



**SUMMARY TEST DATA  
ON  
SDLVA-0120-70 OPT 100M2G, 10DBM Rev. B**

**PL21137/1723**

<b>Customer:</b> _____ <b>SO No:</b> _____ <b>Model No:</b> <u>SDLVA-0120-70 OPT 100M2G, 10DBM Rev.B</u> <b>Serial No:</b> <u>PL21137/1723</u>	<b>Tested By:</b> <u>Simon K.</u> <b>Temperature:</b> <u>+25°C</u> <b>Date:</b> <u>06/07/17</u> <b>Drawing No:</b> <u>27609489</u> <b>Rev:</b> <u>A2</u>
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TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	FREQUENCY RANGE	0.1 TO 2.0 GHz	0.1 TO 2.0 GHz	
2	DYNAMIC RANGE	70 dB MINIMUM, 75 dB TYPICAL	SEE PLOTS	
3	LOG LINEARITY @ -65 TO +5 dBm (250MHz to 2GHz)	± 2.0 dB Max	± 1.62 dB	
4	LOG LINEARITY @ -50 TO +5 dBm (100MHz to 250MHz)	± 2.0 dB Max	± 0.45 dB	
5	LOGGING RANGE	-65 dBm MINIMUM +5 dBm MAXIMUM	SEE PLOTS	
6	INPUT VSWR	2.0:1 MAXIMUM 1.8:1 TYPICAL	1.27:1	
7	TSS	-65 dBm (-70 dBm TYPICAL)	-65 dBm SEE PLOTS	
8	LIMITED IF OUTPUT	+10 dBm TYPICAL	8.4 dBm	
9	MAXIMUM OUTPUT VOLTAGE	2.7 V MAXIMUM	1.76 V SEE PLOTS	



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10	RISE TIME	25 nsec MAXIMUM	See Typical Characteristics	
11	FALL TIME	30 nsec MAXIMUM	See Typical Characteristics	
12	SETTLING TIME	40 nsec MAXIMUM	See Typical Characteristics	
13	DC OFFSET	0.1 V NOMINAL (ADJUSTABLE)	PASS	
14	LOG VIDEO SLOPE	25 mV/dB NOMINAL @ 1 GHz	24.2 mV/dB	
15	LOG VIDEO SLOPE VARIATION WITH FREQUENCY	± 0.5mV/dB TYPICAL (OVER 80 MHz RF BANDWIDTH)	See Typical Characteristics	
16	LOG VIDEO SLOPE VARIATION WITH TEMPERATURE	± 0.5mV/dB TYPICAL	See Typical Characteristics	
17	PROPAGATION DELAY	10 nec TYPICAL	See Typical Characteristics	
18	VIDEO LOAD	100 Ω ± 10%	100 Ω	
19	DC SUPPLY (NO LOAD)	+7 TO +18V @ 300mA Max -7 TO -18V @ 160mA Typ., 170mA Max	+7 TO +18V @ 119 mA -7 TO -18V @ 162 mA	

QA/QC Approval: \_\_\_\_\_ Date: \_\_\_\_\_



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## TRANSFER TUNING PLOT

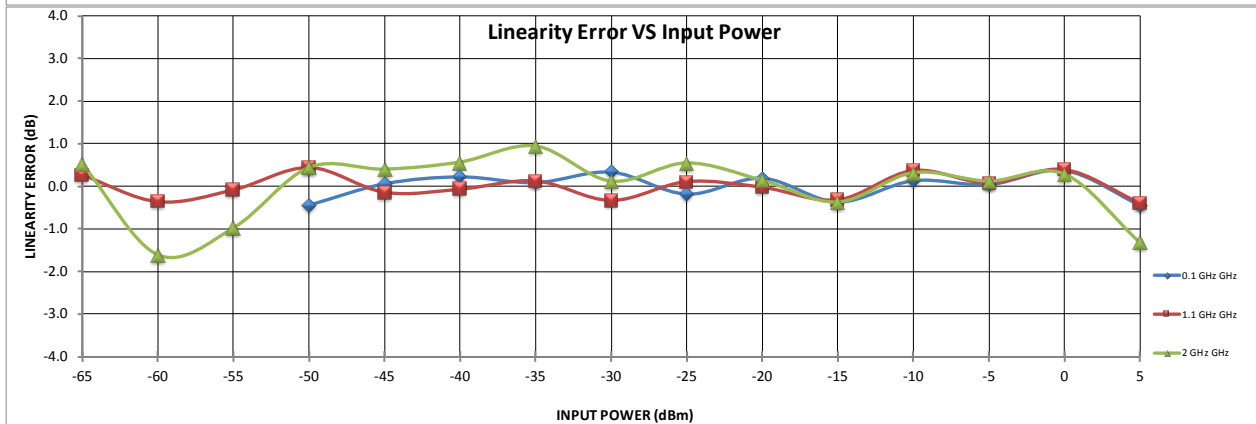
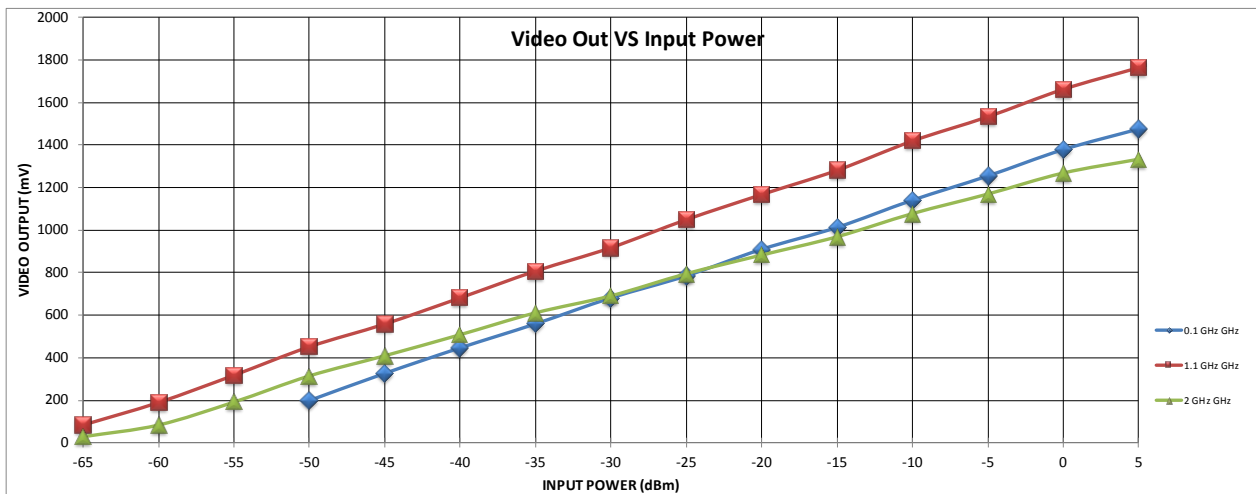
LOG TRANSFER WITH FREQUENCY  
 MODEL: SDLVA-0120-70 Opt. 100M2G, 10DBM  
 TESTED BY: Simon K.  
 TEST DATE: 06/06/17  
 SERIAL NO: PL21137  
 TEST TEMP: +25C



PLANAR MONOLITHICS INDUSTRIES  
 4921 Robert J. Mathews Pkwy Ste 1  
 El Dorado Hills, CA 95762  
 Phone: (916)542-1401 Fax: (301)662-1731  
 EMAIL: SALES@PMI-RF.COM

Frequency

		-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
0.1 GHz	INTERCEPT (mV)																1369
	SLOPE (mV/dB)																23.2
					197	325	445	558	680	784	909	1012	1140	1254	1378	1475	Measured Value (mV)
				-10	1	5	2	8	-4	4	-9	3	1	9	-10	Error (mV)	
				-0.45	0.06	0.23	0.09	0.34	-0.19	0.19	-0.37	0.13	0.04	0.38	-0.45	LINEARITY ERROR (dB)	
1.1 GHz	INTERCEPT (mV)																1653
	SLOPE (mV/dB)																24.2
		84	190	318	452	559	682	808	918	1050	1168	1282	1420	1534	1663	1765	Measured Value (mV)
	6	-9	-2	11	-4	-2	3	-8	3	-1	-8	9	2	10	-10	Error (mV)	
	0.26	-0.37	-0.09	0.44	-0.15	-0.07	0.12	-0.34	0.11	-0.03	-0.32	0.37	0.07	0.39	-0.40	LINEARITY ERROR (dB)	
2 GHz	INTERCEPT (mV)																1264
	SLOPE (mV/dB)																19.2
		28	83	191	314	409	508	611	691	795	883	969	1078	1170	1269	1334	Measured Value (mV)
	10	-31	-19	8	8	11	18	2	10	3	-7	6	2	5	-25	Error (mV)	
	0.51	-1.62	-0.99	0.43	0.39	0.56	0.94	0.11	0.54	0.13	-0.38	0.31	0.11	0.28	-1.33	LINEARITY ERROR (dB)	





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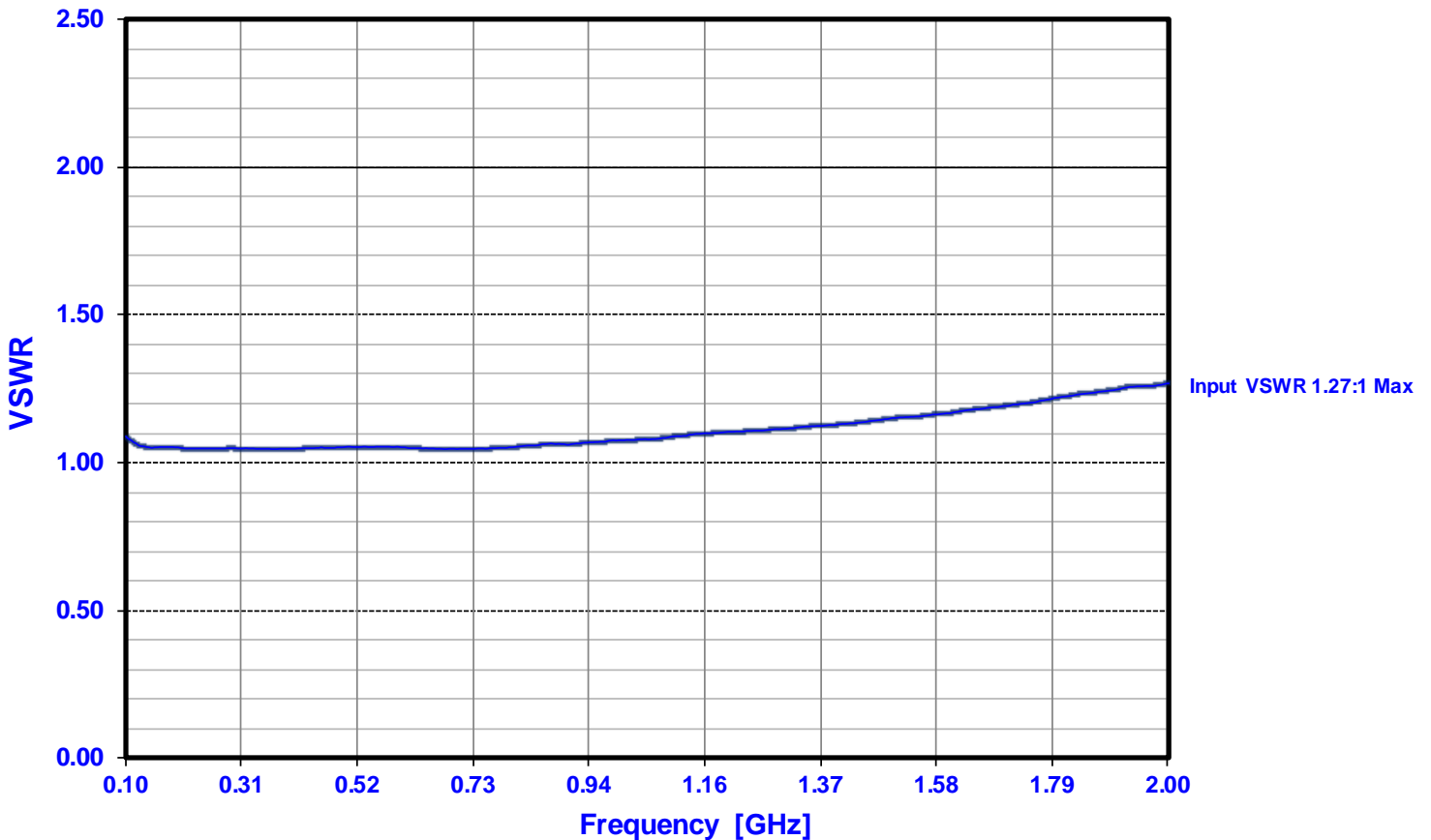
**PL21137/1723**

**VSWR**

Model Number: SDLVA-0120-70 Opt. 100M2G, 10DBM  
Serial Number: PL21137

Temperature: +25C

**VSWR GRAPH**





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**LIMITED IF OUTPUT**

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Frequency		-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)		
0.1 GHz	Limited IF Output	9.9		3.8	7.3	9.6	10.4	10.6	10.7	11	11	10.6	10.7	10.6	10.7	10.8	10.7	10.6	Measured Value (dBm)
1.1 GHz	Limited IF Output	10.0		8.2	9.8	10	10.1	10.2	10.2	10	10.2	10.1	10.3	10.2	10.2	10.1	10.2	10.1	Measured Value (dBm)
2 GHz	Limited IF Output	8.4		2.6	6.6	8.4	8.9	9.0	8.9	9.1	9.0	9.1	9.0	9.1	9.0	8.9	9.1	9.2	Measured Value (dBm)

