA-6G18G-CD-2-OPT218 IS A SUCCESSIVE DETECTION LOGARITHMIC VIDEO AMPLIFIER (SDLVA) DESIGNED TO OPERATE OVER THE 2GHz TO 18GHz FREQUENCY RANGE. THIS MODEL IS DESIGNED FOR ULTRA HIGH SPEED APPLICATIONS WHILE MAINTAINING FLATNESS AND ACCURACY.



October 14, 2016
Designed by: Paul Kuhn
Reported by: Steve Baughman

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com



Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

TABLE OF CONTENTS

1. Product Feature, Specifications & Mechanical Drawing:	Page 3
2. Summary Data:	Page 4
3. Tabulated Data @ 25°C, -40°C & 85°C:	Page 5
4. Video Output & Linearity Error VS Input Power @ 25°C, -40°C & 85°C:	Page 8
5. Video Output & Linearity Error VS Input Power @ 25°C, -40°C & 85°C (3D):	Page 11
6. Tangential Signal Sensitivity (TSS) @ -74dBm 25°C, -40°C & 85°C:	Page 14
7. Rise Time @ 25°C, -40°C & 85°C:	Page 15
8. Fall & Recovery Time 25°C, -40°C & 85°C:	Page 16
9. Input Return Loss:	Page 17
10. Simultaneous Signal Compression Matrix:	Page 18



Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Product Feature

REV	DESCRIPTION	DATE	APP'D
A1	ORIGINAL RELEASE	7-13-18	JZ

DESCRIPTION:
 PMI MODEL NUMBER SDLVA-6G18G-CD-2-OPT218-NRF IS A SUCCESSIVE DETECTION LOGARITHMIC VIDEO AMPLIFIER (SDLVA) DESIGNED TO OPERATE OVER THE 2GHz TO 18GHz FREQUENCY RANGE. THIS MODEL IS DESIGNED FOR ULTRA HIGH SPEED APPLICATIONS WHILE MAINTAINING FLATNESS AND ACCURACY.

SPECIFICATIONS:

- FREQUENCY: 2.0 GHz TO 18.0 GHz
- FLATNESS: ± 2.0dB MAXIMUM
- TSS: -70 dB MINIMUM
- VSWR: 2.0:1 (RF INPUT)
- POWER INPUT: +17 dBm CW MAXIMUM
- RF OUT: NOT CONNECTED
- LOA RLDPE: 25 mVdB (10%) 50 Ω
- LOG RANGE: -70 to +8 dBm
- LOG LINEARITY: ±2.5 dB (-40°C - +85°C)
- PULSE RANGE: 20 ns to CW
- RISE TIME: 10 ns MAXIMUM, 6ns TYPICAL
- RECOVERY TIME: 60 ns TYPICAL
- POWER SUPPLY: +18V or +12V @ 500 mA NOMINAL
-16V or -12V @ 180 mA NOMINAL
- CONNECTORS: SMA FEMALE CONNECTORS
- FINISH: GOLD PLATED

PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.
 4841 ROBERT J. MATHEWS PKWY #1
 EL DORADO HILLS CA 95768
 TEL: 916-543-1401 FAX: 916-296-8557
 WEBSITE: www.pmi-rf.com
 E-MAIL: sales@pmi-rf.com
 ISO 9001 CERTIFIED

REV		PRODUCT FEATURE	
REV	DATE	REV	DATE
A1	7-13-18	A	71A34
			27030481
			A1

ALL DIMENSIONS ARE IN INCH UNLESS SPECIFIED OTHERWISE
 2.000 0.000
 3.000 0.000

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
 Email: sales@pmi-rf.com



Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Summary Test Data

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency:	2.0 GHz – 18.0 GHz	2.0 GHz – 18.0 GHz See Plots	
2	Flatness:	± 2.0 dB Maximum	± 1.5 dB 25°C See Plots	
3	TSS:	-70 dBm Minimum	-74 dBm	
4	VSWR:	2.0:1 (Input)	1.9:1 (Input)	
5	Power Input:	+17 dBm CW Maximum	Pass	
6	RF Out:	Not Connected	Not Connected	
7	Log Slope	25 mV/dB (±10%) 50Ω	25.0 mV/dB See Plot	
8	Log Range:	-70 to +5 dBm	-70 to +5 dBm See Plots	
9	Log Linearity:	±2.5 dB (-40°C - +85°C)	±1.5 dB See Plots	
10	Pulse Range:	30 ns to CW	Pass	
11	Rise Time:	10 ns (6 ns Typical)	6.48 ns	
12	Recovery Time:	60 ns Typical	60 ns	
13	DC Supply:	+15V or +12V @ 350 mA -15V or -12V @ 180 mA	+15V or +12V @ 290 mA -15V or -12V @ 107 mA	



Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Tabulated Data @ 25°C

			-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	1899	109	220	337	471	596	734	855	990	1118	1259	1387	1531	1652	1770	1902	2008	Measured Value (mV)
	SLOPE (mV/dB)	25.9	20	1	-11	-6	-10	-2	-10	-4	-5	6	5	20	12	0	3	-20	Error (mV)
			0.76	0.06	-0.42	-0.23	-0.40	-0.06	-0.38	-0.16	-0.21	0.25	0.20	0.77	0.45	0.02	0.12	-0.78	LINEARITY ERROR (dB)
3.3 GHz	INTERCEPT (mV)	1887	98	202	318	449	578	722	846	977	1103	1241	1369	1515	1636	1759	1888	2008	Measured Value (mV)
	SLOPE (mV/dB)	25.9	27	1	-13	-12	-12	2	-4	-2	-6	2	0	17	8	1	1	-9	Error (mV)
			1.02	0.03	-0.50	-0.45	-0.47	0.08	-0.14	-0.09	-0.24	0.08	0.02	0.64	0.31	0.05	0.02	-0.35	LINEARITY ERROR (dB)
4.7 GHz	INTERCEPT (mV)	1874	125	245	359	491	611	731	842	969	1098	1237	1364	1510	1630	1754	1883	2005	Measured Value (mV)
	SLOPE (mV/dB)	25.3	19	12	0	6	0	-7	-22	-21	-19	-6	-5	15	8	6	9	5	Error (mV)
			0.74	0.49	0.00	0.23	-0.02	-0.27	-0.87	-0.84	-0.73	-0.23	-0.20	0.58	0.33	0.24	0.35	0.18	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	1869	111	223	336	468	589	715	830	953	1086	1228	1356	1503	1624	1748	1876	2002	Measured Value (mV)
	SLOPE (mV/dB)	25.5	27	11	-3	1	-5	-7	-19	-24	-18	-4	-3	16	10	6	7	5	Error (mV)
			1.06	0.45	-0.12	0.05	-0.20	-0.26	-0.75	-0.93	-0.72	-0.15	-0.13	0.63	0.38	0.24	0.26	0.20	LINEARITY ERROR (dB)
7.3 GHz	INTERCEPT (mV)	1852	154	277	392	519	633	729	834	957	1085	1224	1349	1492	1616	1741	1868	1997	Measured Value (mV)
	SLOPE (mV/dB)	24.5	20	21	13	17	8	-18	-36	-36	-31	-14	-12	8	10	12	16	22	Error (mV)
			0.82	0.84	0.52	0.70	0.34	-0.75	-1.47	-1.46	-1.24	-0.58	-0.49	0.34	0.39	0.48	0.66	0.91	LINEARITY ERROR (dB)
8.7 GHz	INTERCEPT (mV)	1844	140	263	376	505	619	727	837	961	1093	1233	1342	1478	1604	1729	1850	1983	Measured Value (mV)
	SLOPE (mV/dB)	24.5	14	15	5	11	2	-12	-25	-24	-15	3	-11	2	5	8	6	16	Error (mV)
			0.58	0.59	0.19	0.45	0.09	-0.51	-1.02	-0.97	-0.60	0.11	-0.45	0.09	0.22	0.31	0.24	0.66	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	1839	142	265	379	507	621	725	834	958	1090	1231	1340	1476	1600	1725	1843	1978	Measured Value (mV)
	SLOPE (mV/dB)	24.4	14	15	6	12	4	-14	-27	-26	-16	3	-10	4	6	8	4	17	Error (mV)
			0.56	0.59	0.26	0.50	0.16	-0.58	-1.12	-1.05	-0.64	0.13	-0.41	0.15	0.23	0.34	0.17	0.70	LINEARITY ERROR (dB)
11.3 GHz	INTERCEPT (mV)	1839	149	272	385	513	626	731	840	962	1088	1229	1340	1477	1599	1725	1845	1982	Measured Value (mV)
	SLOPE (mV/dB)	24.3	14	15	7	13	4	-12	-25	-25	-21	-1	-12	3	4	8	6	22	Error (mV)
			0.58	0.63	0.27	0.53	0.17	-0.51	-1.03	-1.02	-0.84	-0.05	-0.49	0.14	0.15	0.33	0.26	0.89	LINEARITY ERROR (dB)
12.7 GHz	INTERCEPT (mV)	1847	140	262	374	503	618	729	841	965	1096	1236	1340	1478	1602	1729	1854	1989	Measured Value (mV)
	SLOPE (mV/dB)	24.6	15	14	3	9	1	-11	-22	-21	-13	4	-15	0	1	5	7	19	Error (mV)
			0.61	0.57	0.12	0.37	0.05	-0.44	-0.89	-0.84	-0.52	0.17	-0.60	0.01	0.06	0.22	0.30	0.79	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	1853	131	251	364	493	607	722	838	973	1108	1241	1340	1483	1607	1733	1859	1990	Measured Value (mV)
	SLOPE (mV/dB)	24.8	16	12	1	6	-5	-14	-22	-11	0	8	-17	2	2	4	6	12	Error (mV)
			0.65	0.48	0.03	0.22	-0.19	-0.56	-0.89	-0.45	-0.01	0.34	-0.67	0.09	0.08	0.15	0.23	0.50	LINEARITY ERROR (dB)
15.3 GHz	INTERCEPT (mV)	1837	100	204	319	449	564	701	834	957	1072	1201	1310	1462	1588	1714	1844	1976	Measured Value (mV)
	SLOPE (mV/dB)	25.2	26	4	-7	-3	-14	-3	4	2	-9	-6	-23	3	3	3	7	13	Error (mV)
			1.02	0.15	-0.28	-0.12	-0.55	-0.11	0.17	0.06	-0.37	-0.25	-0.92	0.12	0.12	0.13	0.29	0.53	LINEARITY ERROR (dB)
16.7 GHz	INTERCEPT (mV)	1841	152	274	389	515	621	721	835	966	1096	1224	1323	1474	1601	1728	1858	1989	Measured Value (mV)
	SLOPE (mV/dB)	24.4	19	19	12	16	0	-22	-30	-21	-13	-7	-30	-1	4	9	17	26	Error (mV)
			0.77	0.77	0.49	0.65	0.00	-0.90	-1.23	-0.86	-0.53	-0.28	-1.22	-0.03	0.18	0.38	0.71	1.09	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	1852	103	208	324	455	569	700	833	969	1101	1225	1327	1476	1602	1728	1857	1981	Measured Value (mV)
	SLOPE (mV/dB)	25.3	25	3	-5	-3	-16	-12	-6	4	9	6	-18	4	3	2	5	2	Error (mV)
			0.98	0.12	-0.30	-0.13	-0.64	-0.47	-0.22	0.15	0.36	0.25	-0.73	0.15	0.12	0.10	0.19	0.08	LINEARITY ERROR (dB)
	Average Slope (mV)	25.0																	
	Flatness	± dB	1.15	1.53	1.51	1.43	1.41	0.7	0.51	0.76	0.94	1.19	1.58	1.41	1.31	1.15	1.21	0.65	

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com



Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Tabulated Data @ -40°C

			-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	1893	75	194	315	455	586	725	842	984	1117	1254	1372	1514	1638	1761	1902	1995	Measured Value (mV)
	SLOPE (mV/dB)	26.1	7	-4	-13	-4	-3	5	-8	4	6	13	0	12	6	-2	9	-28	Error (mV)
			0.28	-0.16	-0.52	-0.15	-0.12	0.21	-0.31	0.14	0.24	0.49	0.02	0.46	0.22	-0.06	0.34	-1.09	LINEARITY ERROR (dB)
3.3 GHz	INTERCEPT (mV)	1878	64	174	295	431	566	712	833	970	1099	1236	1352	1497	1618	1742	1882	1992	Measured Value (mV)
	SLOPE (mV/dB)	26.1	14	-6	-16	-10	-6	9	0	6	5	11	-3	11	2	-5	4	-16	Error (mV)
			0.55	-0.24	-0.61	-0.40	-0.23	0.36	0.00	0.24	0.18	0.43	-0.13	0.43	0.06	-0.19	0.17	-0.62	LINEARITY ERROR (dB)
4.7 GHz	INTERCEPT (mV)	1862	83	206	324	460	586	709	819	950	1083	1223	1344	1490	1611	1735	1874	1988	Measured Value (mV)
	SLOPE (mV/dB)	25.6	12	7	-3	5	3	-2	-19	-16	-11	1	-6	12	5	1	12	-2	Error (mV)
			0.47	0.28	-0.11	0.21	0.13	-0.06	-0.76	-0.64	-0.44	0.03	-0.24	0.47	0.20	0.04	0.48	-0.07	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	1856	78	199	315	451	576	700	811	939	1075	1219	1337	1483	1604	1729	1866	1985	Measured Value (mV)
	SLOPE (mV/dB)	25.6	16	9	-3	4	1	-3	-20	-20	-12	4	-6	12	5	2	10	1	Error (mV)
			0.61	0.34	-0.13	0.17	0.05	-0.11	-0.77	-0.78	-0.47	0.15	-0.24	0.46	0.18	0.06	0.41	0.05	LINEARITY ERROR (dB)
7.3 GHz	INTERCEPT (mV)	1837	128	258	378	507	621	712	817	946	1077	1216	1329	1472	1595	1721	1858	1981	Measured Value (mV)
	SLOPE (mV/dB)	24.6	11	18	15	21	12	-19	-37	-31	-23	-7	-17	4	4	7	21	21	Error (mV)
			0.44	0.73	0.62	0.87	0.51	-0.79	-1.52	-1.27	-0.93	-0.28	-0.68	0.15	0.15	0.28	0.86	0.86	LINEARITY ERROR (dB)
8.7 GHz	INTERCEPT (mV)	1829	122	252	372	501	615	716	823	955	1087	1225	1322	1460	1584	1710	1840	1970	Measured Value (mV)
	SLOPE (mV/dB)	24.4	4	12	10	16	8	-13	-28	-19	-9	7	-18	-2	-1	3	11	19	Error (mV)
			0.17	0.48	0.39	0.67	0.33	-0.53	-1.16	-0.76	-0.36	0.29	-0.74	-0.10	-0.03	0.13	0.45	0.76	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	1824	128	258	379	506	618	712	820	951	1087	1226	1321	1459	1582	1707	1834	1965	Measured Value (mV)
	SLOPE (mV/dB)	24.3	5	13	13	18	9	-19	-32	-23	-8	9	-17	-1	1	4	10	19	Error (mV)
			0.19	0.54	0.52	0.75	0.36	-0.77	-1.33	-0.94	-0.34	0.38	-0.71	-0.03	0.03	0.17	0.40	0.79	LINEARITY ERROR (dB)
11.3 GHz	INTERCEPT (mV)	1824	125	254	373	501	614	713	821	951	1081	1221	1320	1458	1579	1706	1835	1968	Measured Value (mV)
	SLOPE (mV/dB)	24.4	6	13	10	17	8	-15	-29	-21	-12	6	-17	-1	-2	4	11	22	Error (mV)
			0.25	0.55	0.43	0.68	0.32	-0.61	-1.18	-0.85	-0.51	0.24	-0.70	-0.04	-0.07	0.14	0.44	0.90	LINEARITY ERROR (dB)
12.7 GHz	INTERCEPT (mV)	1833	104	233	349	481	598	711	823	953	1084	1221	1319	1459	1582	1709	1843	1974	Measured Value (mV)
	SLOPE (mV/dB)	24.8	5	11	3	11	4	-7	-19	-13	-6	7	-18	-2	-3	0	10	17	Error (mV)
			0.22	0.43	0.11	0.44	0.16	-0.28	-0.76	-0.51	-0.23	0.30	-0.74	-0.09	-0.13	0.00	0.41	0.69	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	1841	85	210	326	459	574	692	807	944	1084	1221	1319	1465	1588	1715	1851	1975	Measured Value (mV)
	SLOPE (mV/dB)	25.3	12	11	1	8	-4	-12	-23	-13	1	12	-16	3	0	1	10	8	Error (mV)
			0.49	0.44	0.04	0.30	-0.15	-0.47	-0.92	-0.50	0.05	0.47	-0.65	0.13	0.00	0.03	0.41	0.32	LINEARITY ERROR (dB)
15.3 GHz	INTERCEPT (mV)	1826	65	179	298	432	549	686	816	943	1058	1184	1293	1449	1573	1700	1839	1962	Measured Value (mV)
	SLOPE (mV/dB)	25.4	15	2	-6	1	-9	2	5	5	-7	-8	-26	3	0	1	13	9	Error (mV)
			0.59	0.08	-0.23	0.05	-0.34	0.06	0.19	0.19	-0.28	-0.31	-1.02	0.13	0.02	0.02	0.50	0.35	LINEARITY ERROR (dB)
16.7 GHz	INTERCEPT (mV)	1826	135	264	385	511	616	712	824	953	1080	1208	1304	1459	1584	1712	1853	1974	Measured Value (mV)
	SLOPE (mV/dB)	24.3	11	18	18	22	5	-20	-30	-22	-17	-10	-36	-2	1	8	27	27	Error (mV)
			0.43	0.74	0.72	0.90	0.22	-0.83	-1.22	-0.91	-0.68	-0.42	-1.47	-0.09	0.05	0.32	1.12	1.10	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	1848	73	193	311	447	561	690	817	958	1094	1220	1317	1467	1592	1719	1861	1973	Measured Value (mV)
	SLOPE (mV/dB)	25.5	12	4	-5	3	-11	-8	-19	4	12	10	-20	2	-1	-1	13	-3	Error (mV)
			0.47	0.17	-0.21	0.12	-0.41	-0.36	-0.39	0.14	0.46	0.40	-0.80	0.08	-0.03	-0.05	0.51	-0.10	LINEARITY ERROR (dB)
	Average Slope (mV)	25.1																	
	Flatness	± dB	1.46	1.85	1.85	1.65	1.48	0.8	0.72	0.93	1.21	1.44	1.63	1.34	1.34	1.26	1.4	0.68	

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com



Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Tabulated Data @ 85°C

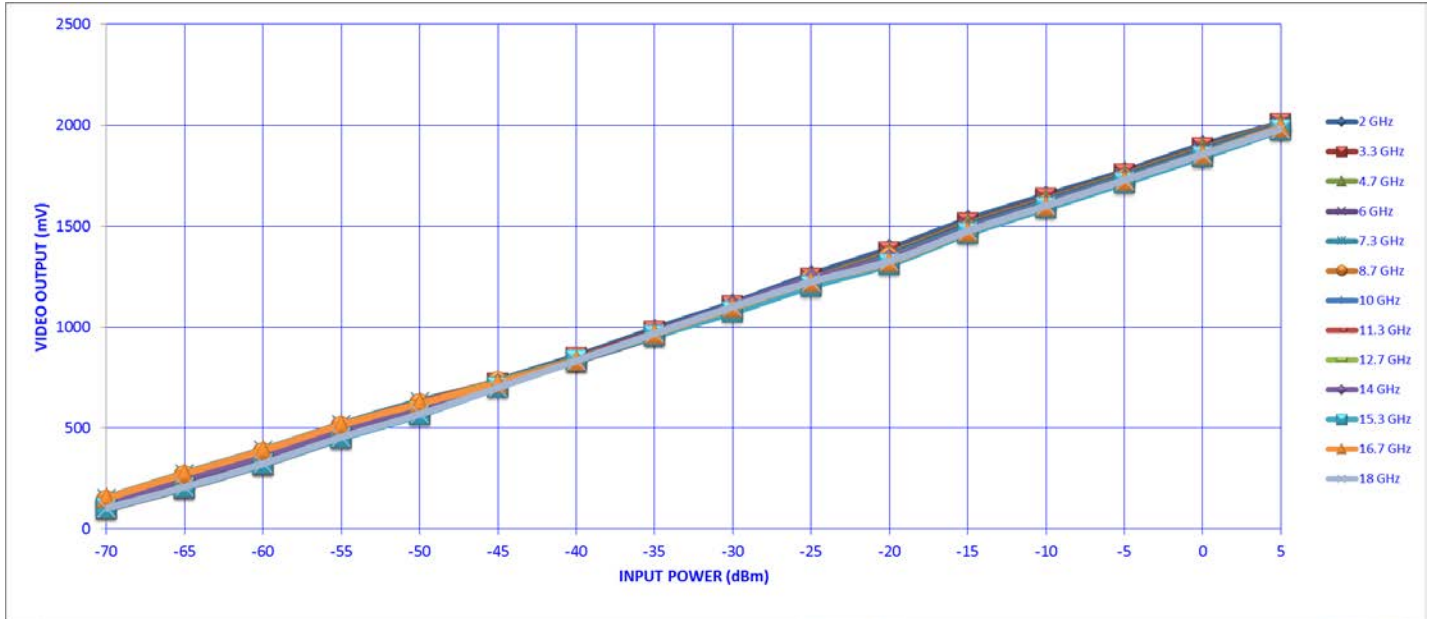
			-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	1862	91	213	331	463	586	730	852	987	1108	1241	1358	1505	1619	1729	1851	1964	Measured Value (mV)
	SLOPE (mV/dB)	25.3	1	-4	-12	-7	-10	7	3	11	5	12	2	23	10	-6	-11	-24	Error (mV)
			0.02	-0.15	-0.49	-0.27	-0.41	0.28	0.10	0.44	0.22	0.47	0.10	0.91	0.41	-0.24	-0.42	-0.95	LINEARITY ERROR (dB)
3.3 GHz	INTERCEPT (mV)	1862	80	194	312	443	569	716	842	973	1093	1226	1344	1491	1612	1735	1856	1981	Measured Value (mV)
	SLOPE (mV/dB)	25.6	12	-2	-12	-9	-12	7	5	8	0	5	-6	13	6	1	-6	-10	Error (mV)
			0.47	-0.08	-0.48	-0.37	-0.45	0.28	0.20	0.31	-0.01	0.18	-0.22	0.51	0.23	0.03	-0.25	-0.37	LINEARITY ERROR (dB)
4.7 GHz	INTERCEPT (mV)	1850	109	236	352	480	599	723	837	965	1088	1222	1339	1485	1607	1732	1852	1979	Measured Value (mV)
	SLOPE (mV/dB)	25	8	10	1	4	-2	-3	-13	-10	-12	-3	-11	10	7	7	2	4	Error (mV)
			0.32	0.41	0.05	0.17	-0.06	-0.10	-0.54	-0.41	-0.49	-0.13	-0.44	0.40	0.28	0.29	0.09	0.17	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	1847	84	201	316	447	567	697	819	943	1071	1206	1331	1479	1602	1727	1846	1976	Measured Value (mV)
	SLOPE (mV/dB)	25.4	19	9	-4	0	-7	-4	-10	-13	-12	-4	-7	14	10	8	-1	2	Error (mV)
			0.74	0.34	-0.14	0.00	-0.28	-0.17	-0.38	-0.51	-0.48	-0.17	-0.26	0.56	0.39	0.30	-0.02	0.09	LINEARITY ERROR (dB)
7.3 GHz	INTERCEPT (mV)	1829	123	252	367	493	606	710	820	941	1065	1198	1324	1468	1596	1721	1839	1971	Measured Value (mV)
	SLOPE (mV/dB)	24.6	13	20	12	15	5	-14	-27	-28	-27	-17	-14	7	12	14	10	19	Error (mV)
			0.55	0.80	0.48	0.61	0.21	-0.56	-1.08	-1.16	-1.11	-0.70	-0.57	0.29	0.50	0.59	0.39	0.76	LINEARITY ERROR (dB)
8.7 GHz	INTERCEPT (mV)	1822	103	228	343	472	585	702	818	941	1070	1206	1317	1455	1584	1709	1822	1955	Measured Value (mV)
	SLOPE (mV/dB)	24.7	10	12	3	8	-2	-9	-16	-17	-11	1	-11	3	9	10	0	9	Error (mV)
			0.41	0.47	0.12	0.34	-0.08	-0.35	-0.65	-0.67	-0.45	0.05	-0.45	0.13	0.36	0.42	-0.01	0.37	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	1816	93	215	330	459	572	690	806	927	1058	1193	1310	1450	1578	1703	1815	1950	Measured Value (mV)
	SLOPE (mV/dB)	24.8	14	12	3	8	-3	-9	-17	-20	-13	-2	-9	6	10	11	-1	10	Error (mV)
			0.57	0.49	0.12	0.32	-0.12	-0.37	-0.69	-0.82	-0.54	-0.10	-0.38	0.26	0.42	0.46	-0.03	0.41	LINEARITY ERROR (dB)
11.3 GHz	INTERCEPT (mV)	1813	98	222	336	464	577	695	811	926	1049	1187	1308	1449	1576	1701	1816	1952	Measured Value (mV)
	SLOPE (mV/dB)	24.7	14	14	5	9	-1	-7	-14	-23	-23	-9	-11	6	10	11	3	15	Error (mV)
			0.56	0.58	0.19	0.38	-0.05	-0.27	-0.57	-0.92	-0.94	-0.35	-0.45	0.26	0.40	0.46	0.12	0.62	LINEARITY ERROR (dB)
12.7 GHz	INTERCEPT (mV)	1820	92	213	327	456	569	689	808	929	1060	1194	1308	1449	1579	1706	1823	1960	Measured Value (mV)
	SLOPE (mV/dB)	24.9	17	13	3	7	-5	-9	-15	-19	-12	-3	-14	3	8	10	3	15	Error (mV)
			0.68	0.53	0.10	0.27	-0.19	-0.38	-0.61	-0.75	-0.50	-0.13	-0.55	0.10	0.32	0.41	0.10	0.60	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	1824	91	212	327	456	568	688	812	944	1075	1203	1308	1452	1580	1706	1824	1959	Measured Value (mV)
	SLOPE (mV/dB)	25	14	10	0	5	-8	-13	-14	-6	0	3	-17	2	6	7	0	10	Error (mV)
			0.56	0.41	0.02	0.19	-0.32	-0.52	-0.55	-0.26	-0.01	0.12	-0.67	0.10	0.23	0.28	0.00	0.41	LINEARITY ERROR (dB)
15.3 GHz	INTERCEPT (mV)	1795	59	160	276	400	515	652	790	908	1026	1153	1267	1421	1550	1676	1800	1934	Measured Value (mV)
	SLOPE (mV/dB)	25.2	31	6	-4	-6	-17	-7	5	-3	-11	-10	-23	5	8	8	5	13	Error (mV)
			1.24	0.24	-0.16	-0.25	-0.69	-0.26	0.20	-0.12	-0.45	-0.42	-0.90	0.20	0.31	0.30	0.22	0.53	LINEARITY ERROR (dB)
16.7 GHz	INTERCEPT (mV)	1812	102	227	340	469	574	686	808	940	1068	1189	1290	1443	1572	1698	1821	1955	Measured Value (mV)
	SLOPE (mV/dB)	24.6	14	16	6	12	-6	-17	-19	-10	-5	-7	-29	1	6	9	9	20	Error (mV)
			0.58	0.66	0.25	0.48	-0.25	-0.71	-0.76	-0.40	-0.20	-0.29	-1.19	0.02	0.26	0.37	0.37	0.81	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	1808	59	160	277	403	517	650	795	927	1054	1173	1280	1433	1562	1688	1807	1936	Measured Value (mV)
	SLOPE (mV/dB)	25.4	29	3	-7	-8	-21	-15	3	8	8	0	-20	6	8	7	-1	1	Error (mV)
			1.13	0.11	-0.28	-0.32	-0.83	-0.60	0.11	0.31	0.31	0.00	-0.79	0.24	0.32	0.28	-0.03	0.05	LINEARITY ERROR (dB)
	Average Slope (mV)	25.0																	
	Flatness	± dB	1.29	1.85	1.83	1.87	1.83	1.61	1.25	1.59	1.65	1.77	1.83	1.69	1.39	1.19	1.13	0.95	

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com

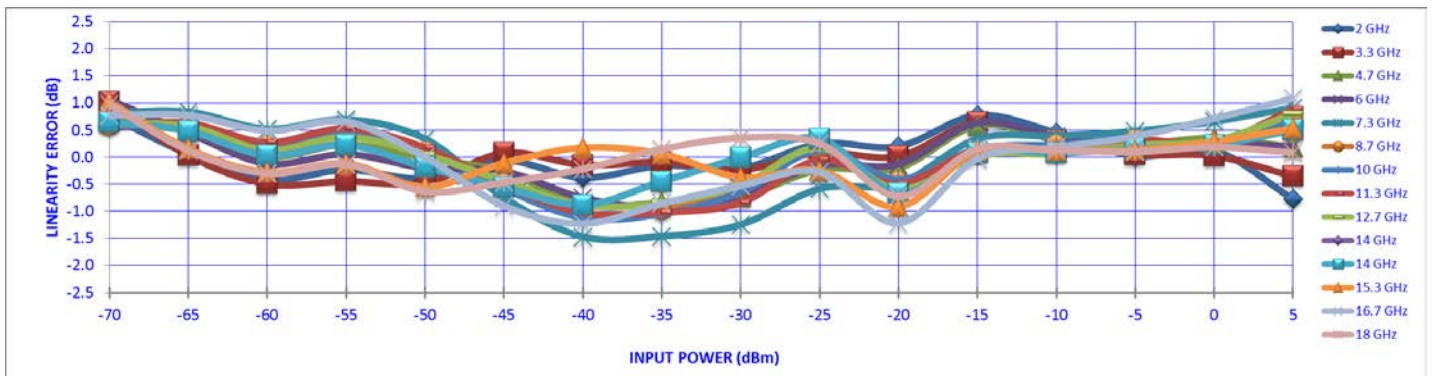


Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Video Output VS Input Power @ 25°C



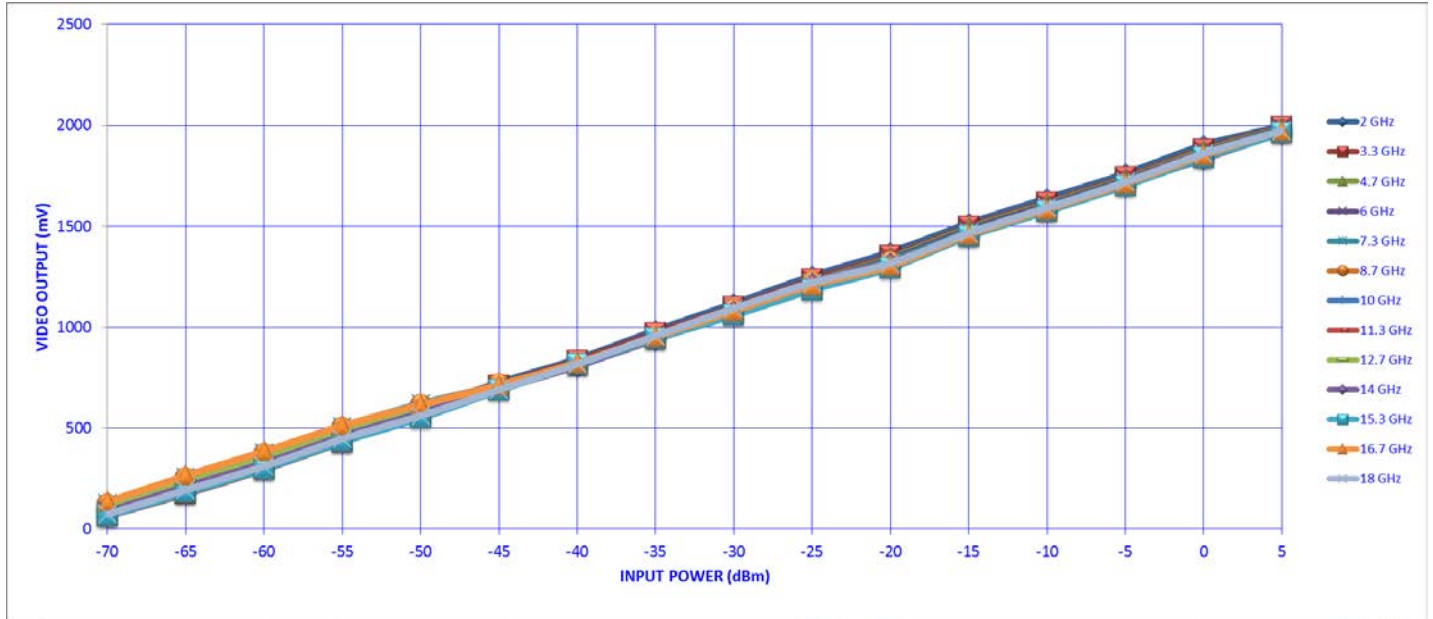
Linearity Error VS Input Power @ 25°C



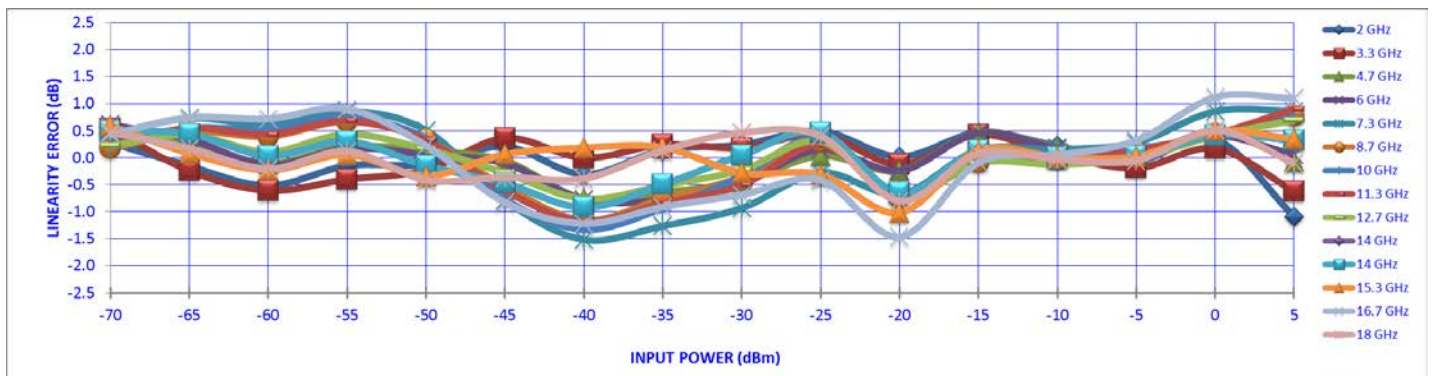


Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Video Output VS Input Power @ -40°C



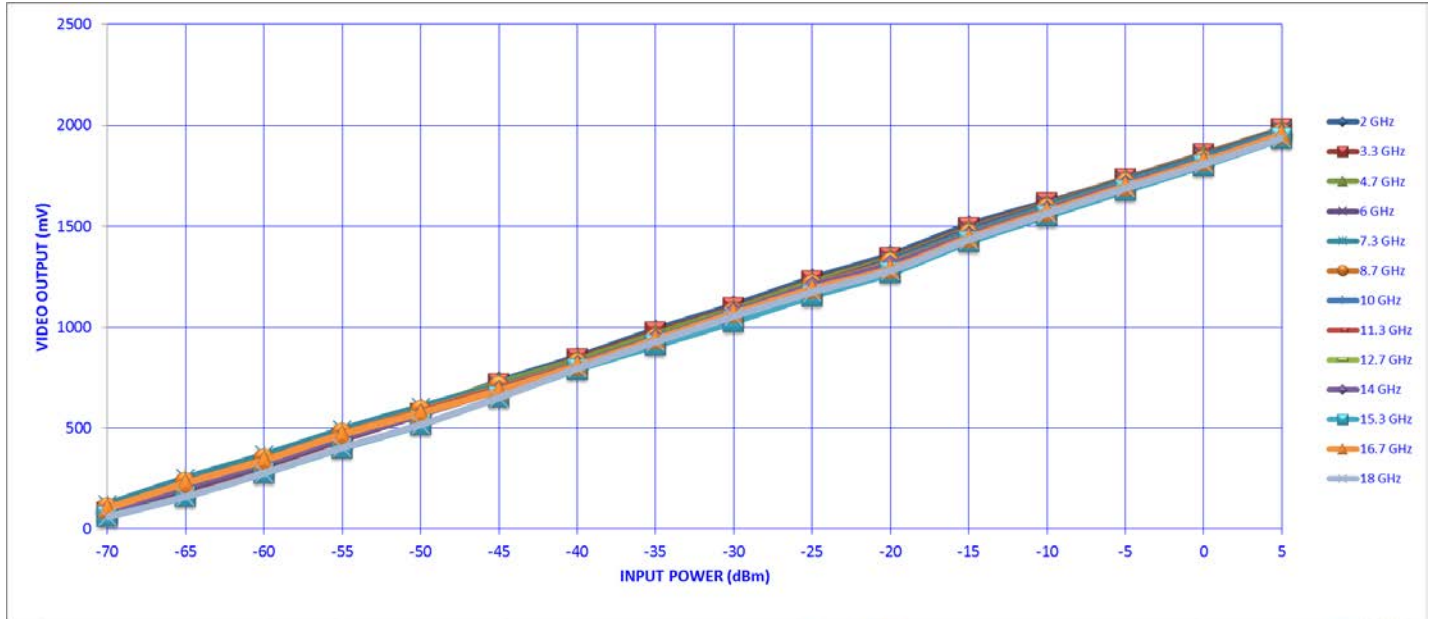
Linearity Error VS Input Power @ -40°C



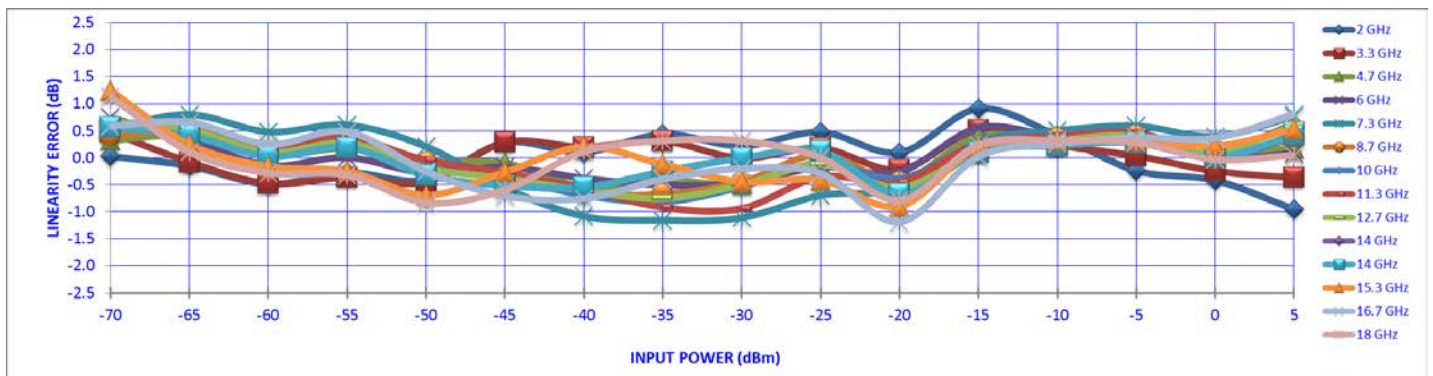


Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Video Output VS Input Power @ 85°C



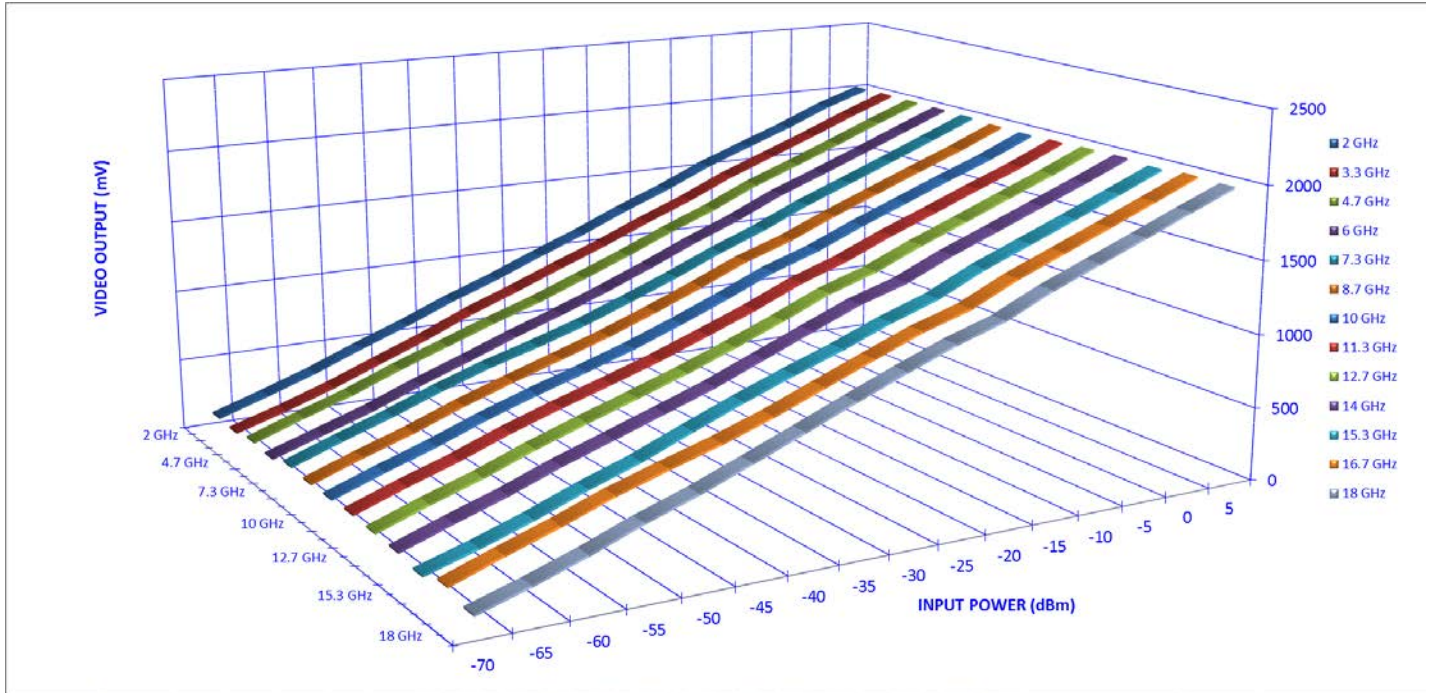
Linearity Error VS Input Power @ 85°C



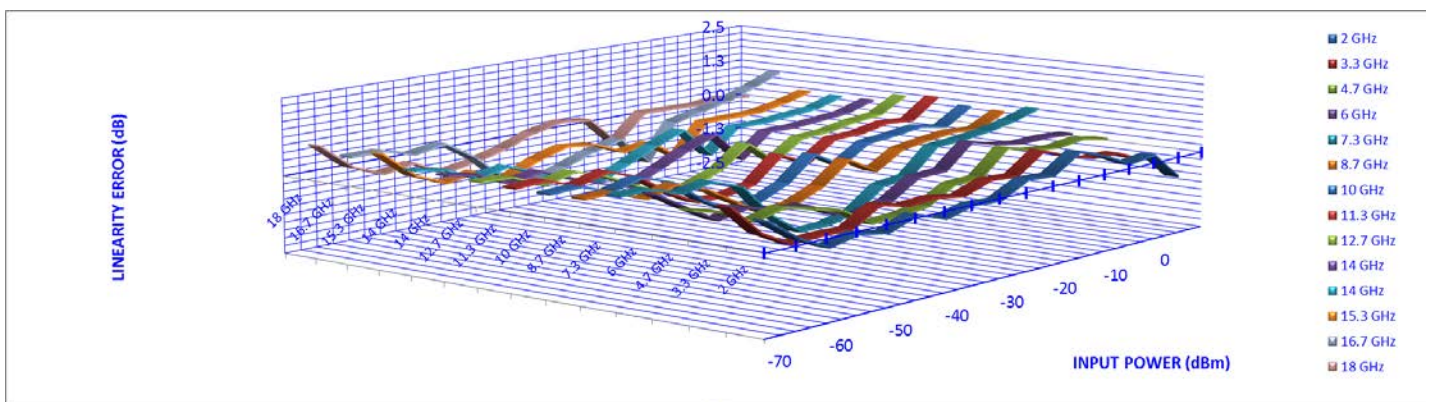


Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Video Output VS Input Power @ 25°C (3D-Plot)



Linearity Error VS Input Power @ 25°C (3D-Plot)

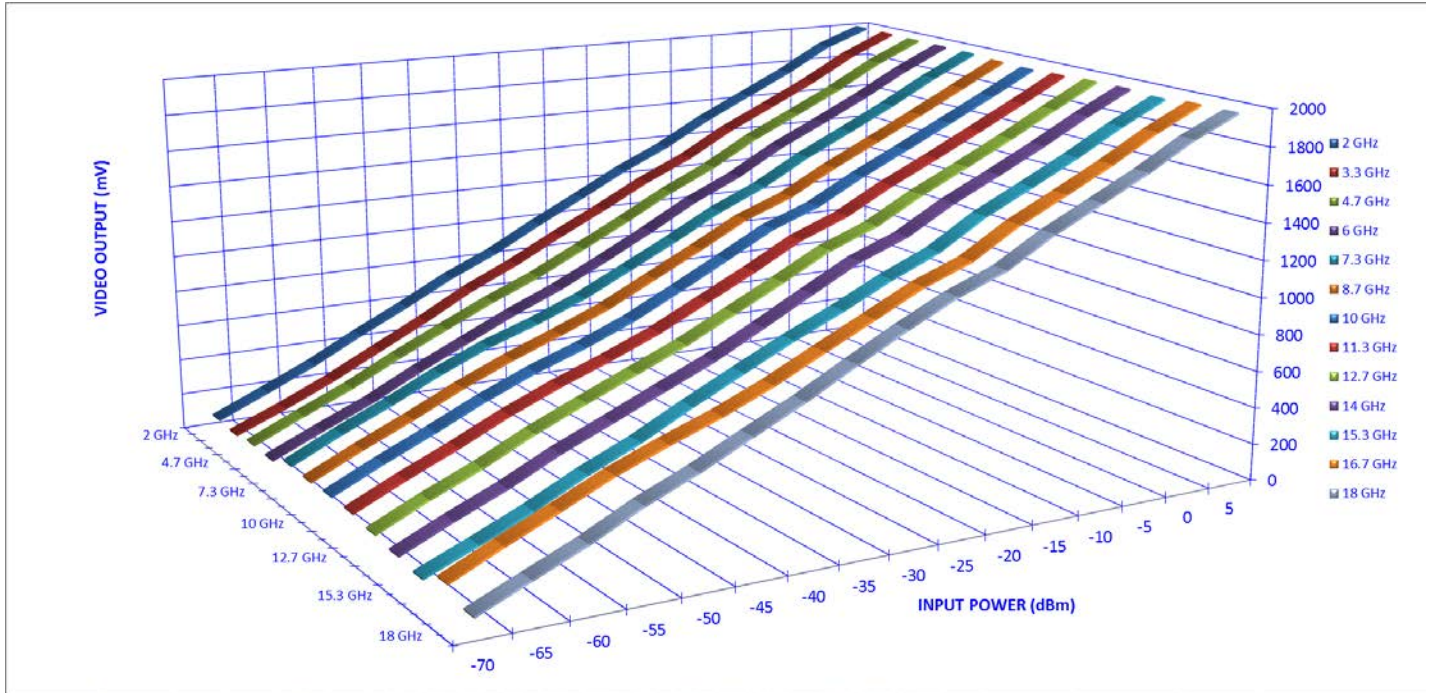


7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com

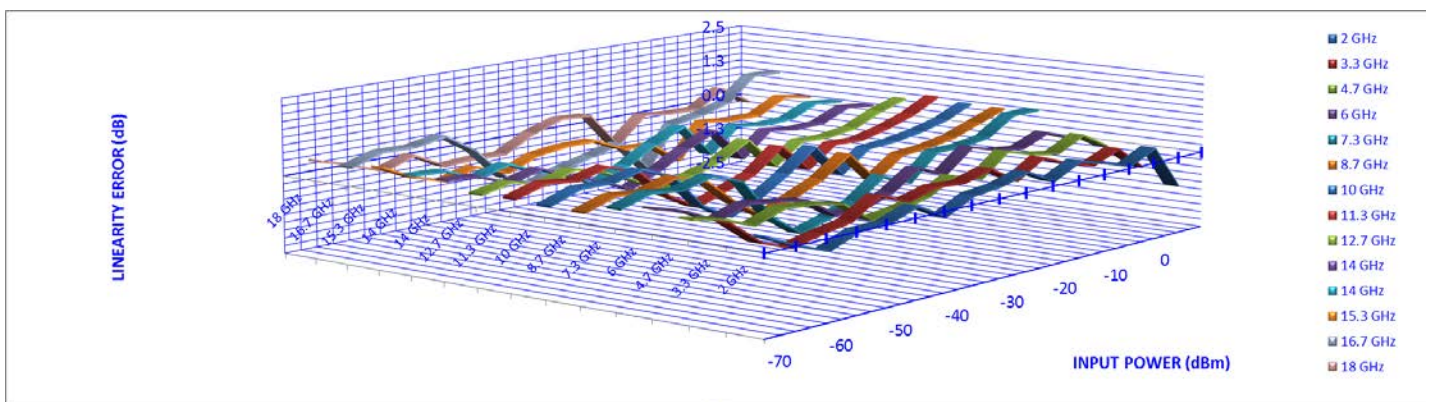


Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Video Output VS Input Power @ -40°C (3D-Plot)



Linearity Error VS Input Power @ -40°C (3D-Plot)

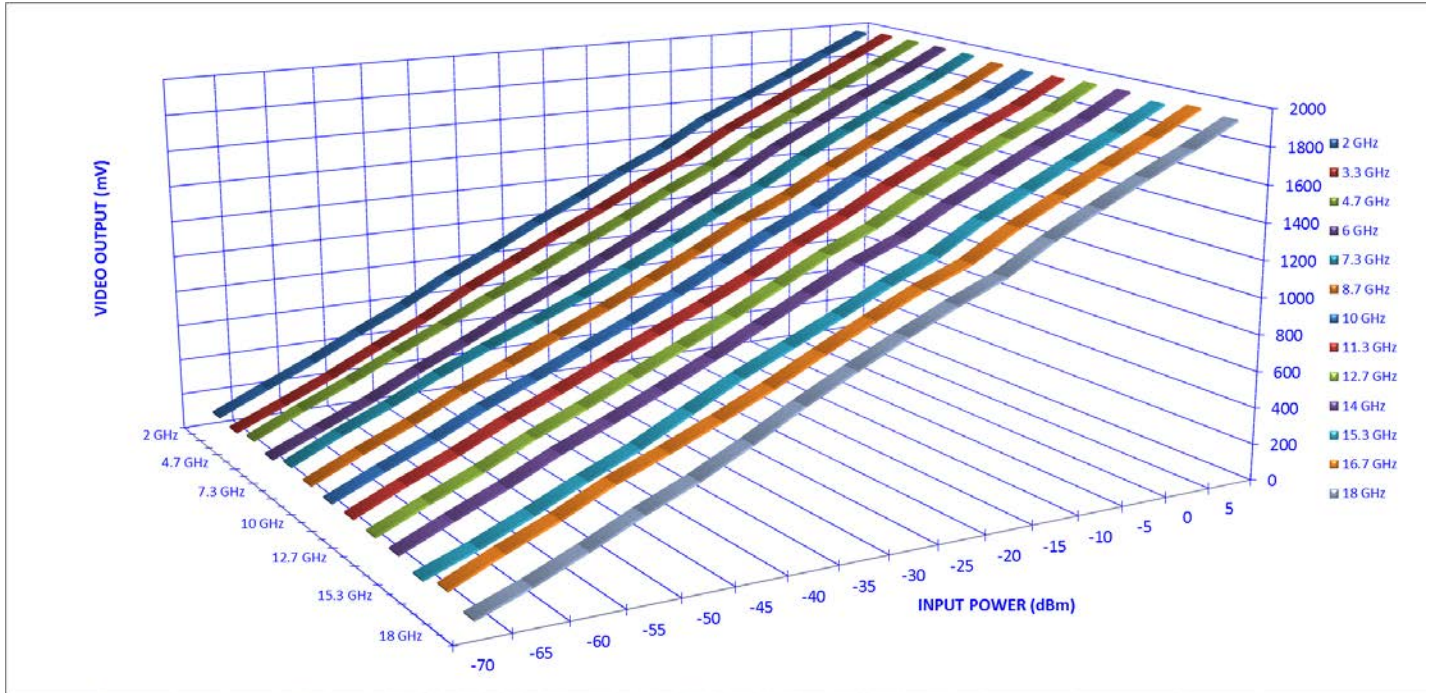


7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com

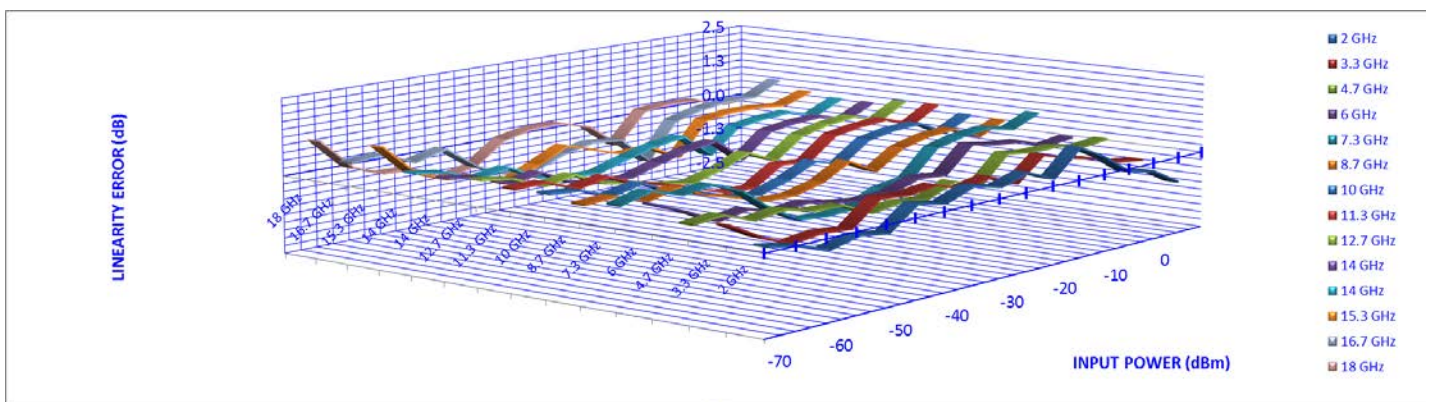


Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Video Output VS Input Power @ 85°C (3D-Plot)



Linearity Error VS Input Power @ 85°C (3D-Plot)

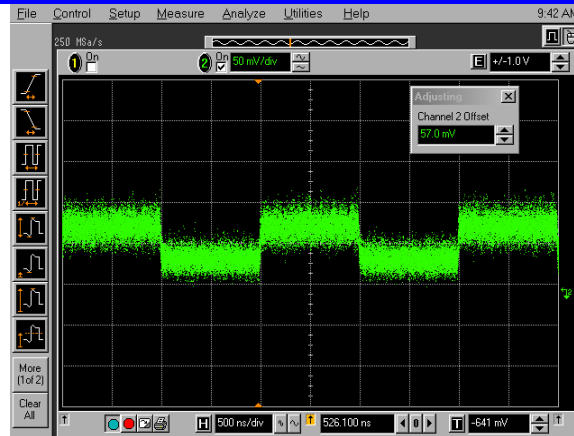


7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com

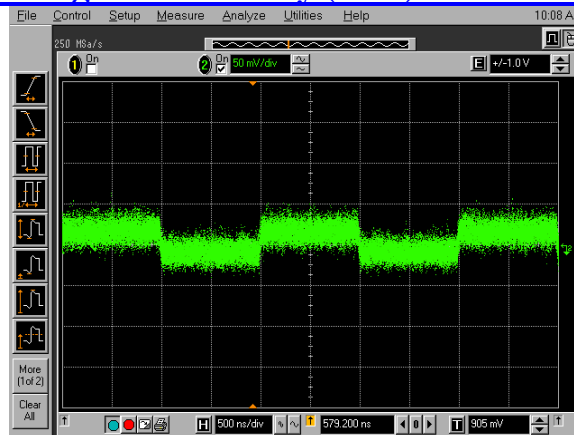


Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

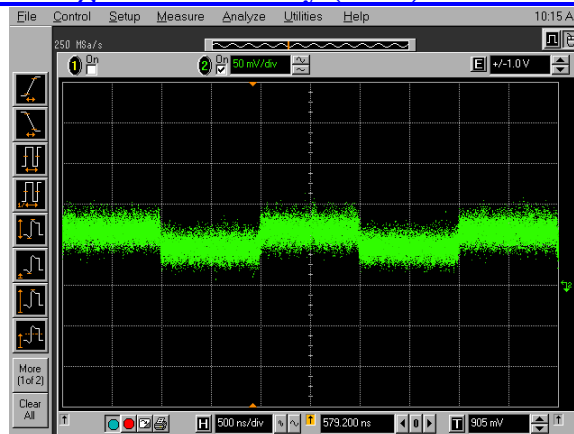
Tangential Signal Sensitivity (TSS) @ -74dBm & 25°C



Tangential Signal Sensitivity (TSS) @ -74dBm & -40°C



Tangential Signal Sensitivity (TSS) @ -74dBm & 85°C

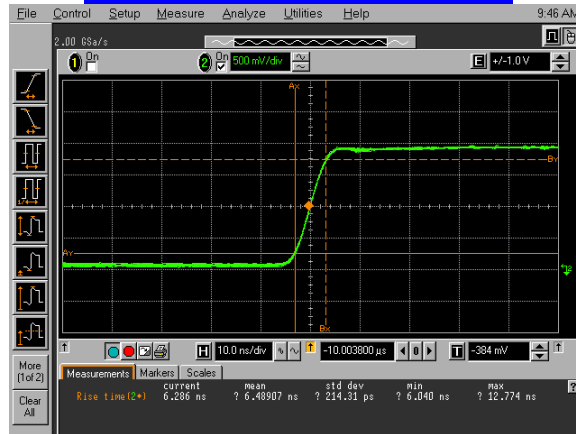


7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com

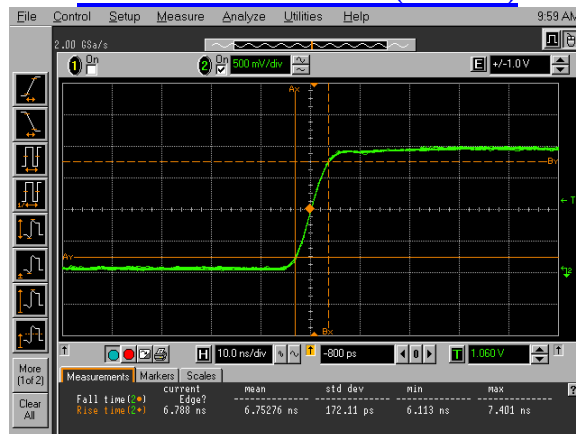


Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

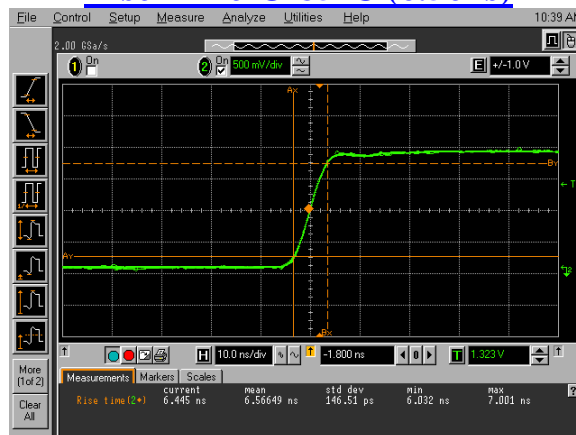
Rise Time @ 25°C (6.48ns)



Rise Time @ -40°C (6.75ns)



Rise Time @ 85°C (6.56ns)

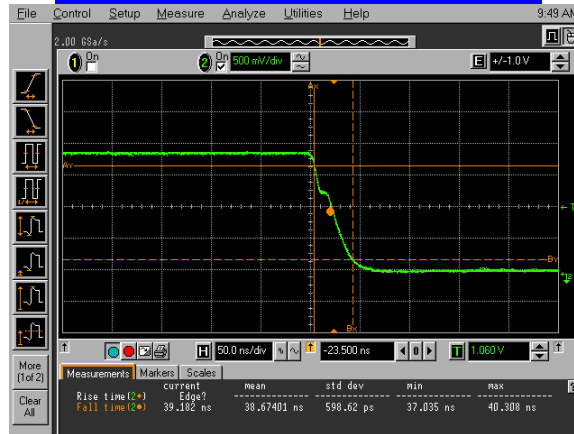


7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com

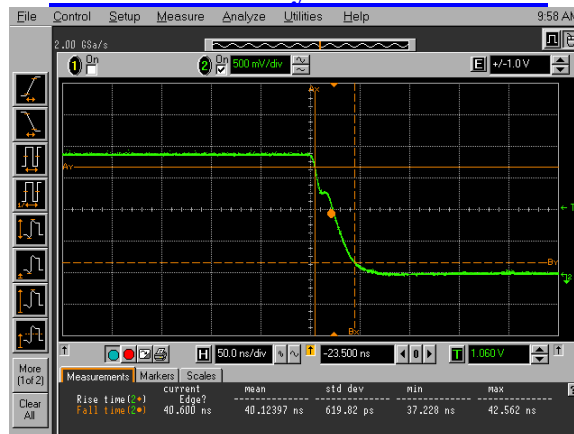


Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

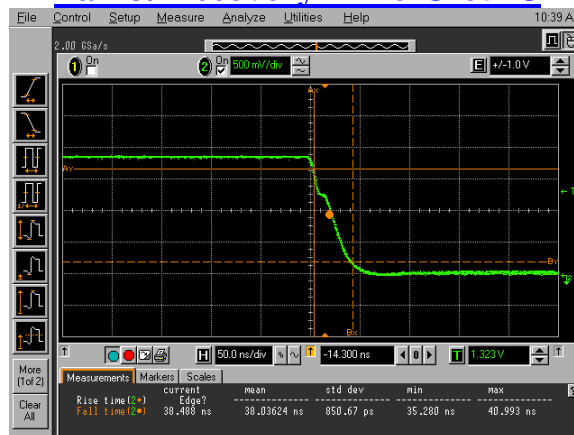
Fall & Recovery Time @ 25°C



Fall & Recovery Time @ -40°C



Fall & Recovery Time @ 85°C

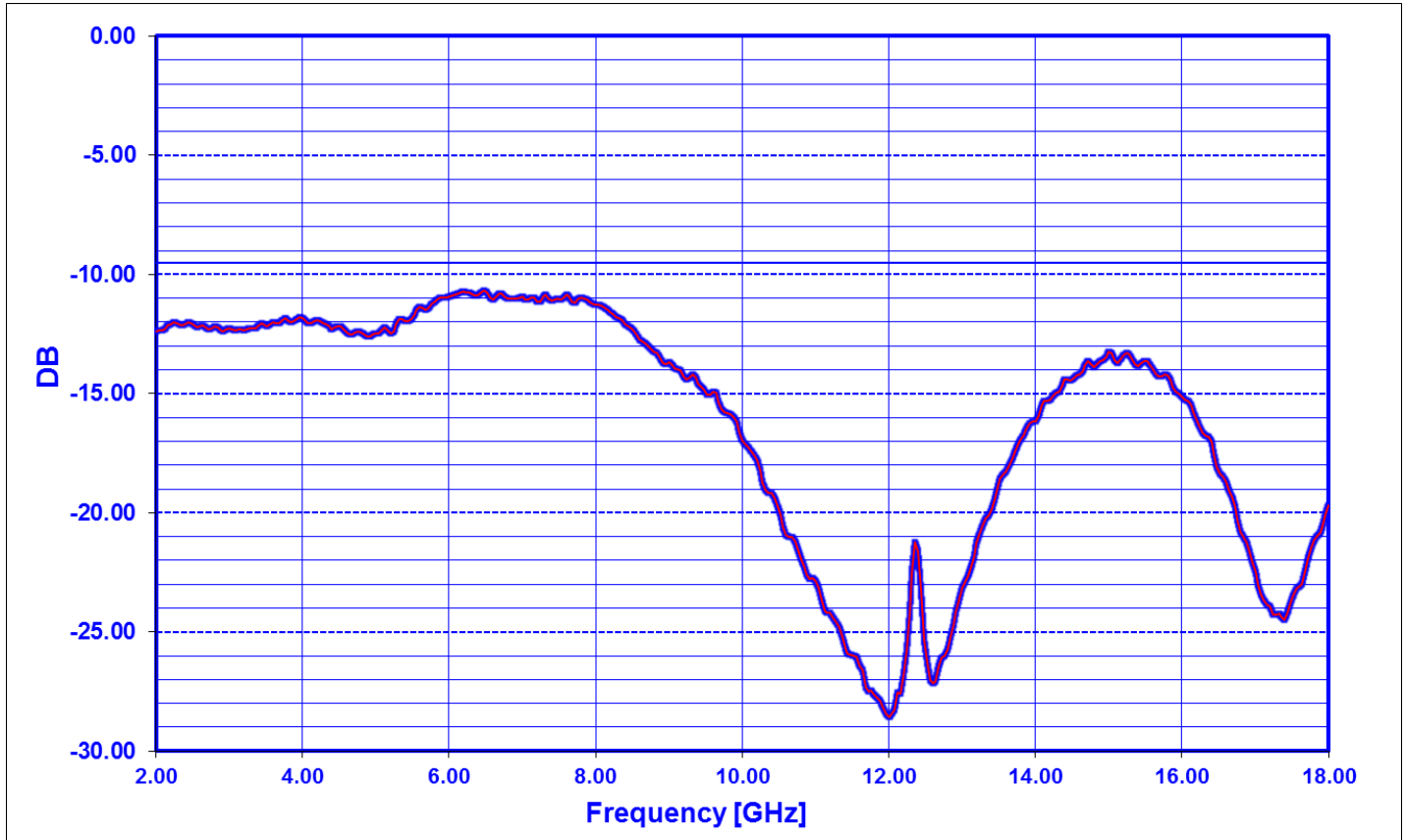


7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi.com



Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Input Return Loss





Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Simultaneous Signal Compression Matrix @ -40dBm & -45dBm Raw Data

Simultaneous Signal Compression Matrix									
-45dBm									
	2 GHz	4 GHz	6 GHz	8 GHz	10 GHz	12 GHz	14 GHz	16 GHz	18 GHz
2 GHz	X	-2.9dB	-1.4dB	0.7dB	0.3dB	0.5dB	-0.4dB	0dB	-1.2dB
4 GHz	-7.7dB	X	-4.1dB	-2.1dB	-2.6dB	-2.4dB	-3.2dB	-3.2dB	-4.4dB
6 GHz	-9.4dB	-6.9dB	X	-3.3dB	-3.9dB	-4dB	-4.7dB	-5dB	-6.1dB
8 GHz	-12.1dB	-9.5dB	-8.3dB	X	-6.6dB	-6.7dB	-7.9dB	-7.8dB	-9.1dB
10 GHz	-11.3dB	-8.7dB	-7.8dB	-5.5dB	X	-6.4dB	-7.1dB	-7.5dB	-8.9dB
12 GHz	-12dB	-9.2dB	-8.1dB	-5.8dB	-6.3dB	X	-7.8dB	-8.2dB	-9.3dB
14 GHz	-10.9dB	-8.4dB	-7.1dB	-5dB	-5.6dB	-5.6dB	X	-7.6dB	-8.3dB
16 GHz	-10.6dB	-8.2dB	-7dB	-4.6dB	-5.3dB	-5.1dB	-6.1dB	X	-8dB
18 GHz	-9.5dB	-7.2dB	-5.7dB	-3.6dB	-4dB	-3.9dB	-5.3dB	-5.9dB	X

Simultaneous Signal Compression Matrix @ -40dBm & -45dBm Output Flatness Normalized

Simultaneous Signal Compression Matrix									
-45dBm									
	2 GHz	4 GHz	6 GHz	8 GHz	10 GHz	12 GHz	14 GHz	16 GHz	18 GHz
2 GHz	X	-5.1dB	-4.9dB	-4.3dB	-4.5dB	-4.2dB	-4.1dB	-4.3dB	-4.3dB
4 GHz	-5.5dB	X	-5.3dB	-4.9dB	-5.2dB	-4.8dB	-4.7dB	-5.3dB	-5.2dB
6 GHz	-6dB	-5.7dB	X	-4.9dB	-5.2dB	-5.2dB	-4.9dB	-5.9dB	-5.7dB
8 GHz	-7.1dB	-6.7dB	-6.7dB	X	-6.3dB	-6.3dB	-6.6dB	-7.2dB	-7.2dB
10 GHz	-6.6dB	-6.2dB	-6.4dB	-5.8dB	X	-6.3dB	-6.1dB	-7dB	-7.3dB
12 GHz	-7.4dB	-6.8dB	-6.9dB	-6.2dB	-6.4dB	X	-6.8dB	-7.9dB	-7.7dB
14 GHz	-7.2dB	-6.9dB	-6.8dB	-6.3dB	-6.7dB	-6.5dB	X	-8.3dB	-7.6dB
16 GHz	-6.2dB	-6.1dB	-6.1dB	-5.3dB	-5.7dB	-5.4dB	-5.4dB	X	-6.8dB
18 GHz	-6.5dB	-6.3dB	-6.1dB	-5.5dB	-5.7dB	-5.5dB	-5.9dB	-7.2dB	X

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com



Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Simultaneous Signal Compression Matrix @ -30dBm & -35dBm Raw Data

Simultaneous Signal Compression Matrix									
-35dBm									
-30dBm	2 GHz	4 GHz	6 GHz	8 GHz	10 GHz	12 GHz	14 GHz	16 GHz	18 GHz
2 GHz	X	-4.5dB	-2.7dB	0.1dB	-0.4dB	0.3dB	-1.6dB	-2.9dB	-4.8dB
4 GHz	-9.4dB	X	-6.2dB	-3.4dB	-4.1dB	-3.6dB	-5.4dB	-7.4dB	-9dB
6 GHz	-11.8dB	-9dB	X	-5.8dB	-6.7dB	-6.5dB	-8.2dB	-10.7dB	-11.7dB
8 GHz	-14.1dB	-12.1dB	-10.3dB	X	-10.1dB	-10dB	-11.8dB	-13.5dB	-15dB
10 GHz	-13.6dB	-11.5dB	-9.6dB	-7.4dB	X	-9.2dB	-10.7dB	-11.9dB	-14.1dB
12 GHz	-15.1dB	-12.5dB	-10.1dB	-8.6dB	-8.7dB	X	-11.5dB	-12.3dB	-13.8dB
14 GHz	-14.4dB	-11.3dB	-9.2dB	-7.7dB	-7.9dB	-7.1dB	X	-11.9dB	-13.2dB
16 GHz	-11.6dB	-9.3dB	-7dB	-5.3dB	-5.9dB	-5.7dB	-6.4dB	X	-10.9dB
18 GHz	-9.4dB	-7.1dB	-5.1dB	-3.6dB	-5dB	-4.9dB	-6.2dB	-7dB	X

Simultaneous Signal Compression Matrix @ -30dBm & -35dBm Output Flatness Normalized

Simultaneous Signal Compression Matrix									
-35dBm									
-30dBm	2 GHz	4 GHz	6 GHz	8 GHz	10 GHz	12 GHz	14 GHz	16 GHz	18 GHz
2 GHz	X	-6.7dB	-6.1dB	-4.9dB	-5.2dB	-4.4dB	-5.3dB	-7.2dB	-7.9dB
4 GHz	-7.1dB	X	-7.5dB	-6.2dB	-6.6dB	-6dB	-6.8dB	-9.6dB	-9.8dB
6 GHz	-8.3dB	-7.8dB	X	-7.3dB	-8dB	-7.7dB	-8.5dB	-11.6dB	-11.3dB
8 GHz	-9.1dB	-9.3dB	-8.7dB	X	-9.9dB	-9.7dB	-10.5dB	-12.8dB	-13.1dB
10 GHz	-8.9dB	-8.9dB	-8.2dB	-7.6dB	X	-9.1dB	-9.6dB	-11.5dB	-12.4dB
12 GHz	-10.4dB	-10dB	-8.9dB	-9dB	-8.8dB	X	-10.5dB	-12dB	-12.2dB
14 GHz	-10.7dB	-9.8dB	-9dB	-9.1dB	-9dB	-8dB	X	-12.5dB	-12.6dB
16 GHz	-7.3dB	-7.2dB	-6.1dB	-5.9dB	-6.3dB	-6dB	-5.7dB	X	-9.7dB
18 GHz	-6.3dB	-6.2dB	-5.5dB	-5.5dB	-6.7dB	-6.5dB	-6.8dB	-8.2dB	X



Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Simultaneous Signal Compression Matrix @ -20dBm & -25dBm Raw Data

		Simultaneous Signal Compression Matrix								
		-25dBm								
		2 GHz	4 GHz	6 GHz	8 GHz	10 GHz	12 GHz	14 GHz	16 GHz	18 GHz
-20dBm	2 GHz	X	-8.3dB	-5dB	-1.9dB	-2.9dB	-1.2dB	-4.1dB	-8.5dB	-11.3dB
	4 GHz	-10.5dB	X	-9.6dB	-7.1dB	-8.4dB	-6.6dB	-9dB	-12dB	-14.1dB
	6 GHz	-14.1dB	-9.9dB	X	-9.5dB	-11.3dB	-8.7dB	-11dB	-14.2dB	-14.9dB
	8 GHz	-15.3dB	-12.6dB	-10.6dB	X	-11.5dB	-11dB	-13.1dB	-16.1dB	-16.8dB
	10 GHz	-14.6dB	-12.2dB	-10.1dB	-8.6dB	X	-9.6dB	-10.3dB	-12.2dB	-14.7dB
	12 GHz	-18.7dB	-14.2dB	-11.7dB	-11.1dB	-10dB	X	-11.9dB	-11.7dB	-13.1dB
	14 GHz	-20.2dB	-14.4dB	-11dB	-10dB	-9.7dB	-7.7dB	X	-12.3dB	-12.1dB
	16 GHz	-15.5dB	-12dB	-8.4dB	-7dB	-7.3dB	-6.8dB	-6.6dB	X	-11.9dB
	18 GHz	-12.1dB	-8.2dB	-5.5dB	-4.5dB	-5.3dB	-4.5dB	-6.5dB	-7.7dB	X

Simultaneous Signal Compression Matrix @ -20dBm & -25dBm Output Flatness Normalized

		Simultaneous Signal Compression Matrix								
		-25dBm								
		2 GHz	4 GHz	6 GHz	8 GHz	10 GHz	12 GHz	14 GHz	16 GHz	18 GHz
-20dBm	2 GHz	X	-10.6dB	-8.5dB	-6.9dB	-7.6dB	-5.8dB	-7.8dB	-12.8dB	-14.3dB
	4 GHz	-8.3dB	X	-10.8dB	-9.9dB	-11dB	-9dB	-10.4dB	-14.1dB	-14.9dB
	6 GHz	-10.7dB	-8.6dB	X	-11dB	-12.6dB	-9.9dB	-11.3dB	-15.1dB	-14.6dB
	8 GHz	-10.2dB	-9.8dB	-9dB	X	-11.2dB	-10.7dB	-11.8dB	-15.4dB	-14.9dB
	10 GHz	-9.9dB	-9.6dB	-8.8dB	-8.8dB	X	-9.5dB	-9.2dB	-11.8dB	-13dB
	12 GHz	-14.1dB	-11.8dB	-10.5dB	-11.5dB	-10.1dB	X	-10.9dB	-11.4dB	-11.5dB
	14 GHz	-16.5dB	-12.9dB	-10.8dB	-11.4dB	-10.8dB	-8.7dB	X	-13dB	-11.5dB
	16 GHz	-11.1dB	-9.9dB	-7.5dB	-7.7dB	-7.7dB	-7.1dB	-6dB	X	-10.6dB
	18 GHz	-9dB	-7.4dB	-5.9dB	-6.5dB	-7dB	-6.1dB	-7.2dB	-9dB	X

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com



Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Simultaneous Signal Compression Matrix @ -10dBm & -15dBm Raw Data

		Simultaneous Signal Compression Matrix								
		-15dBm								
		2 GHz	4 GHz	6 GHz	8 GHz	10 GHz	12 GHz	14 GHz	16 GHz	18 GHz
-10dBm	2 GHz	X	-14.3dB	-15.6dB	-15.5dB	-18.9dB	-18.7dB	-22.3dB	-35.3dB	-34.1dB
	4 GHz	-10.1dB	X	-11.8dB	-14.5dB	-17.1dB	-15dB	-19.5dB	-23.2dB	-28.9dB
	6 GHz	-11.3dB	-9dB	X	-10.9dB	-14.7dB	-12.5dB	-14.7dB	-17.6dB	-17.8dB
	8 GHz	-12.3dB	-11dB	-10.3dB	X	-11.5dB	-12.6dB	-15.5dB	-19.5dB	-19.7dB
	10 GHz	-13.6dB	-11.9dB	-10.2dB	-8.9dB	X	-10dB	-11.7dB	-14.5dB	-17.3dB
	12 GHz	-18.1dB	-14.9dB	-12.1dB	-9.9dB	-9.6dB	X	-11.3dB	-12.6dB	-14.2dB
	14 GHz	-18.9dB	-14.5dB	-11.9dB	-9.6dB	-8.5dB	-7.4dB	X	-11.6dB	-12.9dB
	16 GHz	-14.6dB	-12.6dB	-9.1dB	-7.1dB	-6.8dB	-6.2dB	-7.1dB	X	-11dB
	18 GHz	-10.9dB	-8.8dB	-5.5dB	-3.5dB	-4dB	-3.5dB	-5.3dB	-7.7dB	X

Simultaneous Signal Compression Matrix @ -10dBm & -15dBm Output Flatness Normalized

		Simultaneous Signal Compression Matrix								
		-15dBm								
		2 GHz	4 GHz	6 GHz	8 GHz	10 GHz	12 GHz	14 GHz	16 GHz	18 GHz
-10dBm	2 GHz	X	-16.5dB	-19.1dB	-20.5dB	-23.7dB	-23.3dB	-26dB	-39.6dB	-37.2dB
	4 GHz	-7.8dB	X	-13dB	-17.3dB	-19.7dB	-17.4dB	-20.9dB	-25.4dB	-29.7dB
	6 GHz	-7.9dB	-7.8dB	X	-12.4dB	-16dB	-13.7dB	-14.9dB	-18.5dB	-17.4dB
	8 GHz	-7.3dB	-8.2dB	-8.7dB	X	-11.2dB	-12.2dB	-14.2dB	-18.9dB	-17.8dB
	10 GHz	-8.8dB	-9.3dB	-8.8dB	-9.1dB	X	-9.9dB	-10.6dB	-14.1dB	-15.6dB
	12 GHz	-13.4dB	-12.5dB	-10.9dB	-10.3dB	-9.7dB	X	-10.4dB	-12.3dB	-12.7dB
	14 GHz	-15.2dB	-13.1dB	-11.6dB	-11dB	-9.6dB	-8.4dB	X	-12.3dB	-12.2dB
	16 GHz	-10.2dB	-10.5dB	-8.2dB	-7.8dB	-7.2dB	-6.5dB	-6.4dB	X	-9.7dB
	18 GHz	-7.9dB	-8dB	-5.9dB	-5.4dB	-5.7dB	-5.1dB	-6dB	-9dB	X

7311-F Grove Road Frederick, MD 21704 USA Phone: (301)662-5019 Fax: (301)662-1731
Email: sales@pmi-rf.com



Typical Characteristics For SDLVA-6G18G-CD-2-OPT218-NRF

Simultaneous Signal Compression Matrix @ 0dBm & -5dBm Raw Data

Simultaneous Signal Compression Matrix

-5dBm

0dBm

	2 GHz	4 GHz	6 GHz	8 GHz	10 GHz	12 GHz	14 GHz	16 GHz	18 GHz
2 GHz	X	-19.9dB	-18.9dB	-19.6dB	-21.7dB	-17.5dB	-19.2dB	-25.4dB	-35.1dB
4 GHz	-9.7dB	X	-13.3dB	-23.1dB	-20.6dB	-17.1dB	-19.6dB	-26.2dB	-28.3dB
6 GHz	-10.1dB	-8.8dB	X	-11.9dB	-17.9dB	-26.1dB	-20.5dB	-19.2dB	-18.8dB
8 GHz	-11.4dB	-9.7dB	-9.6dB	X	-12.8dB	-15dB	-18.4dB	-28.4dB	-22.9dB
10 GHz	-12.8dB	-11.1dB	-8.7dB	-7.8dB	X	-11dB	-13.4dB	-17.7dB	-21.2dB
12 GHz	-16.7dB	-14.2dB	-10.7dB	-8.9dB	-9.9dB	X	-11.6dB	-14.2dB	-16.5dB
14 GHz	-16.9dB	-13.9dB	-10.9dB	-9.4dB	-9dB	-7.9dB	X	-11.3dB	-13.5dB
16 GHz	-11.4dB	-12.9dB	-9.2dB	-7.6dB	-7.7dB	-7.1dB	-7.5dB	X	-11dB
18 GHz	-8.4dB	-8.2dB	-6dB	-3.4dB	-4.5dB	-4.2dB	-5.6dB	-8.2dB	X

Simultaneous Signal Compression Matrix @ 0dBm & -5dBm Output Flatness Normalized

Simultaneous Signal Compression Matrix

-5dBm

0dBm

	2 GHz	4 GHz	6 GHz	8 GHz	10 GHz	12 GHz	14 GHz	16 GHz	18 GHz
2 GHz	X	-22.2dB	-22.3dB	-24.7dB	-26.4dB	-22.2dB	-22.9dB	-29.7dB	-38.2dB
4 GHz	-7.5dB	X	-14.5dB	-25.9dB	-23.1dB	-19.5dB	-21dB	-28.4dB	-29.2dB
6 GHz	-6.6dB	-7.6dB	X	-13.5dB	-19.2dB	-27.3dB	-20.8dB	-20.1dB	-18.4dB
8 GHz	-6.3dB	-6.9dB	-8dB	X	-12.5dB	-14.6dB	-17.1dB	-27.7dB	-20.9dB
10 GHz	-8dB	-8.6dB	-7.4dB	-8dB	X	-10.9dB	-12.4dB	-17.3dB	-19.5dB
12 GHz	-12dB	-11.8dB	-9.5dB	-9.2dB	-10dB	X	-10.6dB	-13.9dB	-14.9dB
14 GHz	-13.2dB	-12.5dB	-10.7dB	-10.7dB	-10dB	-8.8dB	X	-12dB	-12.9dB
16 GHz	-7dB	-10.8dB	-8.3dB	-8.3dB	-8.1dB	-7.4dB	-6.8dB	X	-9.7dB
18 GHz	-5.3dB	-7.3dB	-6.4dB	-5.4dB	-6.2dB	-5.8dB	-6.2dB	-9.5dB	X