



SUMMARY TEST DATA ON SDLVA

Customer : _____
Job No : SO11-017-P
Model No : SDLVA-0120-70 OPT 100M2G, 10DBM
Serial No : PL8687

Tested By : Hugo Gonzales
Temperature : +25°C
Date : 02/24/11

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS 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 -50 TO +5 dBm @ 100 MHz	± 2.0 dB MAXIMUM	1.81 dB	
4	LOGGING RANGE	-65 dBm MINIMUM +5 dBm MAXIMUM	SEE PLOTS	
5	INPUT VSWR	2.0:1 MAXIMUM 1.8:1 TYPICAL	SEE TYPICAL CHARACTERISTICS	
6	TSS	-65 dBm (-70 dBm TYPICAL)	SEE TYPICAL CHARACTERISTICS	
7	LIMITED IF OUTPUT	+10 dBm TYPICAL	8.31dBm 11.84dBm	
8	MAXIMUM RF INPUT POWER	+10 dBm	PASS BY DESIGN	
9	LOG VIDEO OUTPUT COUPLING	DC	PASS BY DESIGN	
10	MAXIMUM OUTPUT VOLTAGE	2.7 V MAXIMUM	SEE PLOTS	
11	RISE TIME	25 nSec MAXIMUM	SEE TYPICAL CHARACTERISTICS	
12	FALL TIME	30 nSec MAXIMUM	SEE TYPICAL CHARACTERISTICS	
13	SETTLING TIME	40 nSec MAXIMUM	SEE TYPICAL CHARACTERISTICS	
14	DC OFFSET	0.1 V NOMINAL (ADJUSTABLE)	PASS	
15	LOG VIDEO SLOPE	25 mV/dB NOMINAL @ 1 GHz	24.3mV/dB	



16	LOG VIDEO SLOPE VARIATION WITH FREQUENCY	$\pm 0.5\text{mV/dB}$ TYPICAL (OVER 80 MHz RF BANDWIDTH)	SEE PLOTS	
17	LOG VIDEO SLOPE VARIATION WITH TEMPERATURE	$\pm 0.5\text{mV/dB}$ TYPICAL	SEE TYPICAL CHARACTERISTICS	
18	PROPAGATION DELAY	10 nS TYPICAL	SEE TYPICAL CHARACTERISTICS	
19	VIDEO LOAD	100 Ω \pm 10%	100 Ω	
20	DC POWER +V (NO LOAD)	7 to 18V @ 300 mA MAXIMUM	117mA	
21	DC POWER -V (NO LOAD)	-7 to -18V @ 150 mA MAXIMUM	138mA	

TESTED ON:

QA / QC APPROVAL:

DATED:

LOG TRANSFER WITH FREQUENCY @ 25 °C
 MODEL: SDLVA-0120-70-OPT 100M2G, 10 DBM
 TESTED BY: Hugo G.
 DATE: 2/24/11

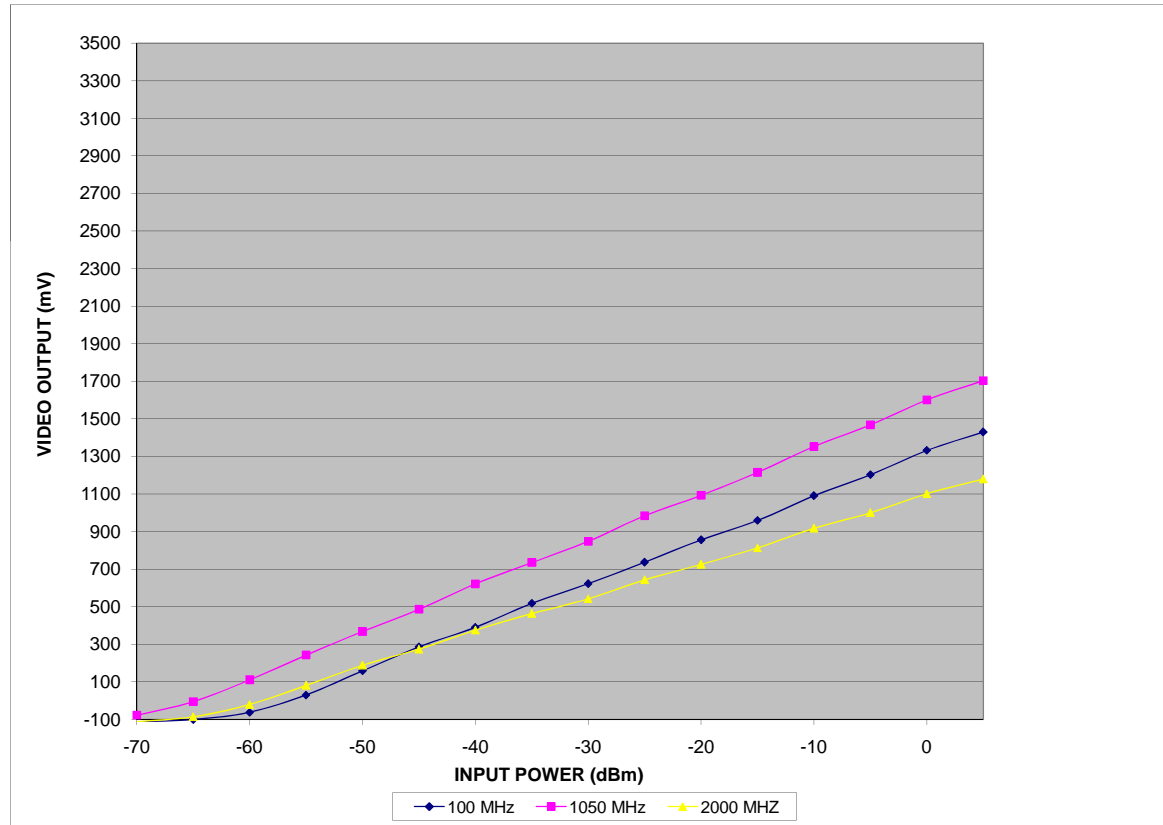
SERIAL NO: PL8687



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Frequency

			-70	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
100 MHz	INTERCEPT (mV)	1299	-114	-100	-61	31	159	287	391	519	623	737	857	960	1091	1203	1332	1430	Measured Value (mV)
	SLOPE (mV/dB)	22.01	128	31	-40	-58	-40	-22	-28	-10	-16	-12	-3	-10	12	14	33	21	Error (mV)
	LIMITED IF OUTPUT (dBm)		2.38	5.25	8.31	10.18	10.19	10.23	10.09	10.14	10.16	10.35	10.09	10.42	10.42	10.30	10.00	10.14	Measured Value (mV)
	LINEARITY(-50 TO +5dBm)	± 1.81																	
1050 MHz	INTERCEPT (mV)	1587	-78	-5	111	243	368	486	622	735	849	984	1093	1215	1353	1468	1601	1704	Measured Value (mV)
	SLOPE (mV/dB)	24.32	37	-12	-17	-7	-3	-7	7	-1	-9	5	-8	-7	9	2	14	-5	Error (mV)
	LIMITED IF OUTPUT (dBm)		7.46	10.02	10.79	11.49	11.30	11.32	11.54	11.70	11.44	10.97	11.40	11.77	11.23	11.82	11.84	11.21	Measured Value (mV)
	LINEARITY(-65 TO +5dBm)	± 0.69																	
2000 MHz	INTERCEPT (mV)	1089	-112	-86	-21	81	189	274	375	463	542	643	725	813	918	1001	1102	1180	Measured Value (mV)
	SLOPE (mV/dB)	17.97	56	-8	-32	-20	-2	-7	4	3	-8	3	-5	-7	8	1	12	0	Error (mV)
	LIMITED IF OUTPUT (dBm)		2.00	5.49	8.49	10.02	10.31	10.38	10.54	10.93	11.35	10.73	10.21	10.59	10.84	10.91	10.33	10.24	Measured Value (mV)
	LINEARITY(-65 TO +5dBm)	± 1.79																	
FREQUENCY FLATNESS		± 24.46																	



LIMITED IF OUTPUT MAX	11.84 dBm	(-60 to +5 dBm)
LIMITED IF OUTPUT MIN	8.31 dBm	(-60 to +5 dBm)
LIMITED IF FLATNESS	± 1.77 dBm	(-60 to +5 dBm)