



**SUMMARY TEST DATA
ON
DLVA-6D5G18G-70-JMAKG2**

PL23511/1839

Customer: _____	Tested By: <u>RCombs</u>	
SO No: _____	Temperature: <u>+25°C +85°C -54°C</u>	
Model No: <u>DLVA-6D5G18G-70-JMAKG2</u>	Date: <u>09/27/18</u>	
Serial No: <u>PL23511/1839</u>	Drawing No: <u>27635426</u>	Rev: <u>A1</u>
Part No: <u>27335480</u>		

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	6.5 GHz – 18 GHz	6.5 GHz – 18 GHz	PMI QA1
2	TSS:	-72 dBm Min	-76 dBm (See Plot)	
3	VSWR:	3.0:1 Max	1.38:1 (See Plot)	
4	Video Output Range:	0 VDC to 2.2 VDC into a 50Ω Load	0.31 to 2.14 VDC (See Plots)	
5	Max Video Output:	2.4 V	2.14 VDC	
6	Input Power:	+20 dBm CW Max.	Pass	
7	Log Range:	-70 dBm to 0 dBm	-70 dBm to 0 dBm (See Plots)	
8	Log Accuracy:	±2.0 Db TYP, ±2.5 Max	± 1.9 dB (See Plots)	
9	Log Slope:	25mV/dB (±10%) @ 50Ω Load	25.0 to 25.7 mV/dB (See Plots)	
10	Pulse Range:	100 ns to CW	Pass	
11	Pulse Rise Time (10% to 90%):	< 30 ns	15.5 ns (See Plot)	
12	Pulse Overshoot:	0.0 dB Max with 50Ω Load	0.0 dB (with 50Ω Load)	
13	Pulse Fall Time (90% to 10%):	< 70 ns	36 ns (See Plot)	
14	Recovery Time:	< 70 ns @ -10 dBm	47 ns @ -10 dBm (See Plot)	
15	Propagation Delay Time:	< 15 ns	6.4 ns (See Plot)	
16	DC Supply:	+12VDC ±6%@ 400 mA Max. -12VDC ±6%@ 250 mA Max.	+12VDC @ 221 mA -12VDC @ 94 mA	PMI QA1

QA/QC Approval:  PMI QA1 Date: 10/18/18

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



SUMMARY TEST DATA ON DLVA-6D5G18G-70-JMAKG2

PL23511/1839

TABULATED DATA @ 25 Degrees C

LOG TRANSFER VS FREQUENCY
MODEL: DLVA-6D5G18G-70-JNEC
TESTED BY: Rcombs
DATE: 09/27/18
SERIAL NO: PL23511

25 Deg C



PLANAR MONOLITHICS INDUSTRIES
4921 ROBERT J. MATHEWS PKWY #1
TEL: 916-542-1401 FAX: 916-265-2597
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	RF Input Power (dBm)
6 GHz	INTERCEPT (mV)	2122															Measured Value (mV)
	SLOPE (mV/dB)	25.32															Error (mV)
		351	478	606	731	865	986	1100	1223	1352	1479	1619	1740	1875	2006	2122	0.48
		1	2	4	2	10	4	-9	-12	-11	-10	4	-2	7	11	0	1.13
		0.05	0.07	0.14	0.07	0.38	0.15	-0.36	-0.48	-0.42	-0.38	0.16	-0.08	0.26	0.43	0.00	
		-0.14	-0.05	0.09	0.09	0.46	0.30	-0.15	-0.20	-0.07	0.03	0.65	0.48	0.89	1.13	0.75	
8 GHz	INTERCEPT (mV)	2105															Measured Value (mV)
	SLOPE (mV/dB)	24.85															Error (mV)
		360	485	614	737	873	993	1107	1233	1361	1488	1616	1725	1856	1981	2100	0.43
		-6	-5	0	-1	11	6	-4	-2	1	4	8	-7	-1	0	-5	0.78
		-0.23	-0.19	-0.02	-0.06	0.43	0.26	-0.15	-0.08	0.04	0.17	0.32	-0.30	-0.03	0.02	-0.21	
		0.22	0.24	0.38	0.32	0.78	0.68	0.15	0.19	0.29	0.38	0.51	-0.13	0.11	0.13	-0.12	
10 GHz	INTERCEPT (mV)	2101															Measured Value (mV)
	SLOPE (mV/dB)	25.18															Error (mV)
		341	469	593	717	850	971	1086	1207	1337	1465	1602	1720	1852	1981	2110	0.52
		2	4	2	1	8	3	-8	-13	-8	-7	4	-4	2	5	8	0.87
		0.09	0.17	0.09	-0.02	0.33	0.11	-0.30	-0.52	-0.34	-0.29	0.16	-0.15	0.10	0.22	0.33	
		-0.54	-0.41	-0.45	-0.48	-0.13	-0.31	-0.69	-0.87	-0.64	-0.55	-0.06	-0.33	-0.04	0.12	0.27	
12 GHz	INTERCEPT (mV)	2092															Measured Value (mV)
	SLOPE (mV/dB)	24.67															Error (mV)
		359	484	612	736	872	986	1099	1220	1351	1480	1610	1718	1843	1965	2089	0.55
		-6	-4	0	1	14	4	-6	-8	-1	5	12	-4	-2	-3	-2	0.72
		-0.25	-0.17	0.02	0.05	0.55	0.17	-0.23	-0.32	-0.04	0.20	0.47	-0.15	-0.08	-0.14	-0.09	
		0.18	0.20	0.32	0.29	0.72	0.29	-0.17	-0.33	-0.11	0.06	0.26	-0.41	-0.41	-0.52	-0.54	
14 GHz	INTERCEPT (mV)	2105															Measured Value (mV)
	SLOPE (mV/dB)	24.84															Error (mV)
		362	487	617	744	881	993	1105	1226	1354	1479	1607	1716	1849	1987	2123	0.75
		-4	-3	3	6	18	6	-6	-9	-6	-5	-1	-16	-7	6	19	1.10
		-0.16	-0.12	0.11	0.23	0.74	0.22	-0.25	-0.37	-0.24	-0.18	-0.04	-0.64	-0.29	0.25	0.75	
		0.32	0.33	0.63	0.62	1.10	0.66	0.06	-0.09	0.01	0.04	0.15	-0.47	-0.15	0.35	0.83	
16 GHz	INTERCEPT (mV)	2118															Measured Value (mV)
	SLOPE (mV/dB)	24.98															Error (mV)
		367	491	622	750	887	999	1112	1234	1361	1492	1623	1733	1863	1997	2132	0.69
		-3	-4	3	5	17	5	-8	-10	-8	-2	4	-11	-6	3	14	1.31
		-0.12	-0.14	0.11	0.22	0.69	0.18	-0.30	-0.40	-0.32	-0.09	0.15	-0.44	-0.22	0.14	0.56	
		0.50	0.48	0.73	0.84	1.31	0.80	0.32	0.22	0.30	0.53	0.77	0.18	0.39	0.75	1.17	
18 GHz	INTERCEPT (mV)	2100															Measured Value (mV)
	SLOPE (mV/dB)	25.04															Error (mV)
		340	469	596	723	861	985	1102	1224	1352	1473	1699	1704	1841	1982	2109	0.84
		-7	-4	-2	0	12	12	3	0	2	-1	-1	-21	-9	7	9	0.98
		-0.30	-0.17	-0.09	-0.02	0.50	0.47	0.13	0.01	0.09	-0.04	-0.02	-0.84	-0.36	0.28	0.36	
		-0.55	-0.41	-0.33	-0.24	0.28	0.27	-0.06	-0.17	-0.07	-0.20	-0.17	-0.98	-0.49	0.16	0.26	
Flatness +/-dB		0.5	0.4	0.6	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.5	0.7	0.7	0.8	0.9	
Linearity Max.(dB)=		0.75															
Linearity Min.(dB)=		-0.84															
Average Slope (mV/dB)		25.0															



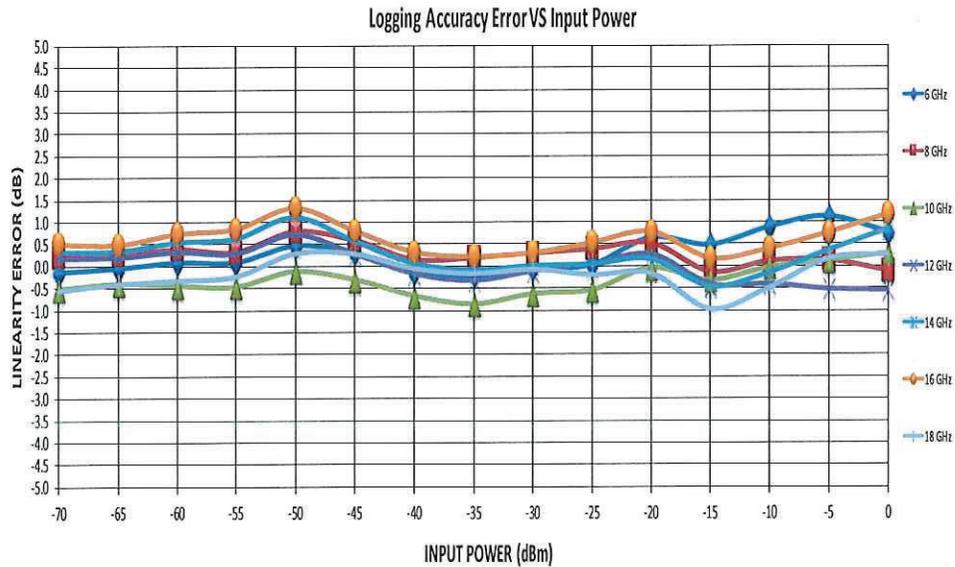
**SUMMARY TEST DATA
ON
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PL23511/1839

LOG LINEARITY @ 25 Degrees C



LOG ACCURACY @ 25 Degrees C





SUMMARY TEST DATA ON DLVA-6D5G18G-70-JMAKG2

PL23511/1839

TABULATED DATA @ 85 Degrees C

LOG TRANSFER VS FREQUENCY
MODEL: DLVA-6D5G18G-70-JNEC
TESTED BY: Rcombs
DATE: 09/27/18
SERIAL NO: PL23511

85 Deg C



PLANAR MONOLITHICS INDUSTRIES
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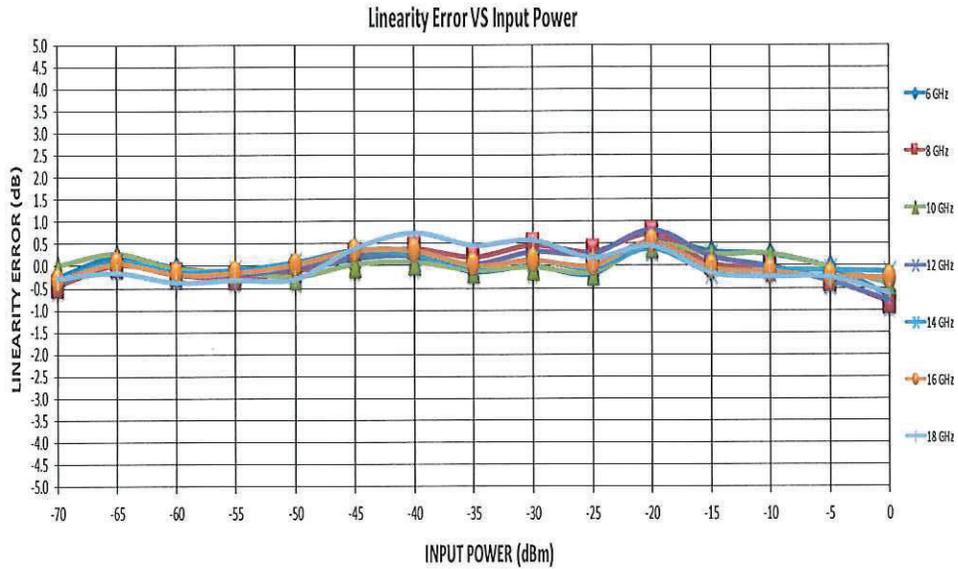
Frequency		-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
6 GHz	INTERCEPT (mV)	338	478	601	727	856	992	1122	1242	1374	1498	1646	1768	1895	2016	2129	Measured Value (mV)
	SLOPE (mV/dB)	-7	5	-1	-4	-3	4	5	-4	0	-5	14	8	6	-1	-17	Error (mV)
		-0.26	0.19	-0.05	-0.16	-0.12	0.15	0.20	-0.14	-0.02	-0.19	0.56	0.31	0.24	-0.06	-0.68	1.36
		0.45	0.91	0.67	0.57	0.62	0.90	0.96	0.63	0.76	0.60	1.36	1.12	1.06	0.77	0.16	
8 GHz	INTERCEPT (mV)	338	478	599	725	856	992	1123	1246	1380	1503	1641	1751	1876	1996	2110	Measured Value (mV)
	SLOPE (mV/dB)	-12	0	-5	-7	-3	6	10	5	12	8	18	1	-1	-9	-21	Error (mV)
		-0.46	0.01	-0.21	-0.29	-0.13	0.22	0.38	0.19	0.46	0.30	0.71	0.04	-0.06	-0.34	-0.84	0.84
		0.46	0.88	0.62	0.49	0.60	0.91	1.01	0.78	1.00	0.80	1.16	0.45	0.31	-0.02	-0.57	1.16
10 GHz	INTERCEPT (mV)	317	453	573	701	826	963	1093	1217	1348	1474	1619	1742	1872	1992	2112	Measured Value (mV)
	SLOPE (mV/dB)	0	7	-2	-4	-7	0	2	-3	-1	-4	12	6	7	-2	-11	Error (mV)
		-0.01	0.26	-0.08	-0.14	-0.26	0.02	0.07	-0.12	-0.04	-0.16	0.46	0.24	0.25	-0.06	-0.43	0.46
		-0.37	-0.08	-0.40	-0.44	-0.54	-0.24	-0.17	-0.33	-0.24	-0.34	0.32	0.11	0.15	-0.15	-0.50	0.54
12 GHz	INTERCEPT (mV)	329	468	589	716	847	981	1109	1231	1365	1491	1632	1744	1866	1985	2101	Measured Value (mV)
	SLOPE (mV/dB)	-10	1	-5	-5	-2	5	6	1	8	6	20	5	-1	-9	-20	Error (mV)
		-0.40	0.05	-0.20	-0.21	-0.07	0.21	0.23	0.02	0.30	0.25	0.79	0.20	-0.02	-0.35	-0.80	0.80
		0.10	0.50	0.20	0.15	0.24	0.47	0.44	0.20	0.43	0.33	0.82	0.19	-0.08	-0.45	-0.94	0.94
14 GHz	INTERCEPT (mV)	326	465	587	717	849	984	1110	1231	1363	1487	1627	1742	1871	1989	2127	Measured Value (mV)
	SLOPE (mV/dB)	-8	2	-4	-3	2	9	6	-1	3	-2	10	-4	-3	-3	-4	Error (mV)
		-0.31	0.08	-0.15	-0.10	0.06	0.33	0.24	-0.04	0.11	-0.07	0.38	-0.15	-0.11	-0.12	-0.15	0.38
		-0.02	0.37	0.14	0.18	0.34	0.61	0.50	0.22	0.36	0.18	0.62	0.09	0.13	0.11	0.08	0.62
16 GHz	INTERCEPT (mV)	330	469	592	722	855	993	1122	1242	1374	1500	1643	1757	1884	2010	2138	Measured Value (mV)
	SLOPE (mV/dB)	-9	1	-5	-4	1	9	9	0	3	0	14	-1	-3	-7	-7	Error (mV)
		-0.33	0.04	-0.20	-0.16	0.03	0.35	0.34	0.01	0.11	0.00	0.54	-0.06	-0.13	-0.26	-0.27	0.54
		0.13	0.53	0.31	0.37	0.59	0.93	0.95	0.64	0.78	0.69	1.26	0.68	0.63	0.53	0.54	1.26
18 GHz	INTERCEPT (mV)	308	440	564	695	825	972	1111	1233	1365	1485	1621	1735	1862	1991	2111	Measured Value (mV)
	SLOPE (mV/dB)	-7	-4	-10	-8	-8	10	19	12	15	4	11	-4	-7	-7	-16	Error (mV)
		-0.29	-0.17	-0.38	-0.32	-0.30	0.39	0.73	0.46	0.56	0.17	0.44	-0.16	-0.25	-0.26	-0.62	0.73
		-0.74	-0.58	-0.76	-0.66	-0.60	0.14	0.53	0.29	0.44	0.08	0.40	-0.17	-0.22	-0.19	-0.52	0.76
Flatness +/-dB		0.6	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	0.6	0.6	0.7	
Linearity Max.(dB)=		0.79															
Linearity Min.(dB)=		-0.84															
Average Slope (mV/dB)		25.7															



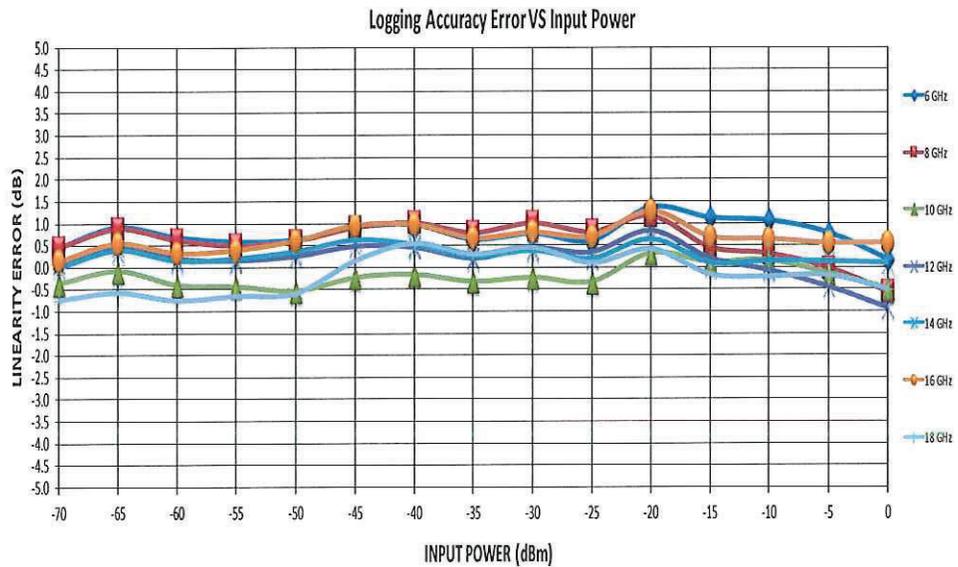
**SUMMARY TEST DATA
ON
DLVA-6D5G18G-70-JMAKG2**

PL23511/1839

LOG LINEARITY@ 85 Degrees C



LOG ACCURACY@ 85 Degrees C





SUMMARY TEST DATA ON DLVA-6D5G18G-70-JMAKG2

PL23511/1839

TABULATED DATA @ -54 Degrees C

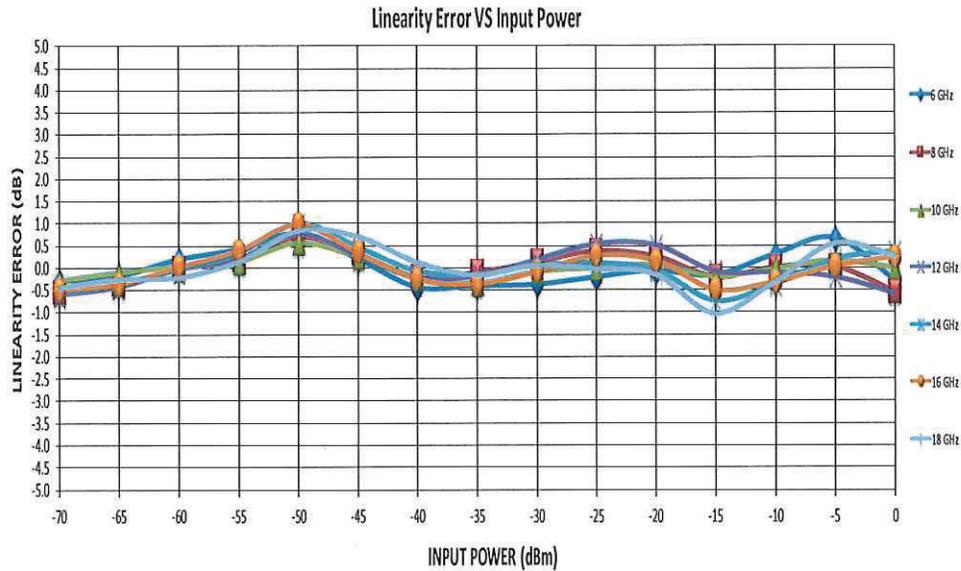
LOG TRANSFER VS FREQUENCY		-54 Deg C																RF Input Power (dBm)	
MODEL: DLVA-6D5G18G-70-JNEC																			
TESTED BY: Rcombs																			
DATE: 09/27/18																			
SERIAL NO: PL23511																			
		PLANAR MONOLITHICS INDUSTRIES 4921 ROBERT J. MATHEWS PKWY #1 TEL: 916-542-1401 FAX: 916-265-2597 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			
6 GHz	INTERCEPT (mV)	2116																Measured Value (mV)	
	SLOPE (mV/dB)	24.97																Error (mV)	
		361	488	623	753	887	997	1106	1232	1357	1486	1615	1737	1874	2008	2109	0.78		
		-8	-5	5	10	19	5	-11	-10	-10	-6	-2	-4	7	17	-7	0.71		
		-0.30	-0.19	0.19	0.41	0.78	0.19	-0.46	-0.42	-0.39	-0.22	-0.07	-0.18	0.30	0.66	-0.30	1.49		
		0.43	0.54	0.91	1.13	1.49	0.89	0.24	0.27	0.30	0.46	0.60	0.49	0.95	1.31	0.35			
8 GHz	INTERCEPT (mV)	2090																Measured Value (mV)	
	SLOPE (mV/dB)	24.57																Error (mV)	
		357	484	616	743	879	992	1102	1228	1356	1485	1605	1716	1845	1968	2077	0.71		
		-13	-9	0	4	18	8	-5	-2	3	9	6	-5	0	1	-14	1.17		
		-0.84	-0.38	-0.01	0.18	0.71	0.31	-0.22	-0.10	0.13	0.38	0.26	-0.21	0.01	0.02	-0.55			
		0.28	0.35	0.63	0.72	1.17	0.69	0.08	0.11	0.25	0.41	0.20	-0.35	-0.21	-0.29	-0.94			
10 GHz	INTERCEPT (mV)	2082																Measured Value (mV)	
	SLOPE (mV/dB)	24.75																Error (mV)	
		342	471	598	724	859	974	1087	1207	1338	1463	1589	1706	1834	1962	2082	0.57		
		-7	-2	1	4	14	6	-5	-9	-2	0	2	-5	0	4	0	0.76		
		-0.28	-0.09	0.03	0.15	0.57	0.25	-0.22	-0.34	-0.08	-0.01	0.07	-0.20	-0.01	0.16	-0.01			
		-0.31	-0.17	-0.09	-0.03	0.34	-0.03	-0.54	-0.71	-0.50	-0.48	-0.45	-0.76	-0.63	-0.50	-0.72			
12 GHz	INTERCEPT (mV)	2069																Measured Value (mV)	
	SLOPE (mV/dB)	24.2																Error (mV)	
		361	486	617	743	878	987	1096	1218	1348	1477	1598	1704	1825	1943	2055	0.78		
		-15	-10	-1	6	19	6	-5	-4	4	13	12	-2	-3	-5	-14	1.81		
		-0.60	-0.43	-0.03	0.20	0.78	0.26	-0.23	-0.18	0.18	0.53	0.51	-0.08	-0.11	-0.21	-0.59			
		0.43	0.44	0.67	0.73	1.12	0.46	-0.17	-0.29	-0.10	0.09	-0.10	-0.83	-1.02	-1.28	-1.81			
14 GHz	INTERCEPT (mV)	2070																Measured Value (mV)	
	SLOPE (mV/dB)	24.34																Error (mV)	
		352	478	609	739	877	986	1094	1214	1341	1463	1581	1686	1817	1952	2078	1.00		
		-14	-9	-1	8	24	11	-2	-4	1	2	-2	-19	-10	4	9	1.57		
		-0.58	-0.38	-0.03	0.33	1.00	0.46	-0.09	-0.15	0.05	0.09	-0.06	-0.77	-0.39	0.18	0.36			
		0.07	0.13	0.34	0.55	1.08	0.42	-0.24	-0.44	-0.38	-0.47	-0.75	-1.57	-1.33	-0.91	-0.87			
16 GHz	INTERCEPT (mV)	2086																Measured Value (mV)	
	SLOPE (mV/dB)	24.54																Error (mV)	
		366	482	614	746	883	990	1098	1218	1347	1479	1599	1705	1833	1964	2092	0.98		
		-12	-9	0	9	24	8	-6	-9	-2	7	4	-12	-8	1	6	1.31		
		-0.51	-0.37	0.02	0.38	0.98	0.33	-0.26	-0.38	-0.09	0.27	0.16	-0.50	-0.32	0.03	0.24			
		0.22	0.27	0.55	0.82	1.31	0.59	-0.09	-0.30	-0.11	0.15	-0.05	-0.78	-0.70	-0.45	-0.34			
18 GHz	INTERCEPT (mV)	2077																Measured Value (mV)	
	SLOPE (mV/dB)	24.91																Error (mV)	
		322	451	577	710	852	973	1083	1201	1331	1453	1574	1677	1820	1966	2083	1.04		
		-11	-6	-5	3	21	17	3	-4	1	-1	-4	-26	-8	13	6	1.91		
		-0.45	-0.26	-0.22	0.14	0.84	0.69	0.12	-0.17	0.06	-0.03	-0.16	-1.04	-0.32	0.54	0.26			
		-1.12	-0.95	-0.93	-0.59	0.08	-0.08	-0.67	-0.98	-0.77	-0.88	-1.02	-1.91	-1.21	-0.38	-0.68			
Flatness +/-dB		0.8	0.7	0.9	0.9	0.7	0.5	0.5	0.6	0.5	0.7	0.8	1.2	1.1	1.3	1.1			
Linearity Max.(dB)=		1.00																	
Linearity Min.(dB)=		-1.04																	
Average Slope (mV/dB)		25.0																	



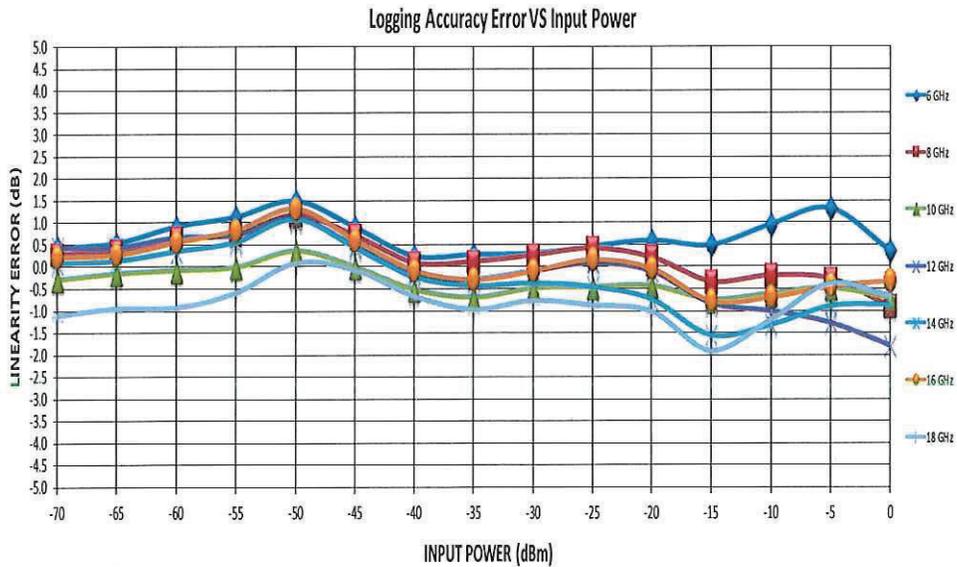
**SUMMARY TEST DATA
ON
DLVA-6D5G18G-70-JMAKG2**

PL23511/1839

LOG LINEARITY@ -54 Degrees C



LOG ACCURACY@ -54 Degrees C

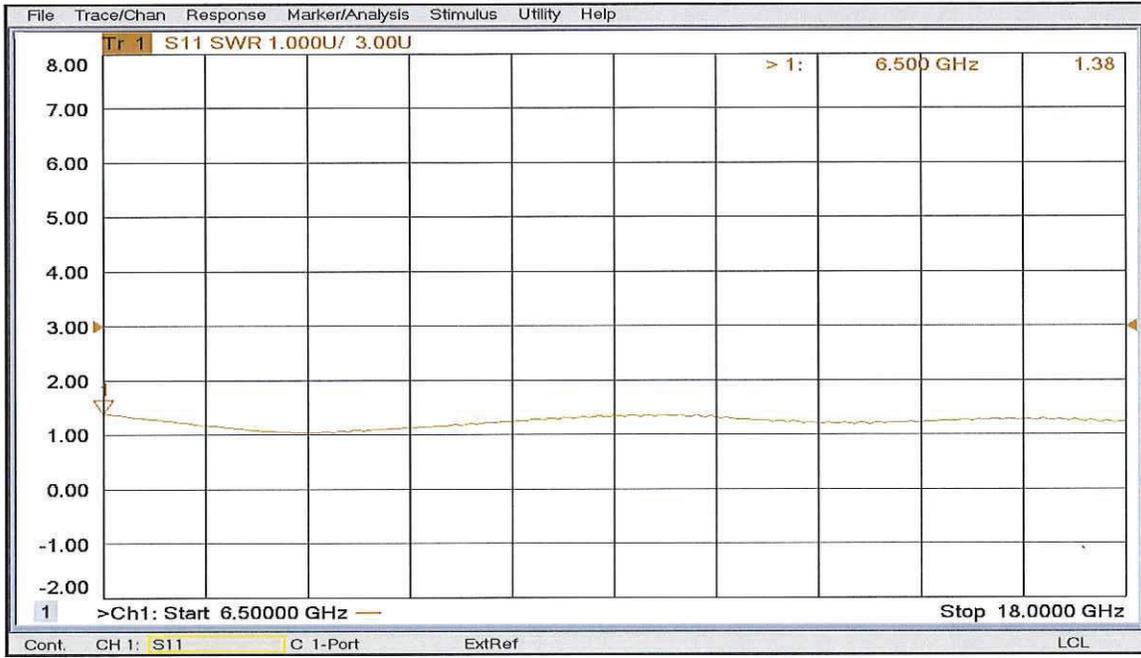




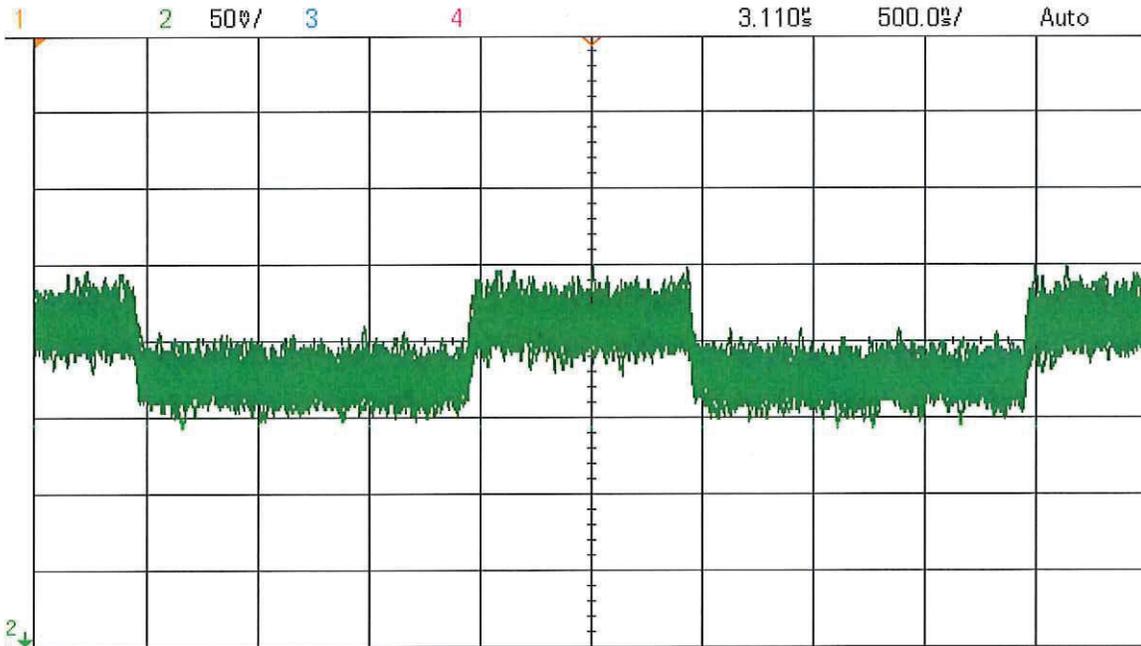
**SUMMARY TEST DATA
ON
DLVA-6D5G18G-70-JMAKG2**

PL23511/1839

VSWR



TSS

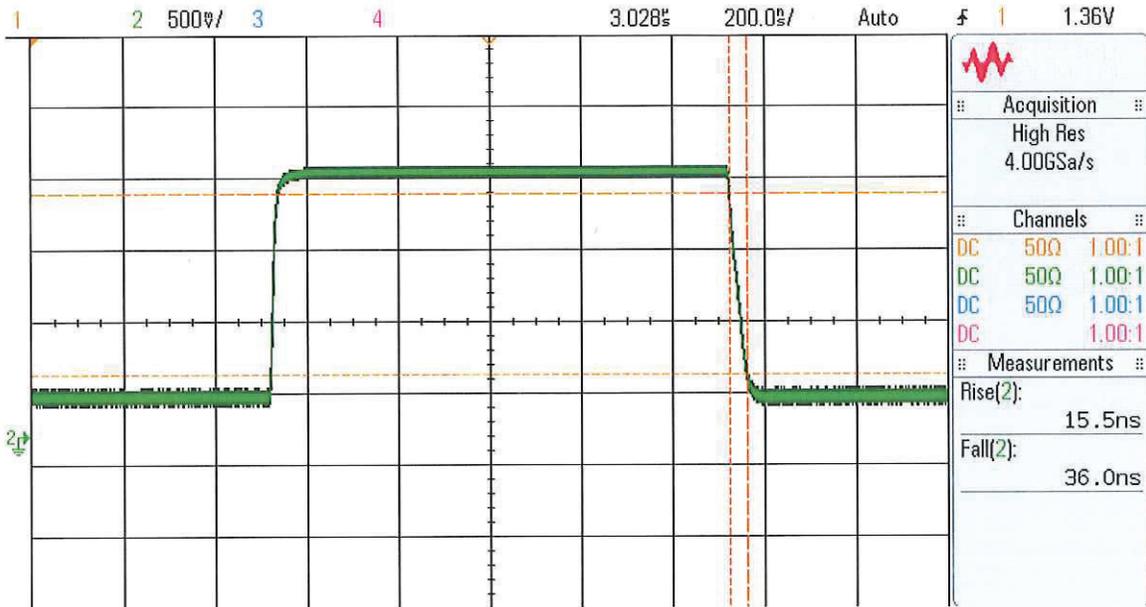




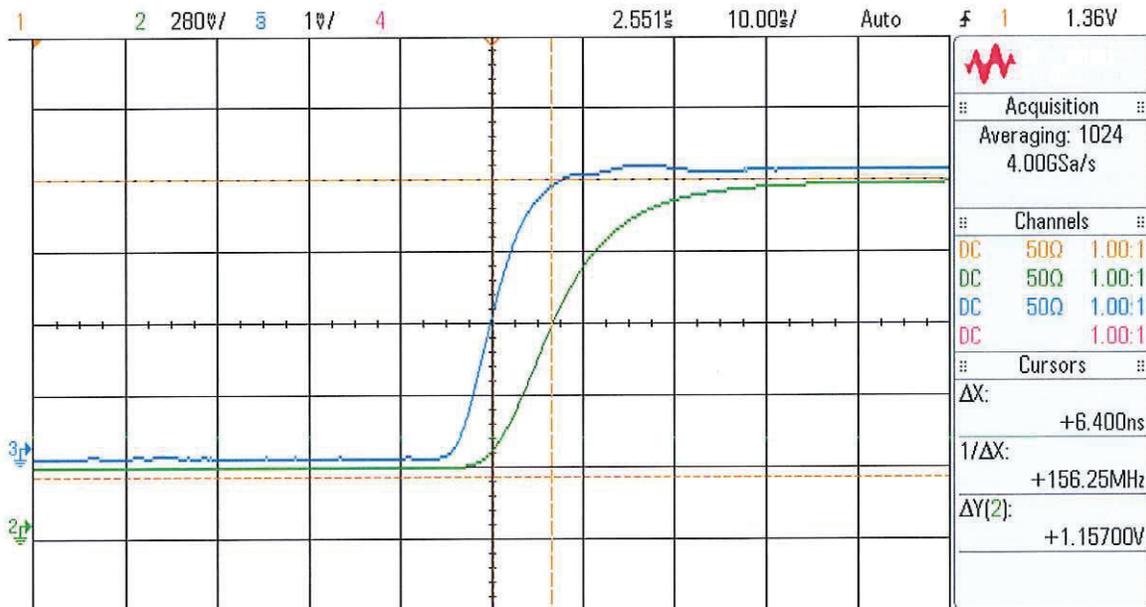
**SUMMARY TEST DATA
ON
DLVA-6D5G18G-70-JMAKG2**

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RISE TIME and FALL TIME



PROPAGATION DELAY TIME





**SUMMARY TEST DATA
ON
DLVA-6D5G18G-70-JMAKG2**

PL23511/1839

RECOVERY TIME

