SUMMARY TEST DATA
ON
SDLVA-6G18G-CD-2-OPT218

PL36647/2221

Customer: [redacted]
SO No: [redacted]
Model No: SDLVA-6G18G-CD-2-OPT218
Serial No: PL36647/2221

Tested By: RCombs
Temperature: +25° C
Date: 6/2/2022
Drawing No: 27623906 **Rev:** A1

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**	PMI QA 2
2	Flatness:	± 2.0 dB Maximum	**±1.3 dB 25°C See Plots**	
3	TSS:	-70 dBm Minimum	**-72 dBm**	
4	VSWR:	2.0:1 (Input)	**1.8:1 (Input)**	
5	Power Input:	+17 dBm CW Maximum	**Pass**	
6	RF Out:	+13 dBm ±3 dB Typical	**11.80 dBm Avg.**	
7	Log Slope:	25 mV/dB (±10%) 50Ω	**25.3 mV/dB See Plots**	
8	Log Range:	-70 to +5 dBm	**-70 to +5 dBm See Plots**	
9	Log Linearity:	±2.5 dB (-40°C - +85°C)	**±1.8 dB See Plots**	
10	Pulse Range:	30 ns to CW	**Pass**	
11	Rise Time:	10 ns (6 ns Typical)	**6.0 ns**	
12	Recovery Time:	60 ns Typical	**46.3 ns**	
13	DC Supply:	+15V or +12V @ 350 mA '-15V or -12V @ 180 mA	**+12V @ 256 mA** **-12V @ 97 mA**	PMI QA 2

QA/QC Approval: [signature] PMI QA 2 **Date:** 6/2/2022

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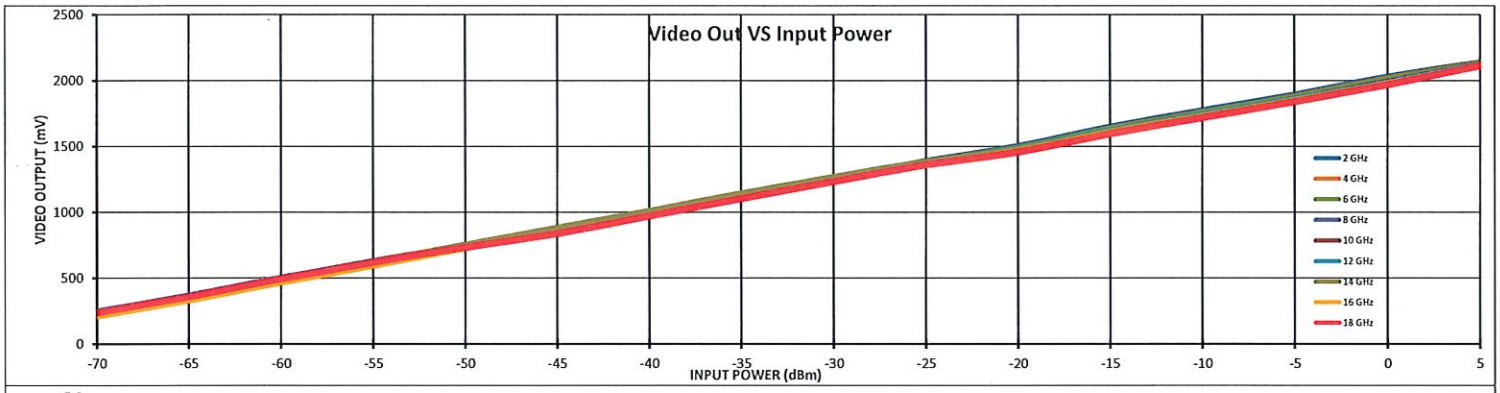
SUMMARY TEST DATA
ON
SDLVA-6G18G-CD-2-OPT218

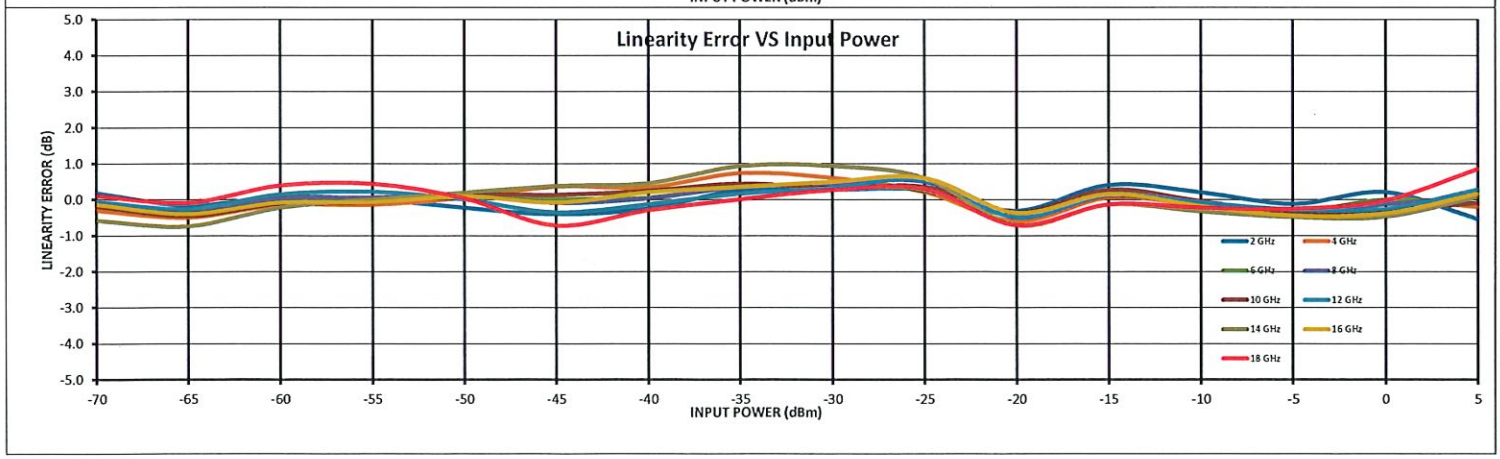
PL36647/2221

Log Transfer Over Frequency +25°C

Model: SDLVA-6G18G-CD-2-OPT218
Serial No: PL36647/2221
Date: 6/2/2022
Tested By: RCombs
Test Temp: · +25°C

Frequency			-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	2028	230	350	485	612	735	859	992	1134	1263	1392	1505	1653	1776	1897	2034	2143	Measured Value (mV)
	SLOPE (mV/dB)	25.8	5	-4	2	0	-6	-10	-6	7	7	7	-8	11	5	-3	6	-14	ERROR (mV)
	LIN. ERR. (dB)	0.5	0.19	-0.15	0.09	0.02	-0.22	-0.40	-0.24	0.27	0.28	0.28	-0.30	0.42	0.21	-0.11	0.21	-0.53	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	2021	225	348	485	613	745	881	1008	1146	1270	1388	1495	1639	1761	1884	2021	2143	Measured Value (mV)
	SLOPE (mV/dB)	25.5	-8	-13	-4	-3	1	10	9	19	15	6	-15	2	-4	-9	0	-5	ERROR (mV)
	LIN. ERR. (dB)	0.7	-0.30	-0.50	-0.14	-0.14	0.06	0.37	0.34	0.75	0.61	0.22	-0.61	0.06	-0.15	-0.35	-0.01	-0.20	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	2016	227	349	486	614	742	869	997	1133	1261	1385	1495	1639	1759	1880	2016	2141	Measured Value (mV)
	SLOPE (mV/dB)	25.5	-3	-9	0	1	2	1	2	10	10	7	-11	5	-2	-8	0	-2	Error (mV)
	LIN. ERR. (dB)	0.4	-0.13	-0.36	0.00	0.03	0.06	0.03	0.06	0.38	0.39	0.26	-0.45	0.22	-0.08	-0.33	0.00	-0.09	LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	2000	227	348	484	612	739	860	990	1124	1253	1381	1482	1624	1743	1864	1997	2129	Measured Value (mV)
	SLOPE (mV/dB)	25.3	-4	-10	1	2	3	-2	1	9	11	13	-12	3	-4	-10	-3	3	ERROR (mV)
	LIN. ERR. (dB)	0.5	-0.15	-0.38	0.03	0.06	0.11	-0.09	0.04	0.36	0.43	0.50	-0.49	0.13	-0.16	-0.39	-0.12	0.10	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	2001	216	336	472	600	733	860	990	1122	1246	1374	1483	1626	1745	1865	1994	2126	Measured Value (mV)
	SLOPE (mV/dB)	25.4	-5	-12	-3	-2	4	3	6	12	8	9	-9	7	-1	-9	-7	-2	Error (mV)
	LIN. ERR. (dB)	0.5	-0.18	-0.45	-0.11	-0.08	0.15	0.14	0.25	0.45	0.32	0.36	-0.36	0.28	-0.05	-0.35	-0.28	-0.09	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	1987	246	365	500	626	745	860	990	1122	1249	1380	1478	1618	1737	1856	1981	2119	Measured Value (mV)
	SLOPE (mV/dB)	24.9	-1	-6	4	6	0	-9	-3	4	8	14	-12	3	-2	-7	-6	7	ERROR (mV)
	LIN. ERR. (dB)	0.6	-0.05	-0.25	0.15	0.22	0.01	-0.34	-0.12	0.18	0.31	0.56	-0.49	0.14	-0.08	-0.27	-0.25	0.29	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	1987	236	356	493	623	751	880	1006	1142	1266	1382	1473	1611	1731	1851	1975	2113	Measured Value (mV)
	SLOPE (mV/dB)	24.8	-14	-18	-5	0	5	10	11	23	23	15	-18	-3	-8	-12	-12	2	ERROR (mV)
	LIN. ERR. (dB)	0.9	-0.57	-0.73	-0.22	0.02	0.20	0.39	0.46	0.94	0.94	0.61	-0.71	-0.13	-0.32	-0.48	-0.47	0.08	LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	1991	202	323	459	586	718	841	976	1107	1238	1369	1471	1612	1731	1852	1981	2123	Measured Value (mV)
	SLOPE (mV/dB)	25.5	-3	-10	-2	-2	3	-2	5	9	13	16	-9	4	-5	-11	-10	4	ERROR (mV)
	LIN. ERR. (dB)	0.6	-0.13	-0.39	-0.08	-0.07	0.10	-0.07	0.21	0.36	0.50	0.61	-0.36	0.16	-0.18	-0.45	-0.38	0.17	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	1971	240	359	495	620	733	839	973	1104	1235	1359	1458	1596	1718	1841	1971	2116	Measured Value (mV)
	SLOPE (mV/dB)	24.8	3	-2	10	11	1	-18	-7	0	7	8	-18	-3	-6	-6	0	21	ERROR (mV)
	LIN. ERR. (dB)	0.9	0.11	-0.08	0.39	0.44	0.04	-0.72	-0.29	0.02	0.27	0.30	-0.71	-0.13	-0.22	-0.25	-0.02	0.86	LINEARITY ERROR (dB)
Avg. Slope: 25.3 mV/dB			0.9	0.8	0.8	0.8	0.7	0.8	0.7	0.8	0.7	0.6	0.9	1.1	1.2	1.1	1.3	0.6	Flatness dB: ±1.3 dB





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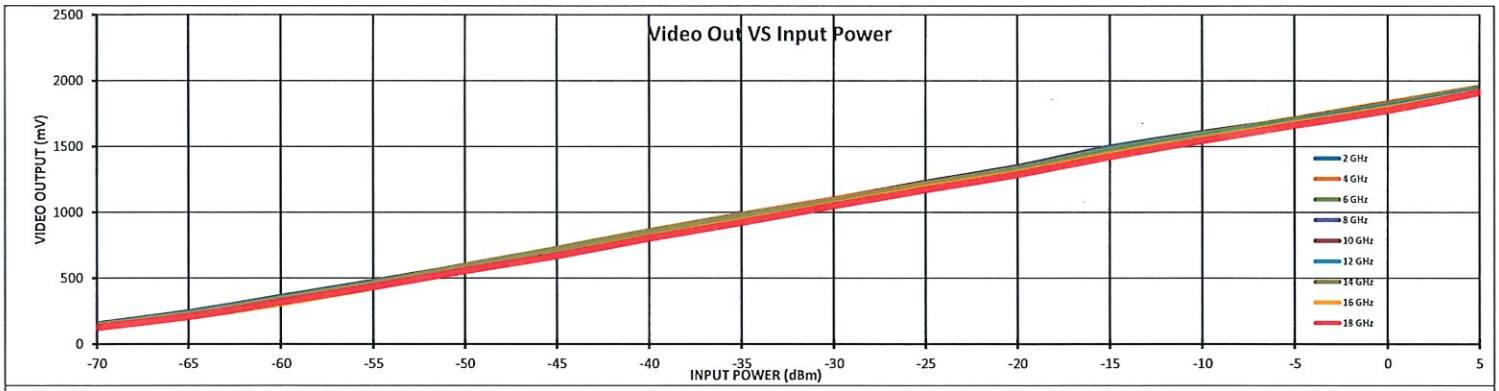
SUMMARY TEST DATA
ON
SDLVA-6G18G-CD-2-OPT218

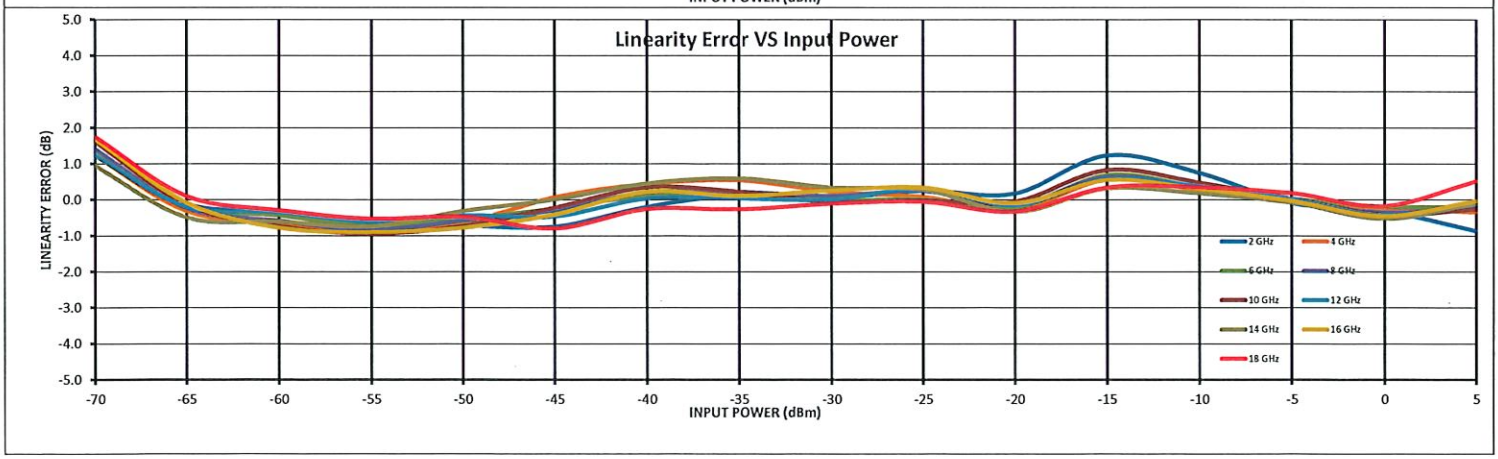
PL36647/2221

Log Transfer Over Frequency +85°C

Model: SDLVA-6G18G-CD-2-OPT218
Serial No: PL36647/2221
Date: 6/2/2022
Tested By: RCombs
Test Temp: · +85°C

Frequency			-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	1831	155	243	360	475	594	715	851	981	1101	1228	1348	1496	1606	1707	1824	1932	Measured Value (mV)
	SLOPE (mV/dB)	24.4	31	-3	-7	-15	-17	-18	-5	4	1	6	4	30	18	-2	-7	-21	ERROR (mV)
	LIN. ERR. (dB)	1.3	1.26	-0.12	-0.30	-0.61	-0.70	-0.74	-0.19	0.14	0.05	0.26	0.18	1.24	0.75	-0.08	-0.30	-0.86	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	1837	138	223	339	455	586	727	860	986	1102	1222	1336	1481	1597	1712	1832	1953	Measured Value (mV)
	SLOPE (mV/dB)	24.7	30	-8	-16	-23	-16	2	11	13	6	2	-7	14	7	-2	-6	-8	ERROR (mV)
	LIN. ERR. (dB)	1.2	1.23	-0.32	-0.64	-0.92	-0.65	0.07	0.44	0.54	0.23	0.08	-0.27	0.57	0.27	-0.07	-0.23	-0.34	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	1829	140	226	343	459	587	716	848	972	1091	1214	1332	1477	1592	1707	1824	1947	Measured Value (mV)
	SLOPE (mV/dB)	24.6	33	-4	-11	-18	-13	-6	3	3	0	0	-5	17	9	1	-4	-5	Error (mV)
	LIN. ERR. (dB)	1.3	1.34	-0.18	-0.44	-0.72	-0.51	-0.25	0.12	0.14	-0.01	0.02	-0.21	0.69	0.36	0.03	-0.18	-0.19	LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	1815	130	213	327	443	573	703	838	961	1081	1207	1321	1463	1578	1691	1807	1933	Measured Value (mV)
	SLOPE (mV/dB)	24.6	35	-5	-14	-21	-14	-7	5	6	3	6	-3	16	8	-1	-8	-5	ERROR (mV)
	LIN. ERR. (dB)	1.4	1.42	-0.22	-0.58	-0.84	-0.57	-0.29	0.22	0.22	0.11	0.25	-0.13	0.64	0.34	-0.04	-0.34	-0.19	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	1812	120	201	310	428	557	693	831	952	1068	1193	1316	1461	1576	1689	1801	1929	Measured Value (mV)
	SLOPE (mV/dB)	24.7	40	-3	-18	-23	-18	-5	9	6	-1	0	-1	21	12	1	-10	-6	Error (mV)
	LIN. ERR. (dB)	1.6	1.62	-0.14	-0.73	-0.94	-0.73	-0.22	0.35	0.22	-0.06	-0.01	-0.05	0.83	0.48	0.04	-0.41	-0.26	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	1804	144	230	347	461	586	706	839	960	1080	1208	1317	1455	1571	1684	1793	1923	Measured Value (mV)
	SLOPE (mV/dB)	24.1	30	-5	-8	-15	-10	-11	1	1	0	8	-3	14	9	1	-10	-1	ERROR (mV)
	LIN. ERR. (dB)	1.2	1.24	-0.20	-0.33	-0.61	-0.43	-0.46	0.04	0.04	0.01	0.32	-0.14	0.58	0.37	0.03	-0.43	-0.05	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	1801	141	227	344	461	592	720	851	974	1088	1207	1312	1448	1565	1679	1788	1919	Measured Value (mV)
	SLOPE (mV/dB)	24.0	23	-12	-14	-18	-7	0	11	14	8	7	-8	8	4	-2	-13	-2	ERROR (mV)
	LIN. ERR. (dB)	0.9	0.94	-0.49	-0.60	-0.73	-0.31	0.01	0.46	0.60	0.34	0.29	-0.33	0.32	0.18	-0.07	-0.53	-0.09	LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	1803	115	195	301	421	548	681	820	941	1068	1194	1307	1446	1664	1679	1792	1926	Measured Value (mV)
	SLOPE (mV/dB)	24.7	42	-2	-19	-22	-19	-10	6	3	6	9	-2	14	8	0	-11	-1	ERROR (mV)
	LIN. ERR. (dB)	1.7	1.69	-0.07	-0.78	-0.90	-0.78	-0.40	0.23	0.11	0.26	0.35	-0.09	0.55	0.31	-0.02	-0.45	-0.03	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	1779	126	207	319	434	557	670	804	925	1050	1172	1287	1424	1546	1663	1775	1913	Measured Value (mV)
	SLOPE (mV/dB)	24.2	42	2	-7	-13	-11	-19	-6	-6	-3	-1	-8	8	8	5	-4	13	ERROR (mV)
	LIN. ERR. (dB)	1.8	1.75	0.10	-0.29	-0.53	-0.47	-0.80	-0.25	-0.27	-0.10	-0.05	-0.32	0.35	0.35	0.19	-0.17	0.52	LINEARITY ERROR (dB)
	Avg. Slope: 24.5 mV/dB		0.8	1	1.2	1.1	0.9	1.2	1.1	1.2	1.1	1.1	1.2	1.5	1.2	1	1.2	0.8	Flatness dB: ±1.5 dB





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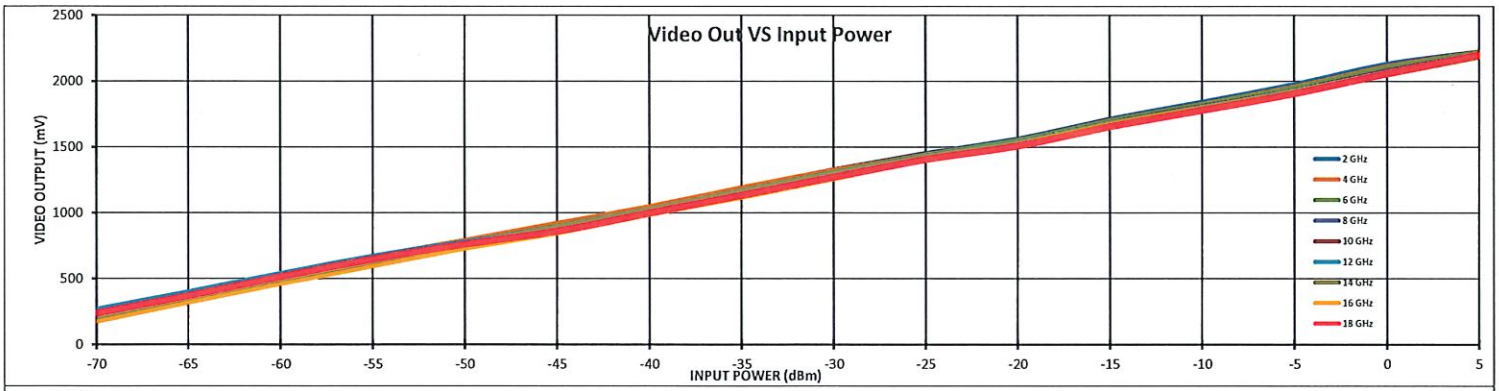
SUMMARY TEST DATA
ON
SDLVA-6G18G-CD-2-OPT218

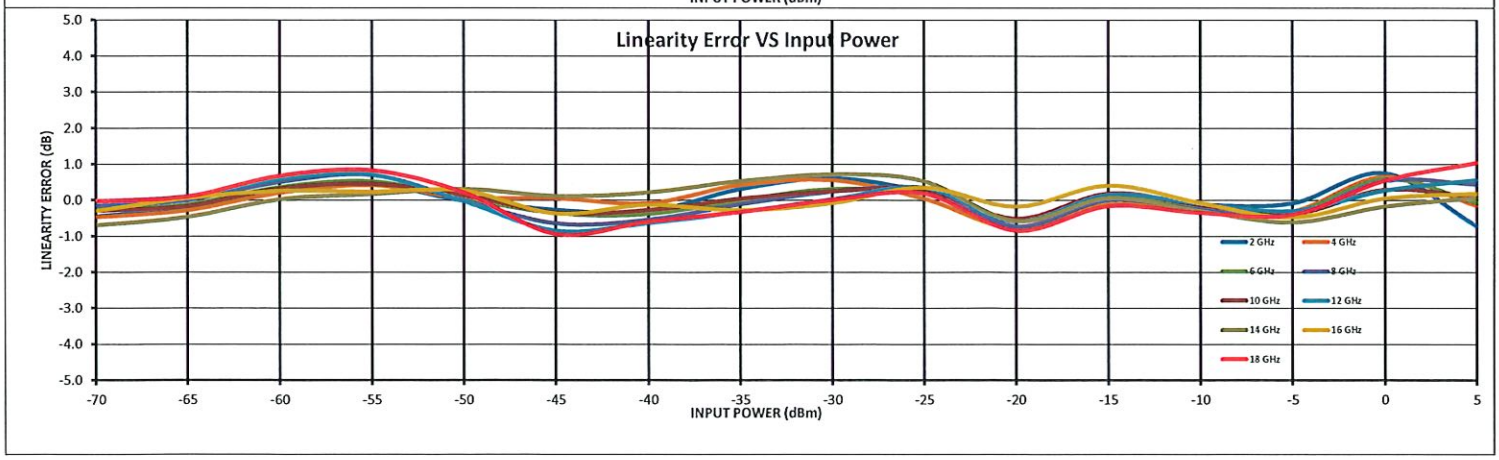
PL36647/2221

Log Transfer Over Frequency -40°C

Model: SDLVA-6G18G-CD-2-OPT218
Serial No: PL36647/2221
Date: 6/2/2022
Tested By: RCombs
Test Temp: -40°C

Frequency			-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
2 GHz	INTERCEPT (mV)	2109	231	371	518	655	776	903	1035	1185	1326	1449	1561	1710	1840	1974	2130	2224	Measured Value (mV)
	SLOPE (mV/dB)	26.7	-12	-5	8	12	0	-7	-8	8	17	6	-15	0	-3	-2	20	-19	ERROR (mV)
	LIN. ERR. (dB)	0.8	-0.45	-0.19	0.29	0.46	-0.01	-0.26	-0.32	0.32	0.62	0.24	-0.57	0.02	-0.12	-0.07	0.76	-0.71	LINEARITY ERROR (dB)
4 GHz	INTERCEPT (mV)	2093	252	387	531	667	788	919	1045	1190	1324	1441	1550	1698	1824	1954	2110	2220	Measured Value (mV)
	SLOPE (mV/dB)	26.1	-12	-7	5	11	2	2	-2	11	15	1	-20	-3	-8	-8	17	-4	ERROR (mV)
	LIN. ERR. (dB)	0.8	-0.47	-0.28	0.21	0.42	0.07	0.06	-0.09	0.43	0.57	0.05	-0.78	-0.11	-0.29	-0.31	0.66	-0.14	LINEARITY ERROR (dB)
6 GHz	INTERCEPT (mV)	2087	245	379	523	658	777	898	1028	1169	1309	1437	1549	1696	1820	1948	2103	2217	Measured Value (mV)
	SLOPE (mV/dB)	26.2	-7	-3	10	14	2	-9	-10	0	8	5	-14	3	-4	-8	16	-2	Error (mV)
	LIN. ERR. (dB)	0.6	-0.26	-0.12	0.37	0.53	0.06	-0.36	-0.38	0.01	0.32	0.20	-0.53	0.10	-0.17	-0.32	0.61	-0.06	LINEARITY ERROR (dB)
8 GHz	INTERCEPT (mV)	2067	259	392	534	668	778	891	1022	1162	1300	1431	1533	1680	1803	1927	2081	2207	Measured Value (mV)
	SLOPE (mV/dB)	25.8	-4	0	13	18	0	-17	-14	-3	6	8	-19	0	-6	-10	14	12	ERROR (mV)
	LIN. ERR. (dB)	0.7	-0.15	0.01	0.51	0.71	0.00	-0.64	-0.54	-0.10	0.25	0.33	-0.72	0.01	-0.25	-0.40	0.54	0.45	LINEARITY ERROR (dB)
10 GHz	INTERCEPT (mV)	2072	239	373	516	650	772	889	1022	1160	1296	1428	1537	1685	1808	1931	2079	2204	Measured Value (mV)
	SLOPE (mV/dB)	26.1	-7	-4	9	12	4	-9	-7	1	7	8	-13	5	-3	-10	8	2	Error (mV)
	LIN. ERR. (dB)	0.5	-0.29	-0.16	0.33	0.46	0.14	-0.34	-0.28	0.05	0.25	0.30	-0.52	0.19	-0.13	-0.38	0.30	0.09	LINEARITY ERROR (dB)
12 GHz	INTERCEPT (mV)	2055	260	392	532	664	773	880	1014	1150	1287	1424	1528	1675	1797	1920	2062	2198	Measured Value (mV)
	SLOPE (mV/dB)	25.6	-1	3	15	18	-1	-22	-16	-8	1	9	-15	4	-2	-8	7	15	ERROR (mV)
	LIN. ERR. (dB)	0.8	-0.02	0.11	0.59	0.71	-0.03	-0.84	-0.63	-0.31	0.03	0.36	-0.59	0.16	-0.09	-0.29	0.28	0.57	LINEARITY ERROR (dB)
14 GHz	INTERCEPT (mV)	2062	211	348	492	627	761	887	1020	1160	1295	1421	1523	1671	1792	1915	2057	2195	Measured Value (mV)
	SLOPE (mV/dB)	26.2	-18	-12	1	5	8	3	6	14	19	14	-15	2	-8	-16	-4	2	ERROR (mV)
	LIN. ERR. (dB)	0.7	-0.69	-0.46	0.03	0.17	0.32	0.12	0.22	0.54	0.72	0.54	-0.58	0.07	-0.30	-0.61	-0.17	0.07	LINEARITY ERROR (dB)
16 GHz	INTERCEPT (mV)	2063	173	318	457	591	726	844	985	1115	1255	1401	1521	1671	1793	1916	2065	2203	Measured Value (mV)
	SLOPE (mV/dB)	26.9	-8	2	7	6	7	-10	-3	-7	-2	10	-5	11	-2	-13	1	5	ERROR (mV)
	LIN. ERR. (dB)	0.5	-0.30	0.07	0.26	0.24	0.27	-0.37	-0.12	-0.27	-0.08	0.36	-0.17	0.41	-0.07	-0.47	0.05	0.19	LINEARITY ERROR (dB)
18 GHz	INTERCEPT (mV)	2046	239	371	515	648	761	860	998	1134	1272	1406	1508	1655	1779	1907	2060	2202	Measured Value (mV)
	SLOPE (mV/dB)	25.8	-1	3	18	21	6	-24	-15	-8	0	5	-22	-4	-9	-10	14	27	ERROR (mV)
	LIN. ERR. (dB)	1.043	-0.03	0.10	0.68	0.83	0.22	-0.94	-0.59	-0.32	0.01	0.19	-0.84	-0.16	-0.35	-0.40	0.56	1.04	LINEARITY ERROR (dB)
Avg. Slope: 26.2 mV/dB			1.7	1.4	1.5	1.5	1.2	1.4	1.2	1.4	1.4	0.9	1	1.1	1.2	1.3	1.4	0.6	Flatness dB: ±1.7 dB





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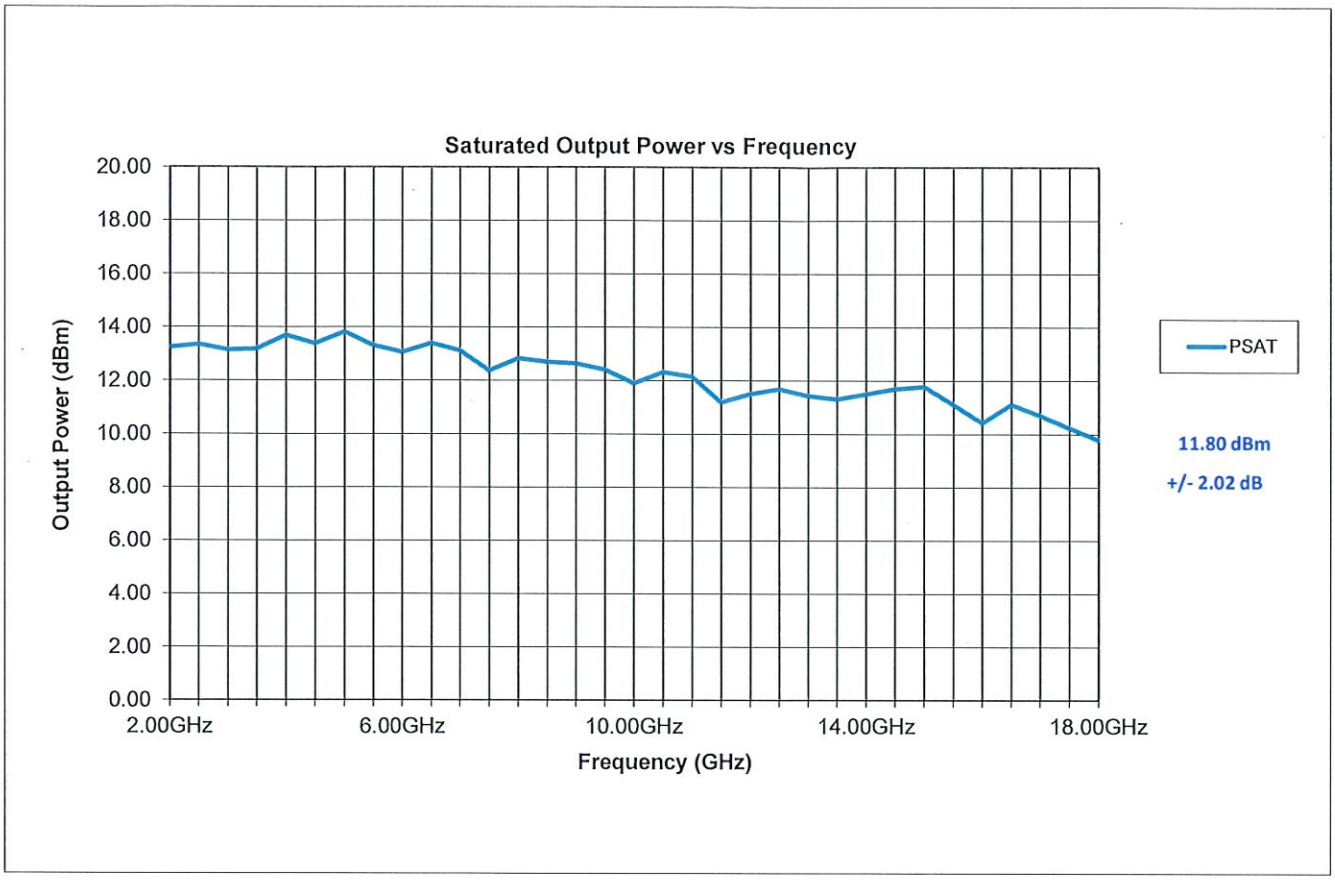
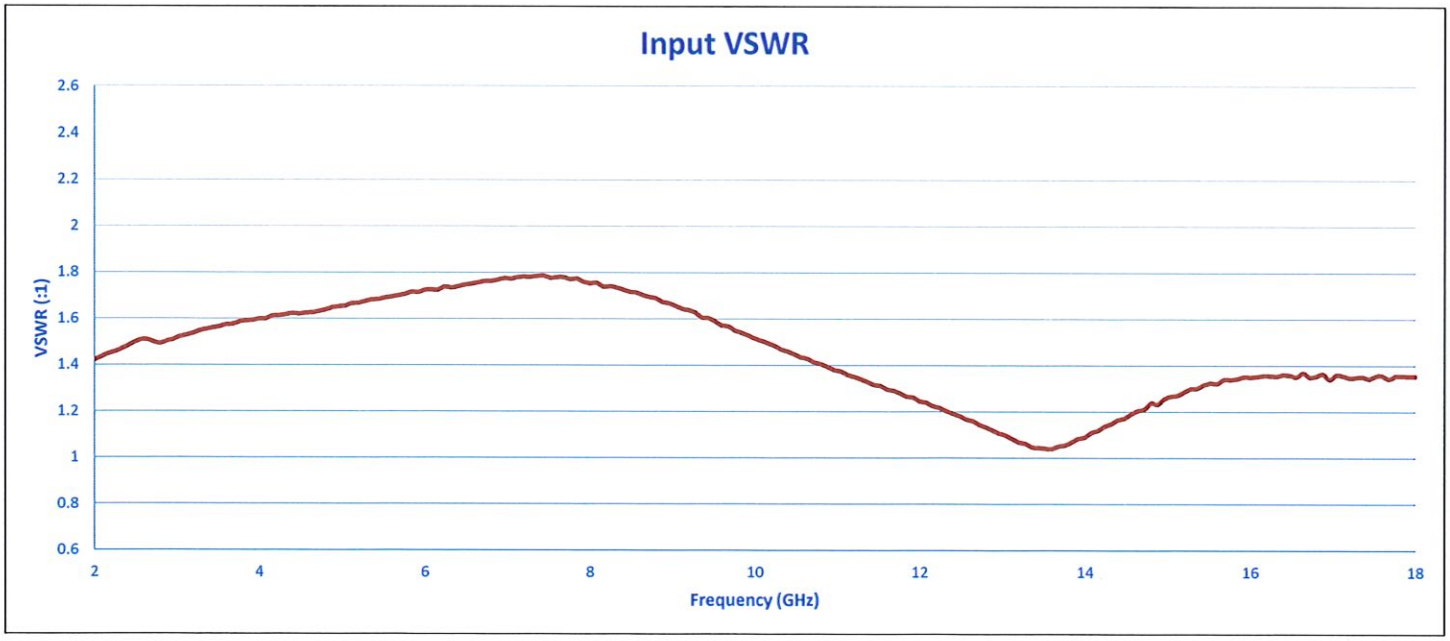
SUMMARY TEST DATA
ON
SDLVA-6G18G-CD-2-OPT218

PL36647/2221

PSAT



INPUT VSWR



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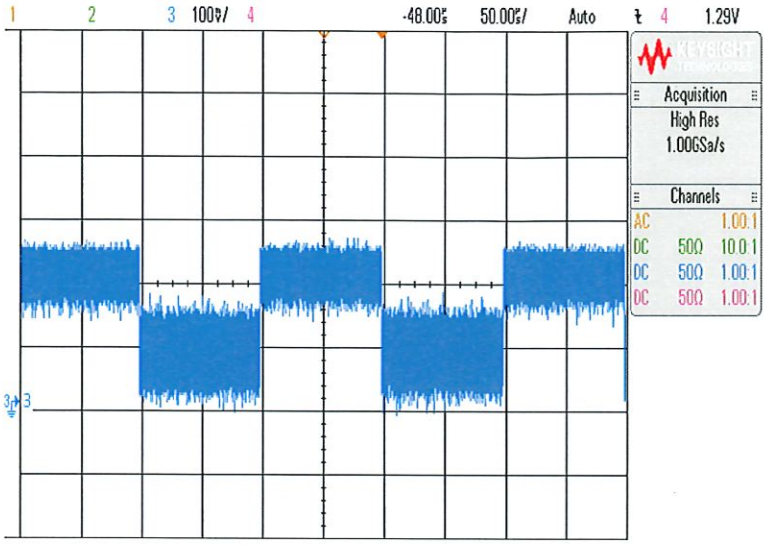
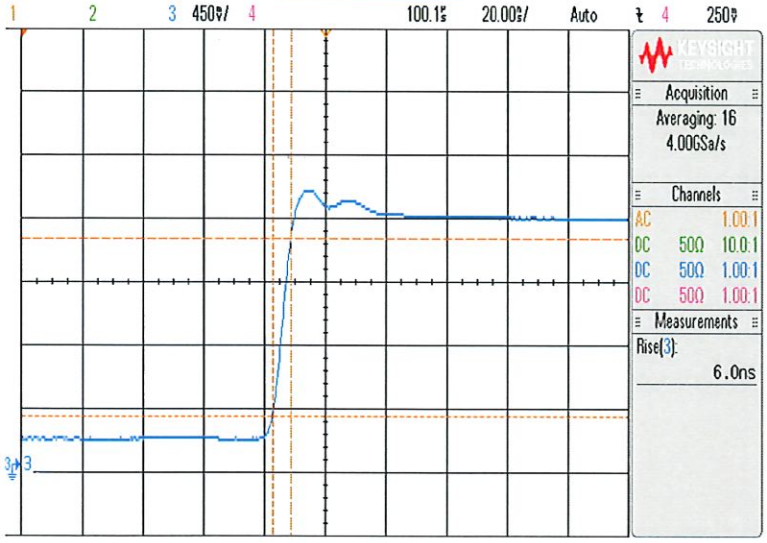
SUMMARY TEST DATA
ON
SDLVA-6G18G-CD-2-OPT218

PL36647/2221

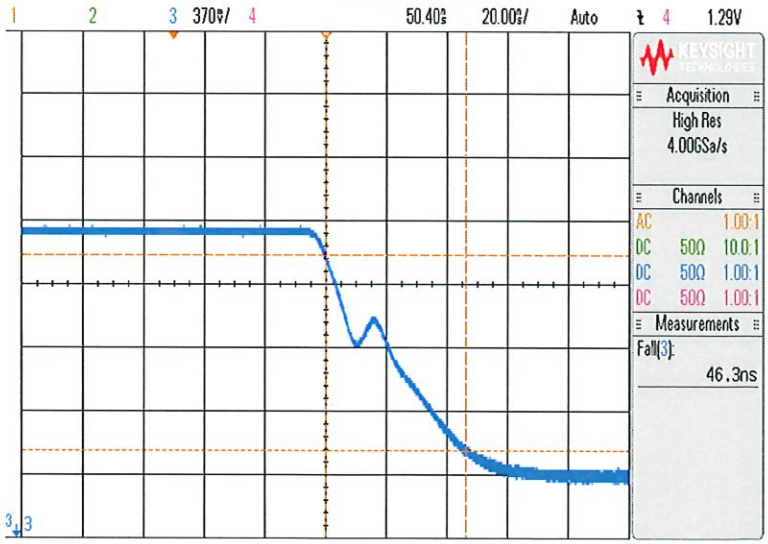
TSS



Rise Time



Fall Time



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