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

PL26756/1942

Customer:		Tested By:	Simon K.
SO No:		Temperature:	+25°C
Model No:	SDLVA-0120-70 OPT 100M2G, 10DBM Rev. B	Date:	10/14/19
Serial No:	PL26756/1942	Drawing No:	27609489 Rev: A2

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	PMI QA1
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	+0.53 / -1.01 dB	
4	LOG LINEARITY @ -50 TO +5 dBm (100MHz to 250MHz)	± 2.0 dB Max	+0.41 / -0.41 dB	
5	LOGGING RANGE	-65 dBm MINIMUM +5 dBm MAXIMUM	(SEE PLOTS)	
6	INPUT VSWR	2.0:1 MAXIMUM 1.8:1 TYPICAL	1.17:1	
7	TSS	-65 dBm (-70 dBm TYPICAL)	-65.5 dBm (SEE PLOTS)	
8	LIMITED IF OUTPUT	+10 dBm TYPICAL	9.37 dBm (SEE PLOTS)	
9	MAXIMUM OUTPUT VOLTAGE	2.7 V MAXIMUM	2.097 V (SEE PLOTS)	
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	PMI QA1

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13	DC OFFSET	0.1 V NOMINAL (ADJUSTABLE)	PASS	PMI QA 1
14	LOG VIDEO SLOPE	25 mV/dB NOMINAL @ 1 GHz	27.4 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 nS 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 @ 118 mA -7 TO -18V @ 149 mA	PMI QA 1

QA/QC Approval: PMI QA 1 Date: 10/16/19

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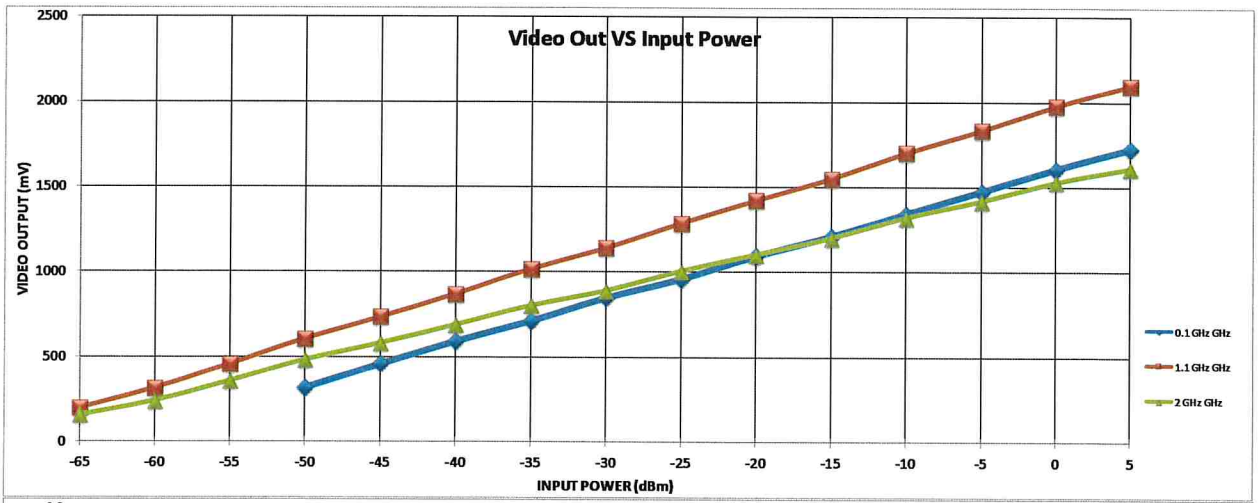
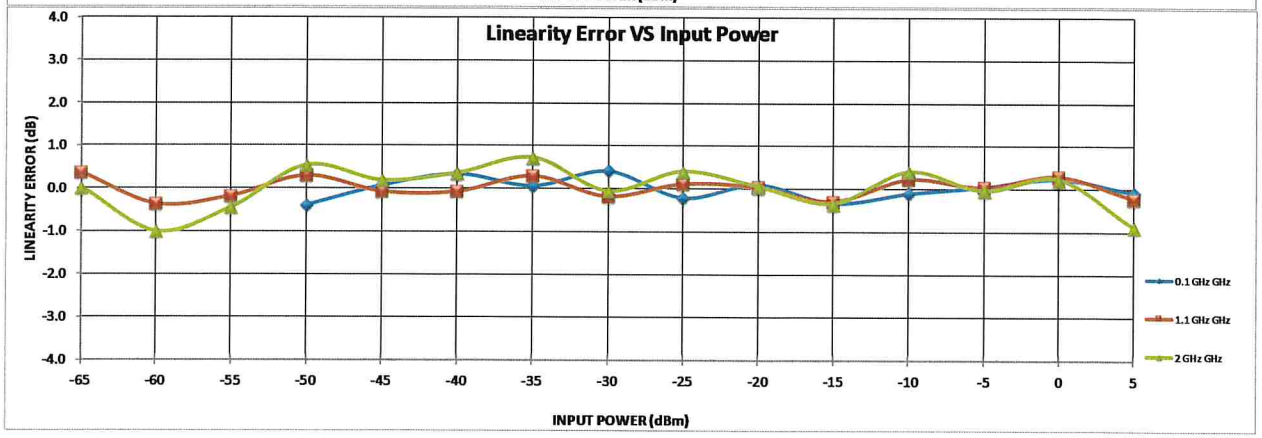
TRANSFER TUNING PLOT

LOG TRANSFER WITH FREQUENCY
MODEL: SDLVA-0120-70 Opt. 100M2G, 10DBM
TESTED BY: Simon K.
TEST DATE: 10/11/19
SERIAL NO: PL26756
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)	1599				318	457	591	711	847	958	1093	1209	1342	1473	1605	1724	Measured Value (mV)
	SLOPE (mV/dB)	25.4				-10	2	8	1	10	-6	2	-9	-3	1	6	-2	Error (mV)
						-0.41	0.06	0.33	0.05	0.41	-0.23	0.08	-0.35	-0.12	0.03	0.23	-0.09	LINEARITY ERROR (dB)
1.1 GHz	INTERCEPT (mV)	1966	195	312	454	604	731	868	1015	1139	1284	1419	1547	1698	1830	1974	2097	Measured Value (mV)
	SLOPE (mV/dB)	27.4	10	-10	-5	8	-2	-2	8	-5	3	1	-8	6	1	8	-6	Error (mV)
			0.35	-0.38	-0.20	0.28	-0.09	-0.09	0.28	-0.20	0.09	0.02	-0.31	0.20	0.02	0.27	-0.24	LINEARITY ERROR (dB)
2 GHz	INTERCEPT (mV)	1522	153	237	354	480	578	687	800	889	1004	1102	1199	1320	1416	1527	1609	Measured Value (mV)
	SLOPE (mV/dB)	21.1	0	-21	-10	11	4	7	15	-1	8	1	-7	8	-1	5	-19	Error (mV)
			0.01	-1.01	-0.45	0.53	0.18	0.35	0.71	-0.06	0.39	0.05	-0.35	0.39	-0.05	0.22	-0.89	LINEARITY ERROR (dB)





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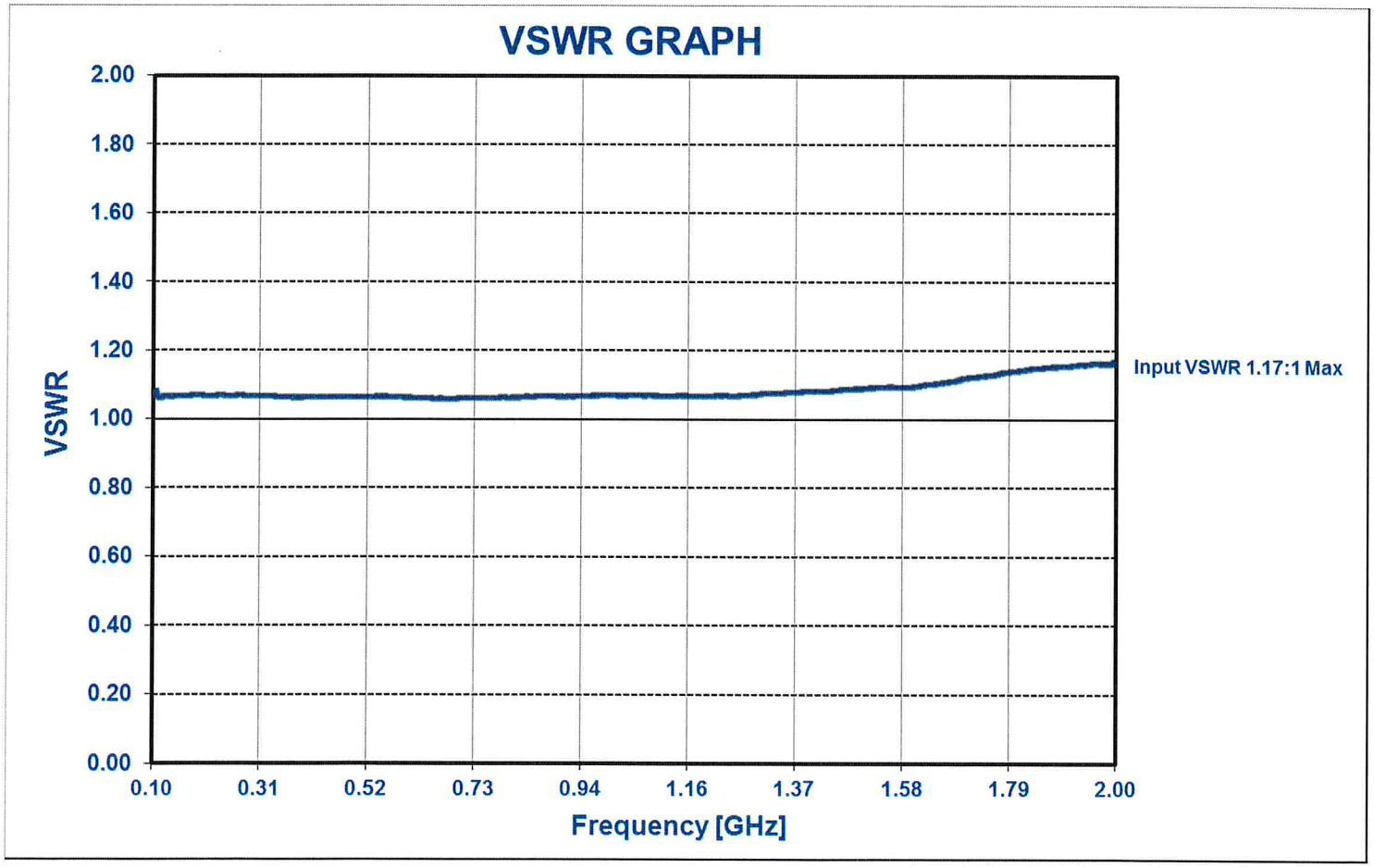
VSWR



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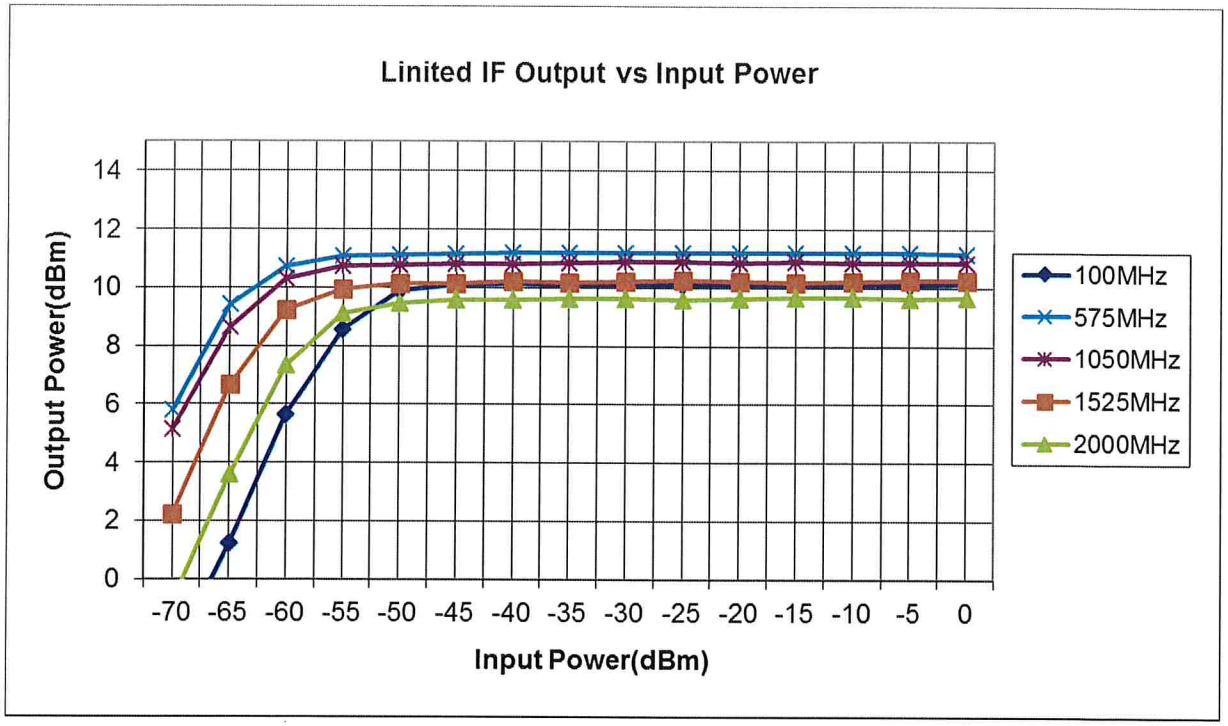
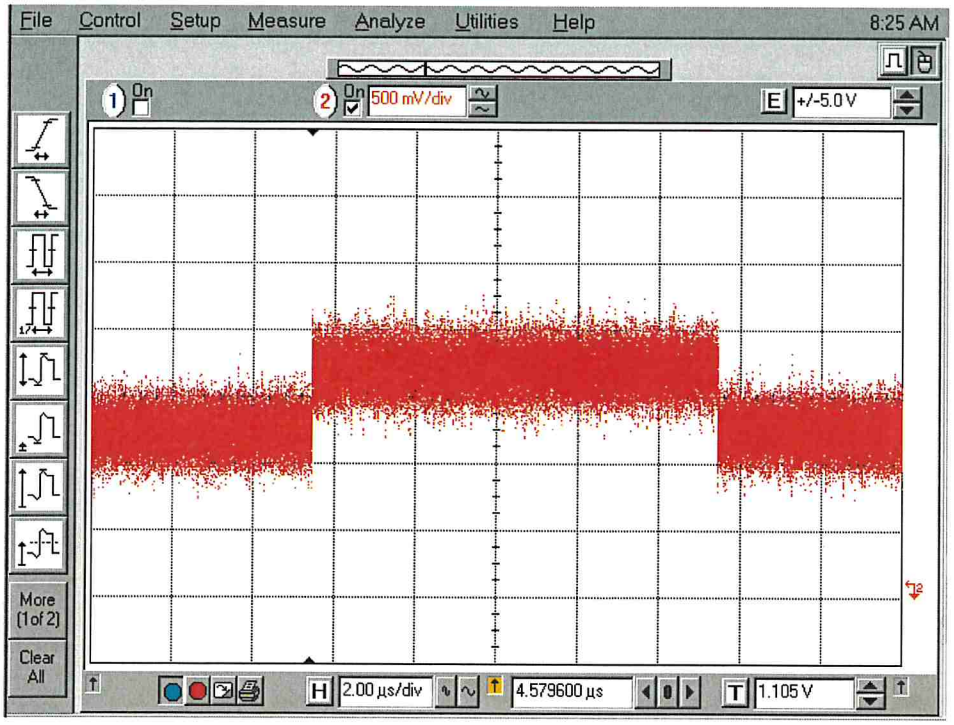
LIMITED IF OUTPUT



TSS



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