

FORM: 017-LVA-DTA



PLANAR MONOLITHICS INDUSTRIES
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**SUMMARY TEST DATA
 ON**

SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER (SDLVA)

CUSTOMER: _____ JOB NO: P608039
 MODEL NO: SDLVA-2020-70 TESTED BY: Loc Chau
 OPTION NO: 118 TEMPERATURE: 0°C TO +60°C
 SERIAL NO: PM611637 DATE: 6/1/2007

TEST ITEM NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	INPUT VSWR (1 - 18 GHz)	3.0:1 (MAX)	1.85:1	
2	TYPICAL OUTPUT VOLTAGE @ -65 dBm to +5 dBm	PLOT ATTACHED	0.119 VDC TO 1.736 VDC	
3	TSS (1 - 18 GHz)	-64 dBm (MIN)	-70 dBm	
4	LOG SLOPE (±10% TOL)	20 mV/dB	20.6 mV/dB TO 21.4 mV/dB	
5	LOG LINEARITY @ -65 dBm TO +5 dBm	±1.75 dB (MAX)	±1.42 dB	
6	FREQUENCY FLATNESS (2 - 20 GHz) @ -20 dBm	±2.5 dB (MAX)	±1.35 dB	
7	RECOVERY TIME (MAX) -65 to +5 dBm	250 nSec	220 nS	
8	OUTPUT STABILITY (0° C to +60°C)	±1.75 dB (MAX)	±0.33 dB	
9	LIMITED IF OUTPUT	+16 dBm (TYPICAL)	+16 dBm	
10	RISE TIME (10% TO 90%POINTS)	30 nSec (MAX)	12 nS	
11	DC POWER @ +15 V	600 mA (MAX)	560 mA	
12	DC POWER @ -15 V	200 mA (MAX)	100 mA	

QA / QC APPROVAL: Q2 DATED: 6/6/07



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 ISO 9001:2000 CERTIFIED

SDLVA-2020-70 OPTION NO: 118 S/N: PM611637
 LOG TRANSFER WITH FREQUENCY 06/01/07 +25 C

FREQUENCY	1 GHz
SLOPE	21.4 mv/db
INTERCEPT	1547.63 mv

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
132	251	361	470	587	698	810	936	1025	1129	1229	1336	1445	1539	1640	1742
-22	-10	-8	-6	4	8	13	31	13	10	3	3	5	-9	-15	-20

Rf input power (dbm)
Measured Values (mv)
Error (mv)

FREQUENCY	6 GHz
SLOPE	21.1 mv/db
INTERCEPT	1498.75 mv

109	228	339	444	556	667	774	884	981	1083	1182	1282	1388	1492	1595	1708
-21	-7	-1	-2	5	11	12	17	9	6	-1	-6	-5	-7	-9	-1

Measured Values (mv)
Error (mv)

FREQUENCY	10 GHz
SLOPE	21.1 mv/db
INTERCEPT	1511.82 mv

119	239	350	456	568	677	789	908	985	1087	1187	1289	1397	1502	1610	1736
-20	-6	-1	0	6	10	16	30	1	-3	-8	-12	-9	-10	-7	13

Measured Values (mv)
Error (mv)

FREQUENCY	14 GHz
SLOPE	20.6 mv/db
INTERCEPT	1491.03 mv

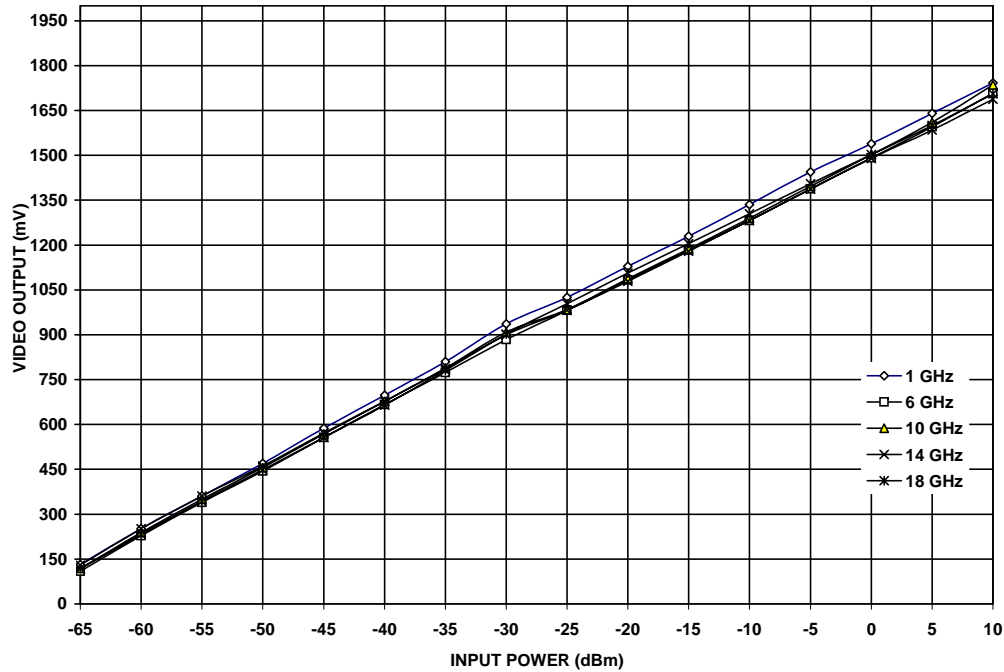
130	252	361	461	571	677	787	900	982	1079	1179	1282	1387	1490	1585	1688
-25	-6	1	-2	5	8	15	26	5	-1	-4	-3	-1	-1	-9	-9

Measured Values (mv)
Error (mv)

FREQUENCY	18 GHz
SLOPE	21.2 mv/db
INTERCEPT	1511.93 mv

118	233	344	448	556	665	781	902	1004	1106	1205	1304	1405	1502	1600	1706
-18	-9	-4	-6	-4	0	10	25	21	17	11	4	-1	-10	-18	-18

Measured Values (mv)
Error (mv)





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SDLVA-2020-70 OPTION NO: 118 S/N: PM611637
 LOG TRANSFER WITH TEMPERATURE @ 10 GHz DATE: 06/01/07

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	Rf input power (dbm)
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TEMPERATURE	0° C	110	240	351	458	572	681	796	918	995	1086	1184	1286	1394	1500	1611	1735	Measured Values (mv)
SLOPE	21.1 mv/db	-31	-7	-1	0	9	12	22	38	10	-5	-12	-15	-13	-12	-7	12	Error (mv)
INTERCEPT	1512.41 mv																	

TEMPERATURE	+ 25° C	119	239	350	456	568	677	789	908	985	1087	1187	1289	1397	1502	1610	1736	Measured Values (mv)
SLOPE	21.1 mv/db	-20	-6	-1	0	6	10	16	30	1	-3	-8	-12	-9	-10	-7	13	Error (mv)
INTERCEPT	1511.82 mv																	

TEMPERATURE	+ 60° C	110	225	339	445	556	664	773	888	982	1089	1191	1294	1402	1506	1613	1736	Measured Values (mV)
SLOPE	21.4 mv/db	-14	-6	1	0	5	6	8	16	3	3	-2	-6	-5	-8	-8	8	Error (mV)
INTERCEPT	1514.05 mv																	

