



Planar Monolithics Industries, Inc.  
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**SUMMARY TEST DATA  
 ON  
 DETECTOR LOG VIDEO AMPLIFIER**

**CUSTOMER:** \_\_\_\_\_  
**MODEL NO:** SDLVA-0120-70-CONDOR  
**OPTION NO:** \_\_\_\_\_  
**SERIAL NO:** PL5747

**JOB NO:** \_\_\_\_\_  
**TESTED BY:** D. DURBIN  
**TEMPERATURE:** +25°C  
**DATE:** 7/29/09

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	FREQUENCY RANGE	750 MHz TO 1250 MHz	750 MHz TO 1250 MHz	
2	CENTER FREQUENCY	1 GHz	1 GHz	
3	INPUT LOGGING RANGE	-60dBm TO +5 dBm (MIN)	SEE PLOTS	
4	LOG VIDEO OUTPUT	20mV/dB (MIN) 30 mV /dB (MAX)	22.7 mV / dB 25.2 mV / dB	
5	LOG VIDEO DC OFFSET	100mV NOMINAL (ADJUSTABLE ± 50%)	Pass	
6	LOG VIDEO LINEARITY BEST FIT STRAIGHT LINE (-60 dBm to +5 dBm)	± 2.5 dB (MAX) @ ROOM TEMPERATURE	± 0.57 dB	
7	LIMITED OUTPUT	-6 dBm(NOM), ±2.0 dB (MAX) @ ROOM	-4.76 dBm -6.98 dBm	
8	LIMITED OUTPUT FLATNESS	± 1.75 dB (MAX) @ ROOM	± 1.11 dB	
9	SETTLING TIME	40 nS MAX (TO WITHIN 1 dB)	Pass (See Typical Speed Characteristics)	No Overshoot
10	RISE TIME	25 nS MAX	Pass (See Typical Speed Characteristics)	



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11	FALL TIME	30 nS MAX	Pass (See Typical Speed Characteristics)	
12	VSWR (+25°C) - INPUT	1.8:1 (MAX)	1.2 : 1	
13	VSWR (+25°C) - OUTPUT	2.5:1 (MAX)	2.4 : 1	
14	DC POWER +9V TO +18 V	200 mA (MAX)	79 mA	
15	DC POWER -9V TO -18 V	200 mA (MAX)	140 mA	
16	VIDEO LOAD	100 OHMS ± 10 %	100 OHMS	

TESTED ON: HP 8350 Sweep Oscillator, Agilent 8593E Spectrum Analyzer, Agilent 34410A Digital Multimeter,  
HP E3631A Power Supply, Agilent E8257D Analog Signal Generator, Agilent DSO6034A

QA/QC APPROVAL: \_\_\_\_\_ DATED: \_\_\_\_\_

LOG TRANSFER WITH FREQUENCY @ 25 °C  
 MODEL: SDLVA-0120-70-CONDOR OPTION :  
 TESTED BY: D. DURBIN  
 DATE: 7/29/09

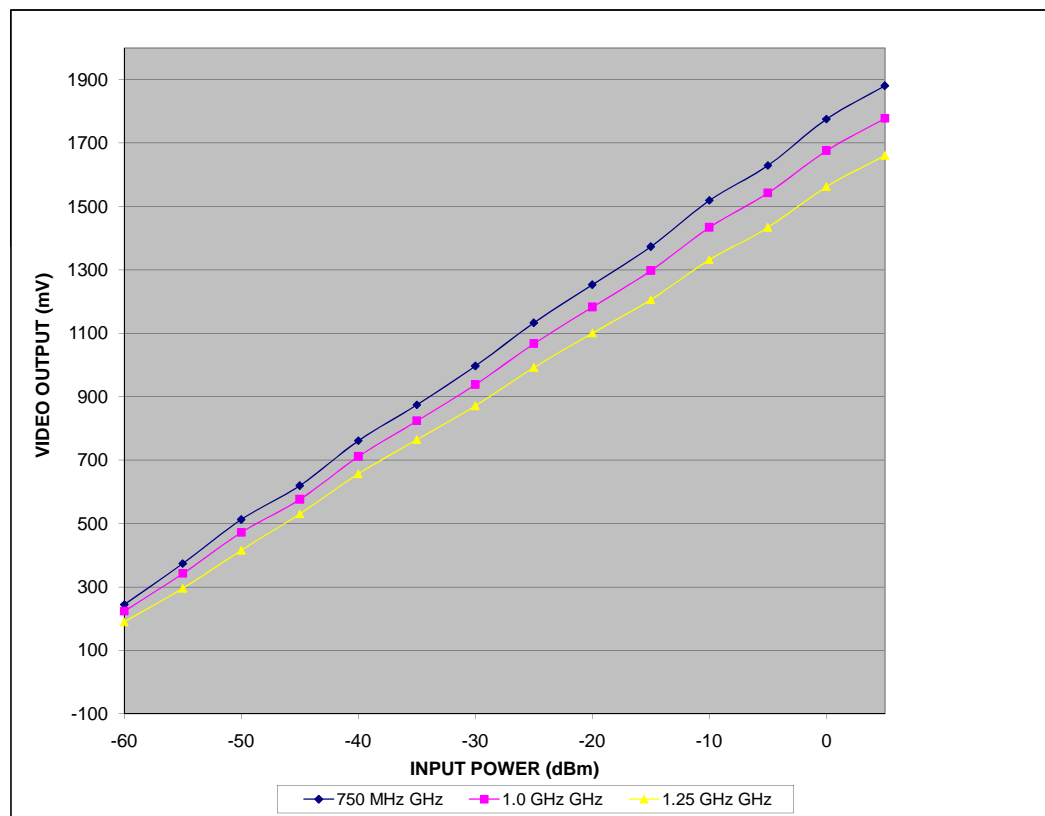
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Frequency			-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
750 MHz	INTERCEPT (mV)	1761	244	374	513	620	761	874	997	1133	1253	1373	1519	1629	1776	1881	Measured Value (mV)
	SLOPE (mV/dB)	25.22	-4	0	12	-7	9	-4	-8	2	-4	-10	10	-6	14	-7	Error (mV)
	LIMITED IF OUTPUT (dBm)		-5.10	-4.94	-4.83	-4.81	-4.81	-4.81	-4.78	-4.78	-4.78	-4.76	-4.76	-4.76	-4.76	-4.78	Measured Value (mV)
1.0 GHz	INTERCEPT (mV)	1665	224	342	472	576	711	824	938	1067	1183	1298	1434	1543	1676	1778	Measured Value (mV)
	SLOPE (mV/dB)	24.02	0	-2	8	-8	7	-1	-6	2	-2	-7	9	-3	11	-8	Error (mV)
	LIMITED IF OUTPUT (dBm)		-6.17	-5.80	-5.57	-5.54	-5.52	-5.50	-5.50	-5.50	-5.52	-5.52	-5.50	-5.50	-5.52	-5.50	Measured Value (mV)
1.25 GHz	INTERCEPT (mV)	1554	190	296	416	530	657	764	871	992	1100	1206	1332	1434	1562	1661	Measured Value (mV)
	SLOPE (mV/dB)	22.73	-1	-9	-2	-1	11	6	-1	6	1	-7	5	-7	8	-7	Error (mV)
	LIMITED IF OUTPUT (dBm)		-6.98	-6.31	-6.02	-5.97	-6.00	-5.97	-5.95	-5.95	-5.97	-5.95	-5.95	-5.93	-6.00	-5.95	Measured Value (mV)

LINEARITY(-60 TO +5 dBm) ± 0.57 dB  
 FREQUENCY FLATNESS ± 4.40 dB



LIMITED IF OUTPUT MAX -4.76 dBm  
 LIMITED IF OUTPUT MIN -6.98 dBm  
 LIMITED IF FLATNESS ± 1.11 dB