



Planar Monolithics Industries, Inc.  
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[www.pmi-rf.com](http://www.pmi-rf.com)

**SUMMARY TEST DATA  
 ON  
 DETECTOR LOG VIDEO AMPLIFIER**

<b>CUSTOMER:</b>	_____	<b>JOB NO:</b>	<b>SO09000054</b>
<b>MODEL NO:</b>	<b>SDLVA-0120-70-CONDOR</b>	<b>TESTED BY:</b>	<b>D. DURBIN</b>
<b>OPTION NO:</b>	_____	<b>TEMPERATURE:</b>	<b>+25°C</b>
<b>SERIAL NO:</b>	<b>PL5741</b>	<b>DATE:</b>	<b>7/29/09</b>

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)	22.8 mV / dB 25.0 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	± 0.68 dB	
7	LIMITED OUTPUT	-6 dBm(NOM), ±2.0 dB (MAX) @ ROOM	-4.90 dBm -7.51 dBm	
8	LIMITED OUTPUT FLATNESS	± 1.75 dB (MAX) @ ROOM	± 1.31 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)	1.19 : 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

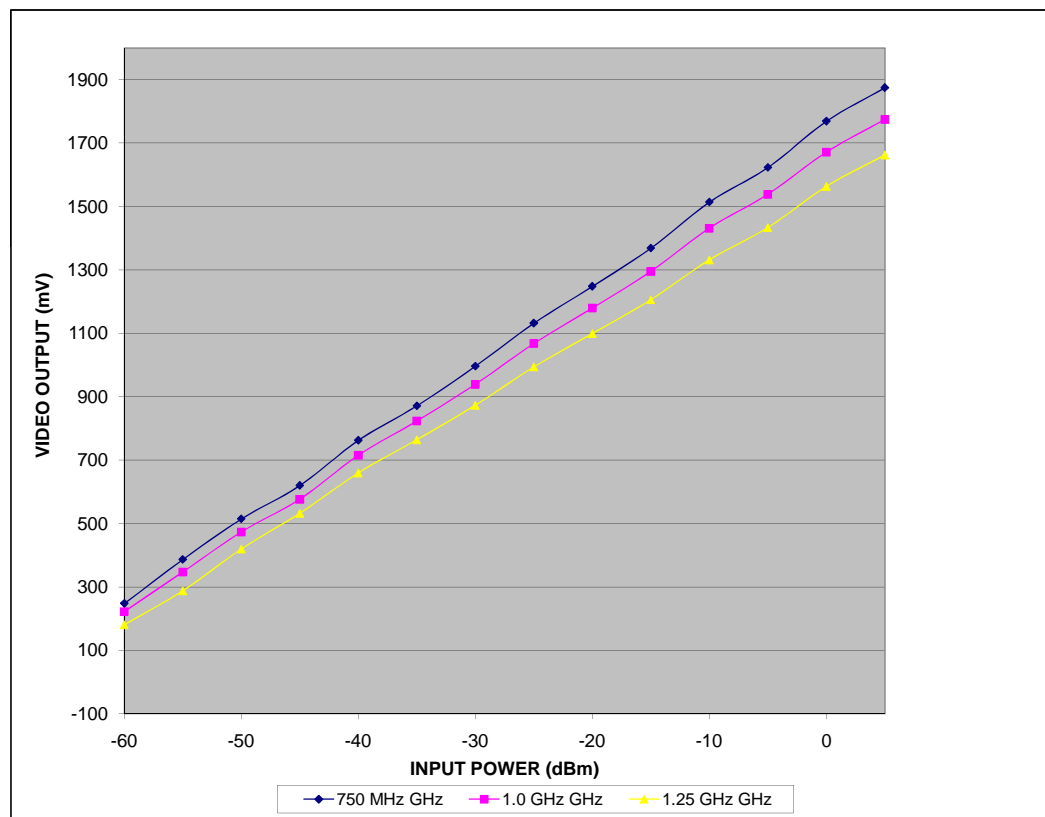
SERIAL No. : PL5741



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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)	1754	248	387	514	620	762	871	996	1132	1248	1369	1514	1623	1769	1875	Measured Value (mV)
	SLOPE (mV/dB)	25.01	-6	8	11	-9	9	-7	-7	3	-6	-10	10	-6	15	-4	Error (mV)
	LIMITED IF OUTPUT (dBm)		-5.24	-4.98	-4.95	-4.92	-4.92	-4.90	-4.90	-4.90	-4.90	-4.90	-4.90	-4.90	-4.90	-4.90	-4.90
1.0 GHz	INTERCEPT (mV)	1662	222	347	473	577	715	823	939	1068	1180	1295	1432	1538	1671	1774	Measured Value (mV)
	SLOPE (mV/dB)	23.92	-4	1	8	-9	10	-1	-5	4	-4	-8	9	-4	10	-7	Error (mV)
	LIMITED IF OUTPUT (dBm)		-6.29	-5.89	-5.71	-5.64	-5.61	-5.61	-5.61	-5.61	-5.61	-5.59	-5.61	-5.61	-5.61	-5.61	-5.61
1.25 GHz	INTERCEPT (mV)	1556	181	288	420	532	660	764	873	994	1099	1206	1332	1433	1563	1662	Measured Value (mV)
	SLOPE (mV/dB)	22.8	-7	-14	4	2	15	6	1	8	-1	-8	4	-9	7	-8	Error (mV)
	LIMITED IF OUTPUT (dBm)		-7.51	-6.56	-6.17	-6.09	-6.08	-6.07	-6.04	-6.04	-6.04	-6.04	-6.04	-6.07	-6.04	-6.07	-6.04

LINEARITY(-60 TO +5 dBm) ± 0.68 dB  
 FREQUENCY FLATNESS ± 4.25 dB



LIMITED IF OUTPUT MAX -4.90 dBm  
 LIMITED IF OUTPUT MIN -7.51 dBm  
 LIMITED IF FLATNESS ± 1.31 dB