



PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

**SUMMARY TEST DATA  
 ON  
 SUCCESSIVE DETECTION LOG VIDEO AMPLIFIED--SDLVA**

CUSTOMER: _____	PART NO: _____
MODEL NO: <u>SDLVAC-0120-70M</u>	JOB NO: <u>P702006</u>
OPTION NO: <u>0308</u>	TESTED BY: <u>Loc Chau</u>
SERIAL NO: <u>PM703793</u>	TEMPERATURE: <u>25 °C</u>
	DATE: <u>3/6/2007</u>

NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	FREQUENCY RANGE	300 TO 800 MHz	300 TO 800 MHz	
2	INPUT VSWR	1.8:1 (MAX)	1.16:1	
3	LOGGING RANGE	-60 dB TO +5 dB (MIN) PLOTS ATTACHED	-60 dB TO +5 dB	
4	TSS	-65 dBm (MIN)	-65 dBm	
5	LOG LINEARITY: @ -60 TO 0 dBm @-65 TO +5dBm	±1.2 dB (MAX) ±1.5 dB(MAX)	0.89 dB 1.06 dB	
6	RISE TIME (10% TO 90% POINTS)	25 nSec (MAX)	11 nS	
7	FALL TIME (90% TO 10% POINTS)	30 nSec (MAX)	12 nS	
8	SETTLING TIME	40 nSEC (MAX)	36 nS	
9	LIMITED IF OUTPUT	-16 dBm (TYPICAL)	-15.96 dBm TO -16.54 dBm	
10	DC POWER @ +5 VDC (NO LOAD)	30 mA (MAX)	12 mA	
11	VIDEO LOAD	100 OHMS MINIMUM	100 OHMS	
12	DC POWER @ -5 VDC (NO LOAD)	170 mA (MAX)	120 mA	

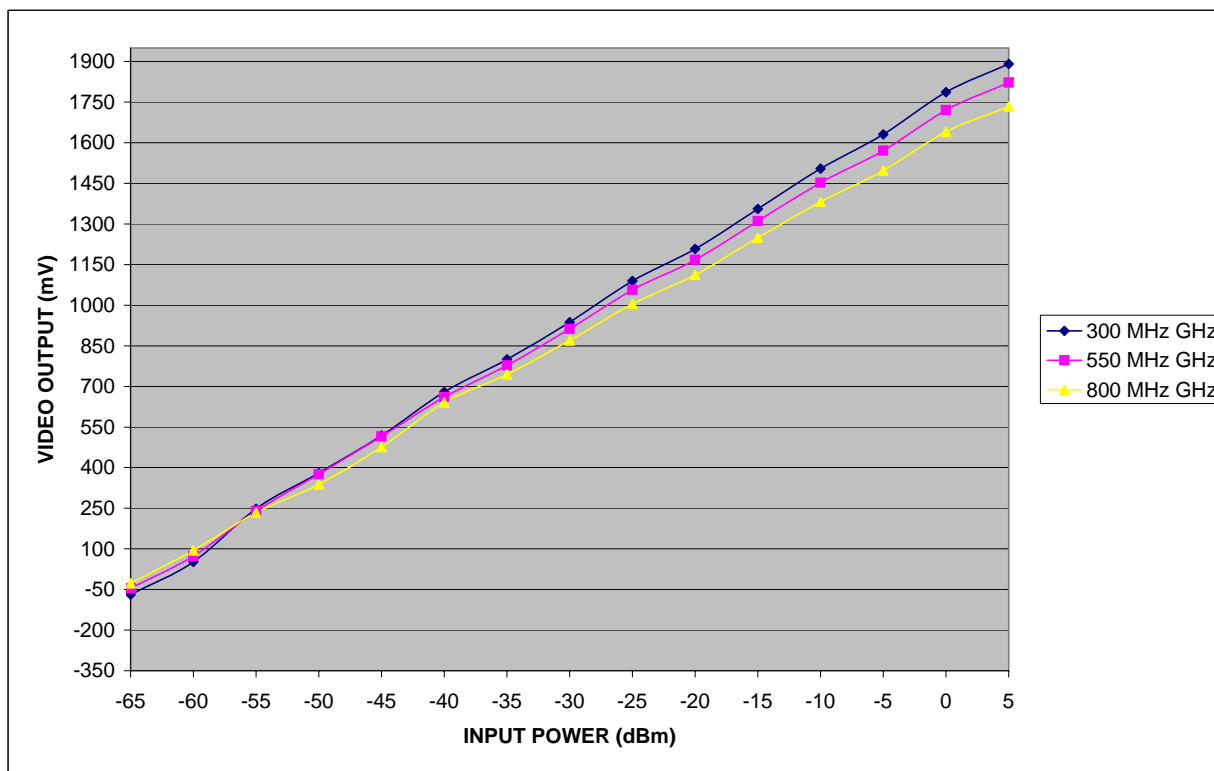
QA / QC APPROVAL: \_\_\_\_\_ Q4 DATED: 3/6/07

LOG TRANSFER WITH FREQUENCY @ -54 °C  
 MODEL: SDLVAC-0120-70M    OPTION : 0308    SERIAL No. :PM703793  
 TESTED BY: Loc Chau  
 DATE: March 1, 2007



PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704 USA  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
300 MHz	INTERCEPT (mV)	1778	-69	52	248	381	519	679	800	937	1090	1208	1355	1505	1631	1787	1891	Measured Value (mV)
	SLOPE (mV/dB)	28.14	-18	-38	17	10	7	26	6	3	15	-8	-1	8	-7	9	-28	Error (mV)
	LIMITED IF OUTPUT (dBm)		-15.56	-15.53	-15.72	-15.79	-15.75	-15.79	-15.82	-15.80	-15.80	-15.82	-15.83	-15.84	-15.85	-15.85	-15.86	
550 MHz	INTERCEPT (mV)	1713	-45	73	240	376	515	660	777	912	1057	1168	1311	1453	1571	1721	1822	Measured Value (mV)
	SLOPE (mV/dB)	26.86	-12	-29	4	6	11	21	4	5	15	-8	1	8	-8	8	-25	Error (mV)
	LIMITED IF OUTPUT (dBm)		-15.53	-15.60	-15.70	-15.75	-15.79	-15.86	-15.82	-15.81	-15.85	-15.88	-15.88	-15.88	-15.89	-15.90	-15.92	
800 MHz	INTERCEPT (mV)	1629	-27	94	234	338	476	640	745	870	1005	1112	1249	1382	1497	1640	1734	Measured Value (mV)
	SLOPE (mV/dB)	25.44	-3	-9	4	-19	-8	28	6	4	12	-8	1	7	-5	11	-22	Error (mV)
	LIMITED IF OUTPUT (dBm)		-15.55	-15.62	-15.69	-15.75	-15.73	-15.82	-15.81	-15.79	-15.83	-15.86	-15.85	-15.83	-15.82	-15.83	-15.90	
LINEARITY(-60 TO 0dBm)			± 1.35															
LINEARITY(-65 TO +5dBm)			± 1.35															

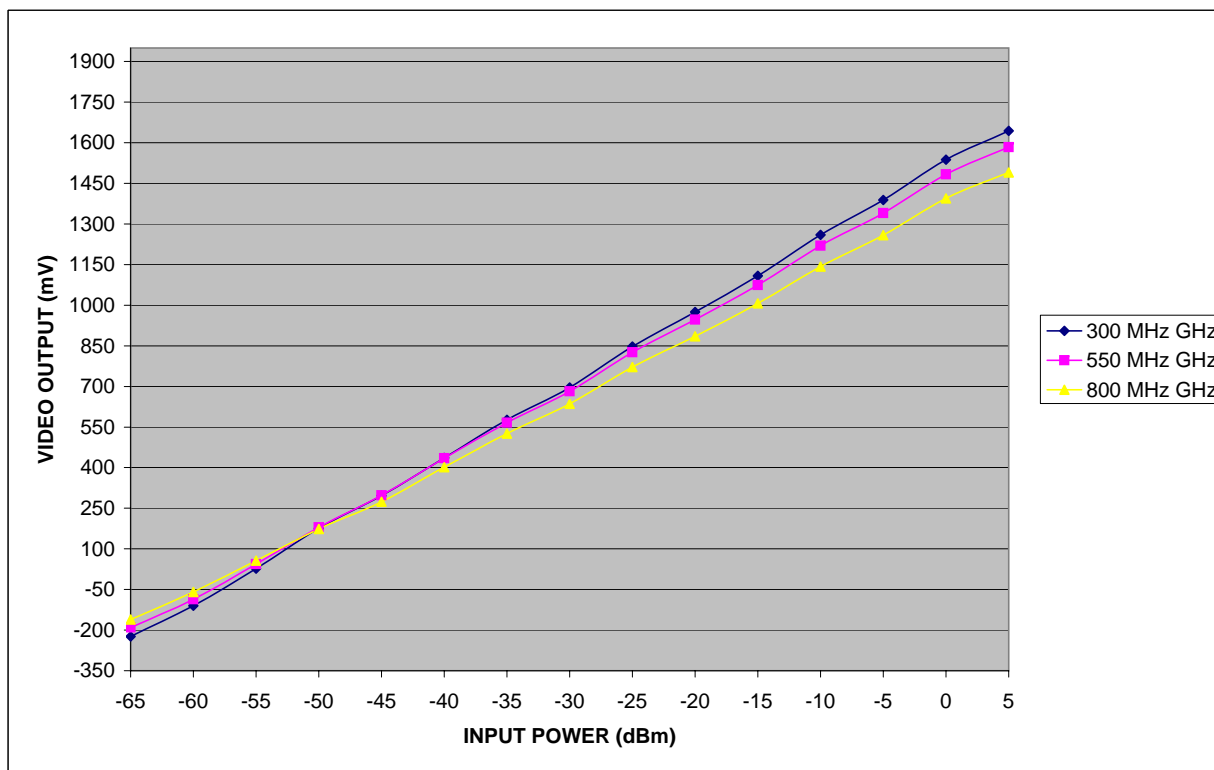


LOG TRANSFER WITH FREQUENCY @ 25 °C  
 MODEL: SDLVAC-0120-70M    OPTION : 0308    SERIAL No. :PM703793  
 TESTED BY: Loc Chau  
 DATE: March 1, 2007



PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704 USA  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
300 MHz	INTERCEPT (mV)	1521	-224	-110	27	176	296	436	577	696	847	975	1108	1260	1389	1538	1644	Measured Value (mV)
	SLOPE (mV/dB)	27.07	14	-7	-5	8	-7	-2	3	-13	3	-5	-7	10	3	17	-12	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.54	-16.25	-16.15	-16.08	-16.03	-15.98	-15.96	-15.94	-15.93	-15.94	-15.94	-15.95	-15.96	-15.96	-15.97	
550 MHz	INTERCEPT (mV)	1467	-191	-86	44	180	298	435	566	682	826	946	1074	1220	1340	1483	1584	Measured Value (mV)
	SLOPE (mV/dB)	25.78	18	-6	-5	2	-9	-1	1	-11	4	-5	-6	11	2	16	-12	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.45	-16.27	-16.16	-16.06	-15.97	-15.94	-15.98	-15.99	-16.00	-16.01	-16.02	-16.01	-16.01	-16.03	-16.05	
800 MHz	INTERCEPT (mV)	1373	-161	-59	56	173	274	402	526	636	772	885	1007	1143	1258	1394	1490	Measured Value (mV)
	SLOPE (mV/dB)	23.98	25	7	3	0	-19	-11	-7	-17	-1	-8	-6	10	5	21	-2	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.34	-16.16	-16.10	-16.06	-16.01	-15.94	-15.96	-15.99	-16.01	-16.03	-16.03	-16.02	-16.02	-16.03	-16.07	
LINEARITY(-60 TO 0dBm)			± 0.89															
LINEARITY(-65 TO +5dBm)			± 1.06															



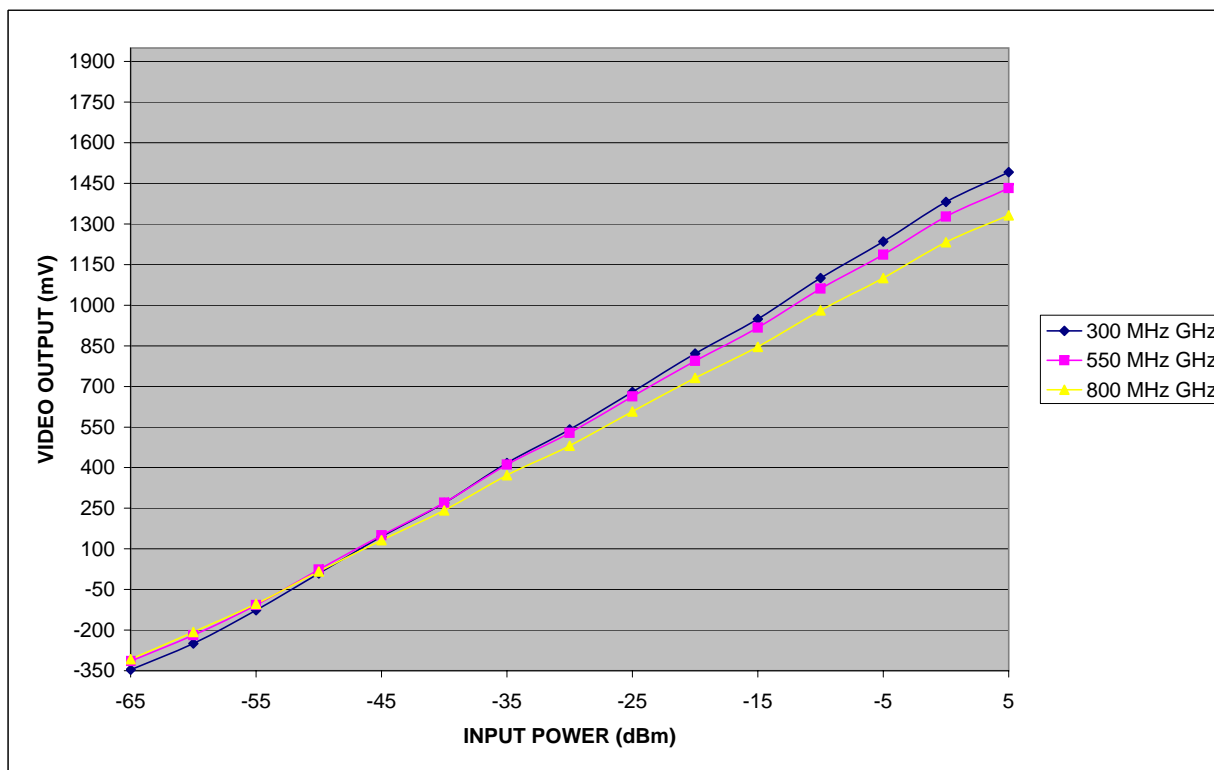
LOG TRANSFER WITH FREQUENCY @ 85 °C  
 MODEL: SDLVAC-0120-70M    OPTION : 0308    SERIAL No. :PM703793  
 TESTED BY: Loc Chau  
 DATE: March 1, 2007



PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704 USA  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
300 MHz	INTERCEPT (mV)	1360	-346	-249	-127	9	145	269	417	541	680	821	949	1100	1235	1381	1491	Measured Value (mV)
	SLOPE (mV/dB)	26.85	39	2	-10	-8	-7	-17	-3	-13	-9	-2	-8	9	9	21	-3	Error (mV)
	LIMITED IF OUTPUT (dBm)		-17.16	-16.51	-16.22	-16.08	-16.00	-15.94	-15.90	-15.88	-15.87	-15.86	-15.87	-15.88	-15.88	15.89	-15.89	
550 MHz	INTERCEPT (mV)	1307	-314	-219	-108	23	150	271	411	528	663	794	917	1061	1187	1327	1432	Measured Value (mV)
	SLOPE (mV/dB)	25.52	38	5	-12	-8	-9	-15	-3	-14	-6	-3	-7	9	8	20	-3	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.93	-16.49	-16.24	-16.09	-15.99	-15.93	-15.92	-15.92	-15.94	-15.95	-15.96	-15.96	-15.96	-15.97	-16.00	
800 MHz	INTERCEPT (mV)	1211	-308	-207	-103	16	132	242	372	481	607	731	846	981	1100	1232	1332	Measured Value (mV)
	SLOPE (mV/dB)	23.82	29	11	-5	-5	-8	-17	-6	-16	-9	-4	-8	8	8	21	1	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.82	-16.36	-16.15	-16.02	-15.97	-15.96	-15.95	-15.96	-15.97	-15.98	-15.98	-15.98	-15.99	-16.01	-16.05	

LINEARITY(-60 TO 0dBm) ± 0.86  
 LINEARITY(-65 TO +5dBm) ± 1.47





PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

**SUMMARY TEST DATA  
 ON  
 SUCCESSIVE DETECTION LOG VIDEO AMPLIFIED--SDLVA**

CUSTOMER: _____	PART NO: _____
MODEL NO: <u>SDLVAC-0120-70M</u>	JOB NO: <u>P702006</u>
OPTION NO: <u>0308</u>	TESTED BY: <u>Loc Chau</u>
SERIAL NO: <u>PM703794</u>	TEMPERATURE: <u>25 °C</u>
	DATE: <u>3/6/2007</u>

NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	FREQUENCY RANGE	300 TO 800 MHz	300 TO 800 MHz	
2	INPUT VSWR	1.8:1 (MAX)	1.18:1	
3	LOGGING RANGE	-60 dB TO +5 dB (MIN) PLOTS ATTACHED	-60 dB TO +5 dB	
4	TSS	-65 dBm (MIN)	-65 dBm	
5	LOG LINEARITY: @ -60 TO 0 dBm @-65 TO +5dBm	±1.2 dB (MAX) ±1.5 dB(MAX)	0.91 dB 0.92 dB	
6	RISE TIME (10% TO 90% POINTS)	25 nSec (MAX)	12 nS	
7	FALL TIME (90% TO 10% POINTS)	30 nSec (MAX)	12 nS	
8	SETTLING TIME	40 nSEC (MAX)	34 nS	
9	LIMITED IF OUTPUT	-16 dBm (TYPICAL)	-15.29 dBm TO -15.81 dBm	
10	DC POWER @ +5 VDC (NO LOAD)	30 mA (MAX)	12 mA	
11	VIDEO LOAD	100 OHMS MINIMUM	100 OHMS	
12	DC POWER @ -5 VDC (NO LOAD)	170 mA (MAX)	119 mA	

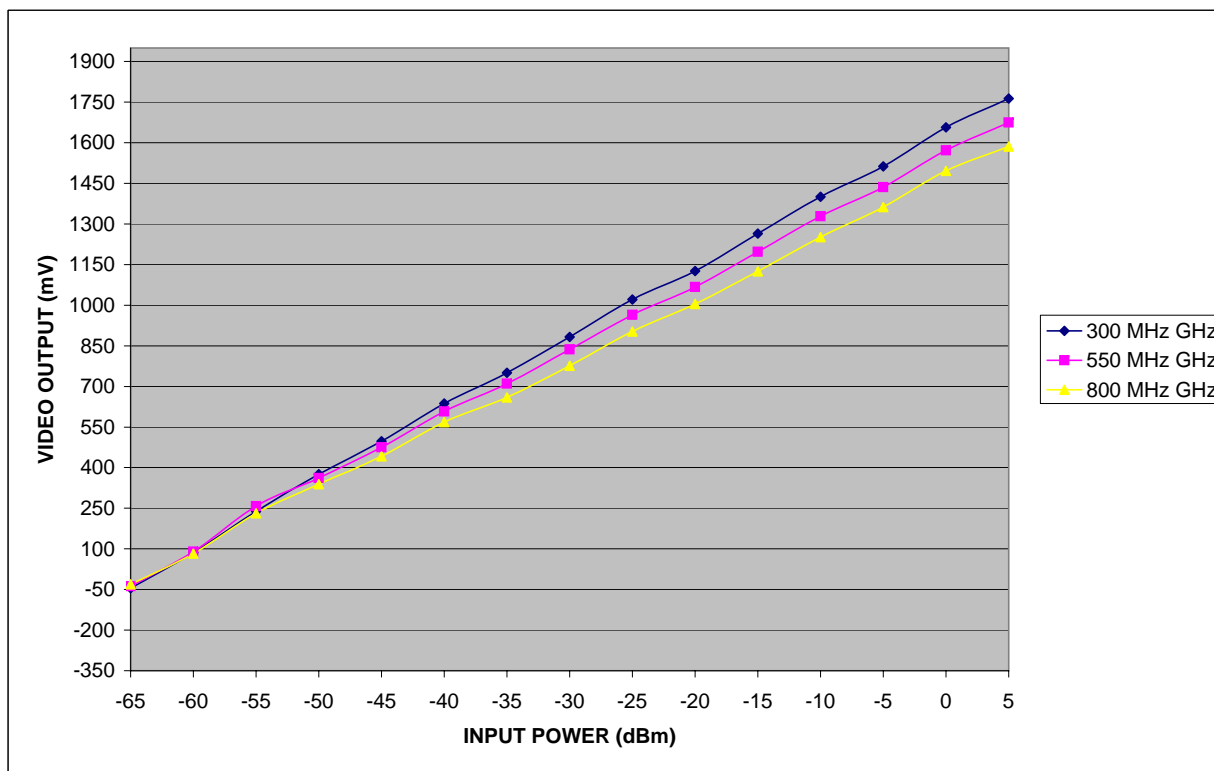
QA / QC APPROVAL: \_\_\_\_\_ Q4 DATED: 3/6/07

LOG TRANSFER WITH FREQUENCY @ -54 °C  
 MODEL: SDLVAC-0120-70M    OPTION : 0308    SERIAL No. :PM703794  
 TESTED BY: Loc Chau  
 DATE: March 1, 2007



PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704 USA  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)	
300 MHz	INTERCEPT (mV)	1651																Measured Value (mV)	
	SLOPE (mV/dB)	25.79	-45	86	239	376	498	637	750	883	1021	1126	1264	1401	1513	1657	1763	Error (mV)	
	LIMITED IF OUTPUT (dBm)		-20	-18	6	14	7	17	1	5	14	-10	-1	7	-10	6	-17	Measured Value (mV)	
550 MHz	INTERCEPT (mV)	1564	-15.56	-15.53	-15.72	-15.79	-15.75	-15.79	-15.82	-15.80	-15.80	-15.82	-15.83	-15.84	-15.85	-15.85	-15.86	Measured Value (mV)	
	SLOPE (mV/dB)	24.27	-38	90	258	361	475	607	710	837	964	1067	1197	1328	1436	1572	1675	Error (mV)	
	LIMITED IF OUTPUT (dBm)		-24	-18	29	11	3	14	-5	1	7	-12	-3	7	-7	8	-10	Measured Value (mV)	
800 MHz	INTERCEPT (mV)	1478	-15.53	-15.60	-15.70	-15.75	-15.79	-15.86	-15.82	-15.81	-15.85	-15.88	-15.88	-15.88	-15.89	-15.90	-15.92	Measured Value (mV)	
	SLOPE (mV/dB)	23.05	-31	82	231	339	442	568	659	776	903	1004	1125	1251	1362	1496	1586	Error (mV)	
	LIMITED IF OUTPUT (dBm)		-10	-13	21	14	2	12	-12	-10	2	-13	-7	4	0	18	-7	Measured Value (mV)	
LINEARITY(-60 TO 0dBm)																		± 1.19	
LINEARITY(-65 TO +5dBm)																			± 1.19

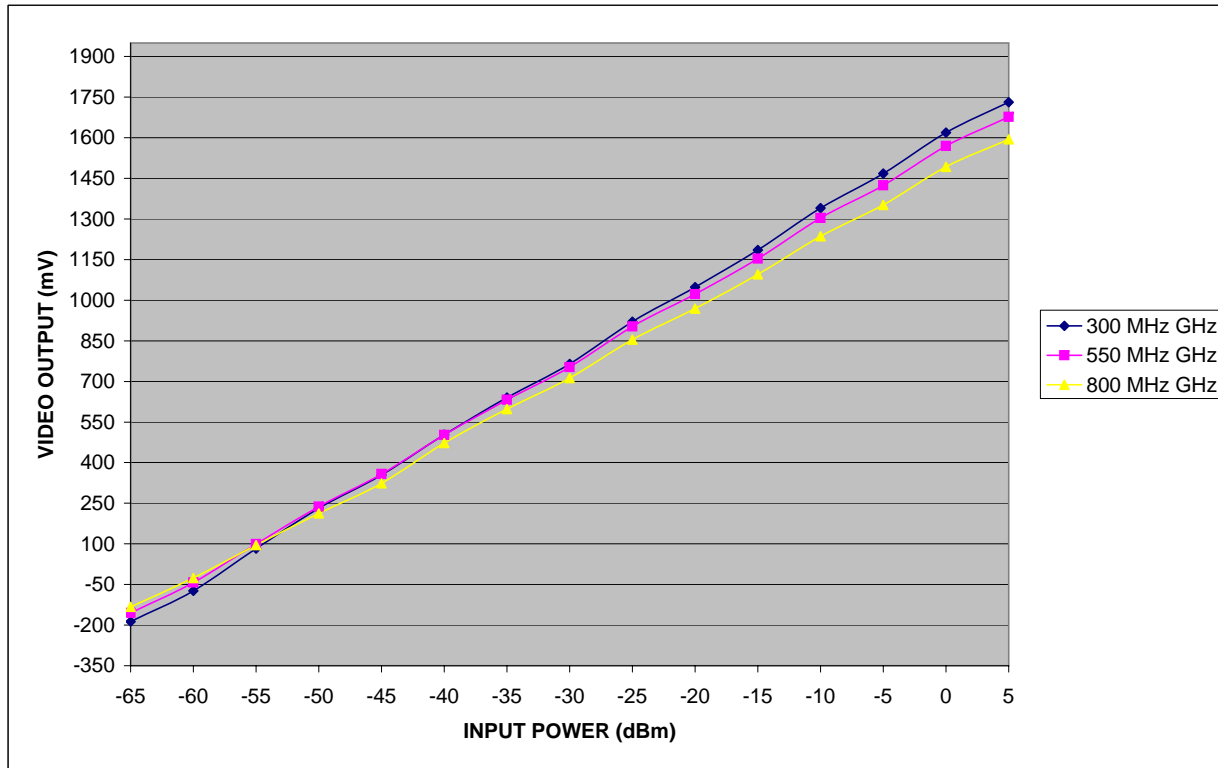


LOG TRANSFER WITH FREQUENCY @ 25 °C  
 MODEL: SDLVAC-0120-70M    OPTION : 0308    SERIAL No. :PM703794  
 TESTED BY: Loc Chau  
 DATE: March 1, 2007



PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704 USA  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
300 MHz	INTERCEPT (mV)	1607	-187	-73	82	231	354	503	641	765	921	1048	1185	1340	1468	1619	1731	Measured Value (mV)
	SLOPE (mV/dB)	27.72	8	-17	0	10	-5	5	4	-10	7	-4	-6	10	0	12	-14	Error (mV)
	LIMITED IF OUTPUT (dBm)		-15.81	-15.55	-15.46	-15.42	-15.37	-15.33	-15.31	-15.30	-15.29	-15.29	-15.30	-15.30	-15.30	-15.30	-15.30	-15.30
550 MHz	INTERCEPT (mV)	1557	-155	-43	99	237	358	502	632	753	903	1022	1153	1303	1424	1569	1677	Measured Value (mV)
	SLOPE (mV/dB)	26.49	10	-11	-1	4	-7	5	2	-9	8	-5	-7	11	0	12	-12	Error (mV)
	LIMITED IF OUTPUT (dBm)		-15.77	-15.61	-15.53	-15.45	-15.39	-15.40	-15.41	-15.39	-15.40	-15.42	-15.42	-15.43	-15.43	-15.44	-15.46	-15.46
800 MHz	INTERCEPT (mV)	1476	-132	-26	95	212	324	473	598	712	854	969	1095	1236	1352	1493	1594	Measured Value (mV)
	SLOPE (mV/dB)	25.1	23	4	-1	-9	-23	1	0	-11	5	-5	-5	11	1	17	-8	Error (mV)
	LIMITED IF OUTPUT (dBm)		-15.70	-15.57	-15.51	-15.47	-15.35	-15.33	-15.39	-15.39	-15.40	-15.41	-15.41	-15.40	-15.40	-15.41	-15.46	-15.46
LINEARITY(-60 TO 0dBm)			± 0.91															
LINEARITY(-65 TO +5dBm)			± 0.92															

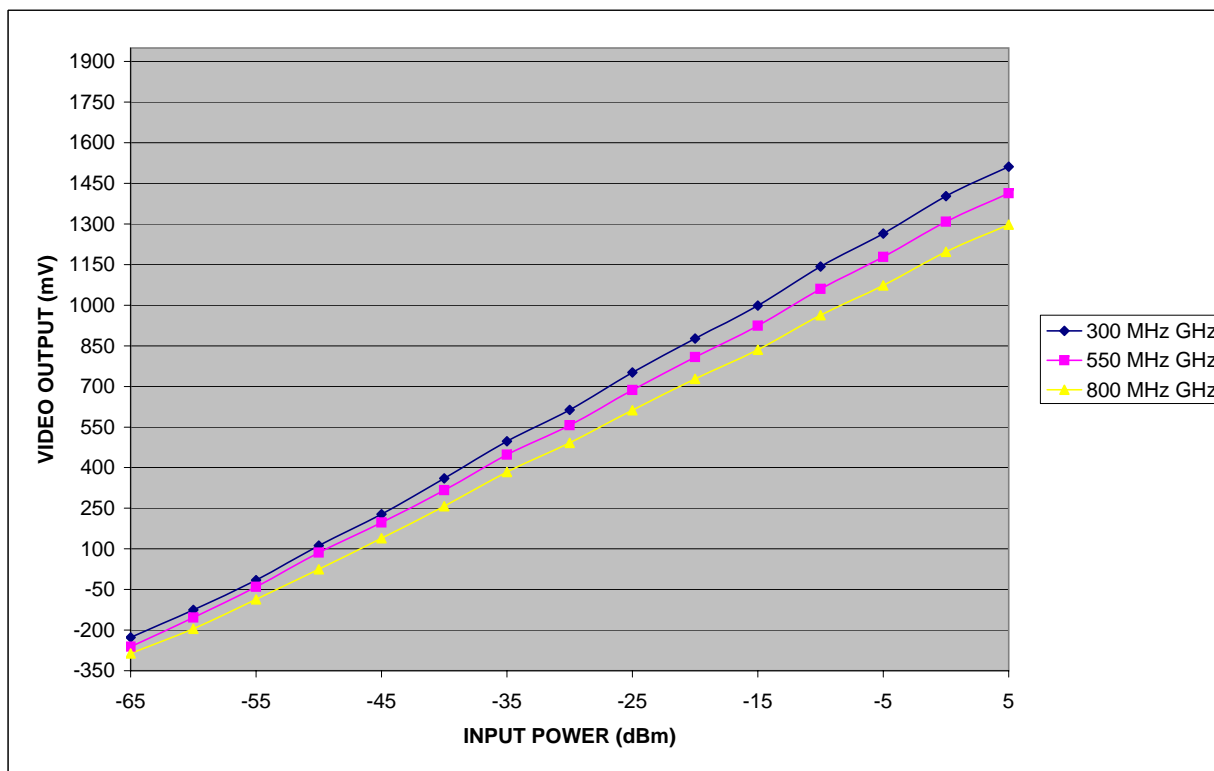


LOG TRANSFER WITH FREQUENCY @ 85 °C  
 MODEL: SDLVAC-0120-70M    OPTION : 0308    SERIAL No. :PM703794  
 TESTED BY: Loc Chau  
 DATE: March 1, 2007



PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704 USA  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
300 MHz	INTERCEPT (mV)	1386	-227	-125	-16	112	228	360	498	613	751	877	998	1143	1264	1403	1512	Measured Value (mV)
	SLOPE (mV/dB)	25.33	33	9	-9	-7	-18	-13	-1	-13	-2	-2	-8	10	5	17	-1	Error (mV)
	LIMITED IF OUTPUT (dBm)		-17.16	-16.51	-16.22	-16.08	-16.00	-15.94	-15.90	-15.88	-15.87	-15.86	-15.87	-15.88	-15.88	15.89	-15.89	Measured Value (mV)
550 MHz	INTERCEPT (mV)	1294	-261	-154	-40	86	197	317	448	557	687	808	924	1060	1178	1308	1413	Measured Value (mV)
	SLOPE (mV/dB)	24.2	17	3	-4	1	-9	-10	0	-12	-3	-3	-8	7	5	14	-2	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.93	-16.49	-16.24	-16.09	-15.99	-15.93	-15.92	-15.92	-15.94	-15.95	-15.96	-15.96	-15.96	-15.97	-16.00	Measured Value (mV)
800 MHz	INTERCEPT (mV)	1187	-286	-195	-87	25	139	257	384	491	612	728	836	963	1073	1197	1297	Measured Value (mV)
	SLOPE (mV/dB)	23.03	25	0	-7	-10	-11	-8	4	-5	1	2	-5	7	2	10	-5	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.82	-16.36	-16.15	-16.02	-15.97	-15.96	-15.95	-15.96	-15.97	-15.98	-15.98	-15.98	-15.99	-16.01	-16.05	Measured Value (mV)
LINEARITY(-60 TO 0dBm)			± 0.72															
LINEARITY(-65 TO +5dBm)			± 1.32															







PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

**SUMMARY TEST DATA  
 ON  
 SUCCESSIVE DETECTION LOG VIDEO AMPLIFIED--SDLVA**

CUSTOMER: \_\_\_\_\_  
 MODEL NO: SDLVAC-0120-70M  
 OPTION NO: 0308  
 SERIAL NO: PM703795

PART NO: \_\_\_\_\_  
 JOB NO: P702006  
 TESTED BY: Loc Chau  
 TEMPERATURE: 25 °C  
 DATE: 3/6/2007

NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	FREQUENCY RANGE	300 TO 800 MHz	300 TO 800 MHz	
2	INPUT VSWR	1.8:1 (MAX)	1.18:1	
3	LOGGING RANGE	-60 dB TO +5 dB (MIN) PLOTS ATTACHED	-60 dB TO +5 dB	
4	TSS	-65 dBm (MIN)	-65 dBm	
5	LOG LINEARITY: @ -60 TO 0 dBm @ -65 TO +5dBm	±1.2 dB (MAX) ±1.5 dB(MAX)	0.84 dB 1.09 dB	
6	RISE TIME (10% TO 90% POINTS)	25 nSec (MAX)	10 nS	
7	FALL TIME (90% TO 10% POINTS)	30 nSec (MAX)	12 nS	
8	SETTLING TIME	40 nSEC (MAX)	34 nS	
9	LIMITED IF OUTPUT	-16 dBm (TYPICAL)	-15.96 dBm TO -16.61 dBm	
10	DC POWER @ +5 VDC (NO LOAD)	30 mA (MAX)	12 mA	
11	VIDEO LOAD	100 OHMS MINIMUM	100 OHMS	
12	DC POWER @ -5 VDC (NO LOAD)	170 mA (MAX)	119 mA	

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

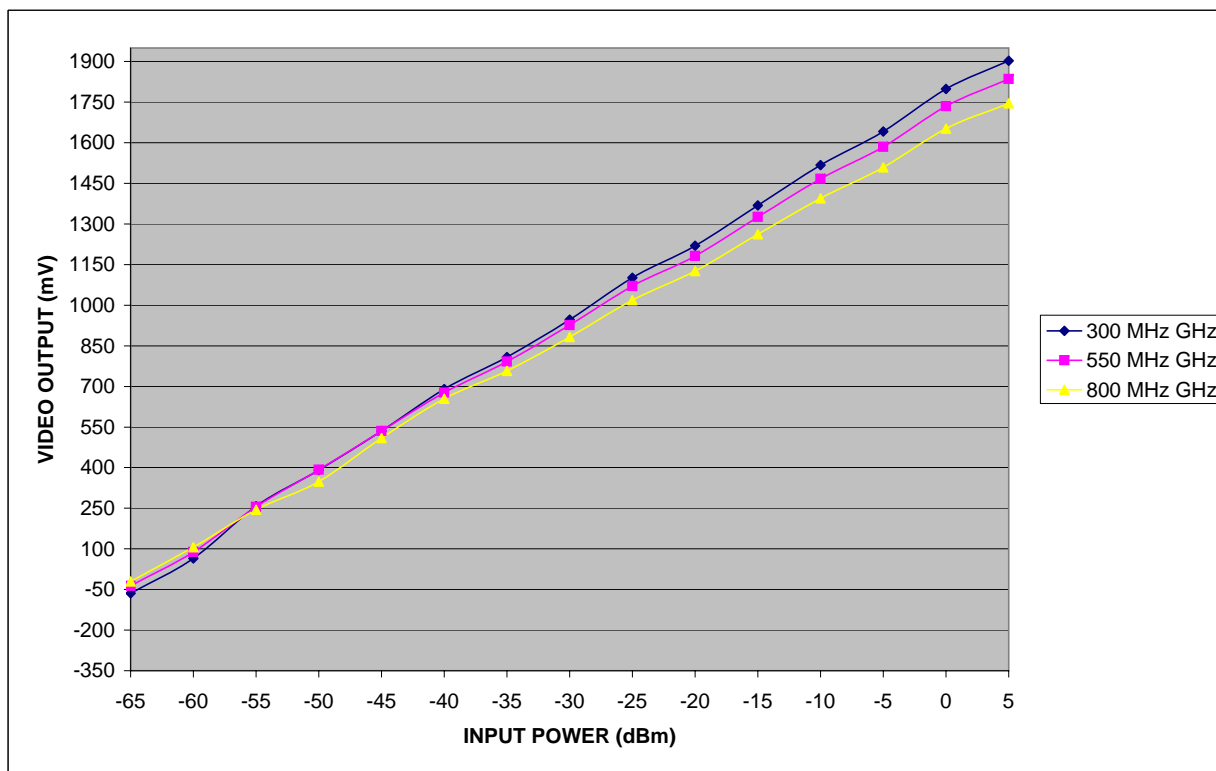
DATED: 3/6/07

LOG TRANSFER WITH FREQUENCY @ -54 °C  
 MODEL: SDLVAC-0120-70M    OPTION : 0308    SERIAL No. :PM703795  
 TESTED BY: Loc Chau  
 DATE: March 1, 2007



PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704 USA  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
300 MHz	INTERCEPT (mV)	1791	-64	65	258	391	535	690	808	947	1101	1219	1368	1517	1642	1799	1903	Measured Value (mV)
	SLOPE (mV/dB)	28.18	-23	-35	17	9	12	26	4	2	15	-8	0	8	-8	8	-28	Error (mV)
	LIMITED IF OUTPUT (dBm)		-15.66	-15.59	-15.74	-15.81	-15.79	-15.81	-15.81	-15.79	-15.79	-15.81	-15.82	-15.83	-15.84	-15.85	-15.86	
550 MHz	INTERCEPT (mV)	1728	-37	88	255	392	535	677	792	927	1071	1182	1326	1467	1585	1735	1835	Measured Value (mV)
	SLOPE (mV/dB)	26.86	-19	-28	4	7	16	24	4	5	15	-9	1	8	-8	7	-27	Error (mV)
	LIMITED IF OUTPUT (dBm)		-15.63	-15.65	-15.71	-15.77	-15.86	-15.86	-15.82	-15.82	-15.86	-15.88	-15.89	-15.89	-15.89	-15.89	-15.91	-15.93
800 MHz	INTERCEPT (mV)	1642	-20	106	245	349	509	655	758	883	1019	1126	1262	1395	1509	1652	1745	Measured Value (mV)
	SLOPE (mV/dB)	25.43	-10	-11	1	-22	11	30	6	3	12	-8	1	7	-6	10	-24	Error (mV)
	LIMITED IF OUTPUT (dBm)		-15.65	-15.68	-15.73	-15.77	-15.77	-15.85	-15.83	-15.81	-15.85	-15.87	-15.86	-15.85	-15.85	-15.86	-15.93	
LINEARITY(-60 TO 0dBm)			± 1.24															
LINEARITY(-65 TO +5dBm)			± 1.24															

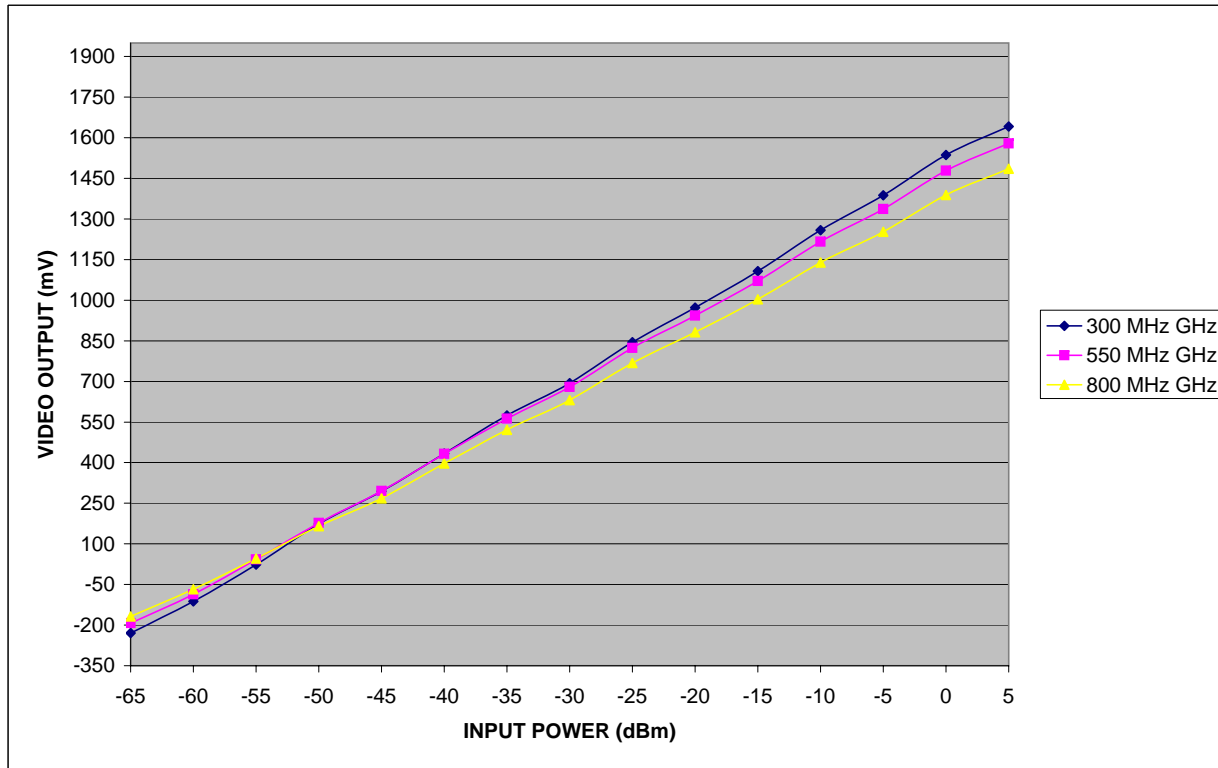


LOG TRANSFER WITH FREQUENCY @ 25 °C  
 MODEL: SDLVAC-0120-70M    OPTION : 0308    SERIAL No. :PM703795  
 TESTED BY: Loc Chau  
 DATE: March 1, 2007



PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704 USA  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
300 MHz	INTERCEPT (mV)	1519	-229	-113	24	173	294	434	574	694	845	973	1107	1259	1387	1536	1641	Measured Value (mV)
	SLOPE (mV/dB)	27.09	13	-7	-5	8	-6	-2	3	-13	3	-5	-6	11	3	17	-14	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.61	-16.28	-16.17	-16.09	-16.04	-16.00	-15.97	-15.96	-15.96	-15.96	-15.97	-15.97	-15.98	-15.99	-15.99	
550 MHz	INTERCEPT (mV)	1463	-193	-87	42	177	295	433	563	679	824	943	1071	1216	1336	1479	1579	Measured Value (mV)
	SLOPE (mV/dB)	25.74	17	-5	-5	1	-9	0	1	-11	5	-5	-6	11	2	16	-12	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.52	-16.31	-16.18	-16.08	-15.99	-15.97	-16.00	-16.01	-16.02	-16.03	-16.04	-16.04	-16.05	-16.06	-16.08	
800 MHz	INTERCEPT (mV)	1369	-168	-68	46	165	268	397	521	631	768	881	1003	1139	1253	1389	1485	Measured Value (mV)
	SLOPE (mV/dB)	24.05	26	6	0	-1	-19	-10	-6	-16	0	-7	-5	11	5	20	-4	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.43	-16.24	-16.15	-16.10	-16.04	-15.97	-15.99	-16.02	-16.04	-16.05	-16.05	-16.04	-16.04	-16.05	-16.09	
LINEARITY(-60 TO 0dBm)			± 0.84															
LINEARITY(-65 TO +5dBm)			± 1.09															

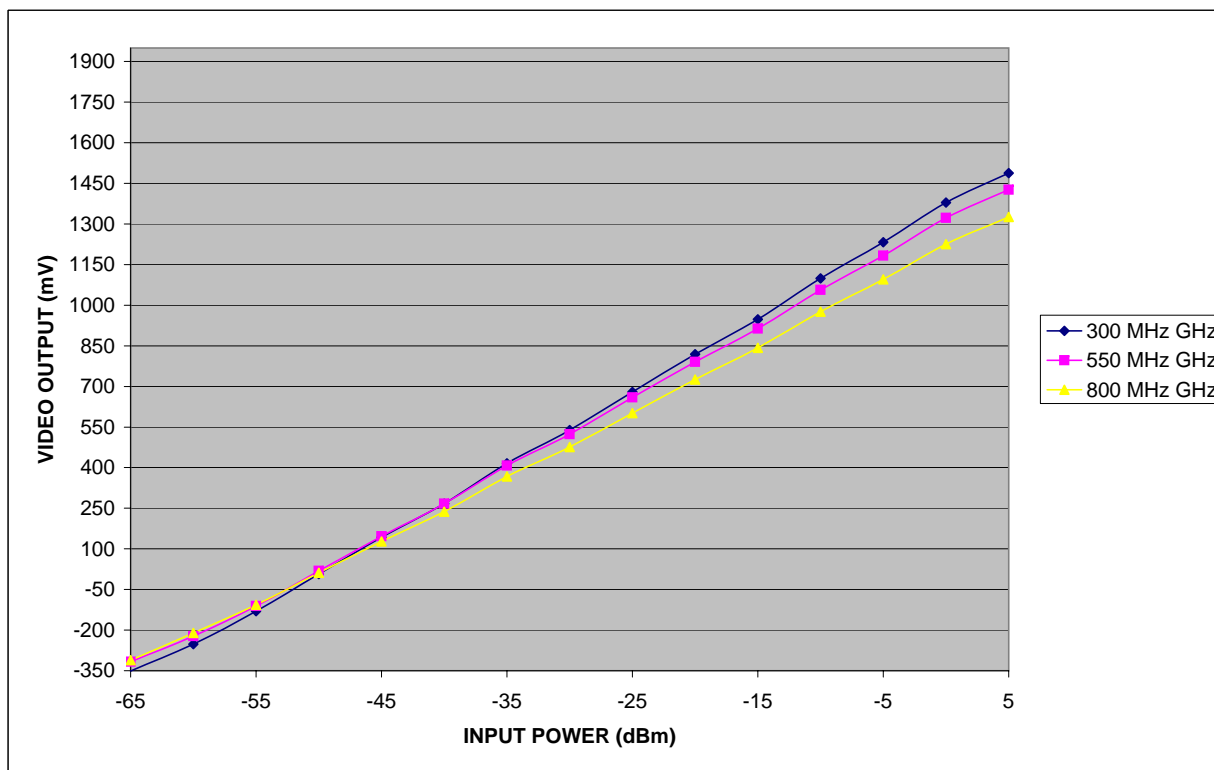


LOG TRANSFER WITH FREQUENCY @ 85 °C  
 MODEL: SDLVAC-0120-70M    OPTION : 0308    SERIAL No. :PM703795  
 TESTED BY: Loc Chau  
 DATE: March 1, 2007



PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704 USA  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
300 MHz	INTERCEPT (mV)	1358	-351	-252	-130	7	143	267	416	539	679	819	948	1099	1232	1379	1488	Measured Value (mV)
	SLOPE (mV/dB)	26.87	37	2	-10	-8	-6	-16	-2	-13	-8	-2	-7	9	8	21	-5	Error (mV)
	LIMITED IF OUTPUT (dBm)		-17.18	-16.52	-16.23	-16.09	-16.00	-15.94	-15.90	-15.88	-15.87	-15.87	-15.87	-15.88	-15.88	-15.89	-15.89	
550 MHz	INTERCEPT (mV)	1302	-317	-222	-111	19	146	267	408	523	659	791	913	1057	1183	1322	1426	Measured Value (mV)
	SLOPE (mV/dB)	25.49	38	5	-11	-9	-9	-16	-2	-15	-6	-2	-7	10	8	20	-4	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.96	-16.51	-16.27	-16.11	-16.01	-15.95	-15.94	-15.95	-15.96	-15.97	-15.98	-15.98	-15.99	-16.00	-16.03	
800 MHz	INTERCEPT (mV)	1206	-311	-210	-106	12	128	237	368	476	602	726	842	976	1095	1226	1326	Measured Value (mV)
	SLOPE (mV/dB)	23.78	29	11	-4	-5	-8	-18	-6	-16	-9	-4	-7	8	8	20	1	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.88	-16.43	-16.23	-16.10	-16.05	-16.02	-16.02	-16.04	-16.04	-16.05	-16.05	-16.05	-16.06	-16.08	-16.11	
LINEARITY(-60 TO 0dBm)			± 0.85															
LINEARITY(-65 TO +5dBm)			± 1.47															





PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

**SUMMARY TEST DATA  
 ON  
 SUCCESSIVE DETECTION LOG VIDEO AMPLIFIED--SDLVA**

CUSTOMER: \_\_\_\_\_  
 MODEL NO: SDLVAC-0120-70M  
 OPTION NO: 0308  
 SERIAL NO: PM703796

PART NO: \_\_\_\_\_  
 JOB NO: P702006  
 TESTED BY: Loc Chau  
 TEMPERATURE: 25 °C  
 DATE: 3/6/2007

NO:	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	FREQUENCY RANGE	300 TO 800 MHz	300 TO 800 MHz	
2	INPUT VSWR	1.8:1 (MAX)	1.18:1	
3	LOGGING RANGE	-60 dB TO +5 dB (MIN) PLOTS ATTACHED	-60 dB TO +5 dB	
4	TSS	-65 dBm (MIN)	-65 dBm	
5	LOG LINEARITY: @ -60 TO 0 dBm @-65 TO +5dBm	±1.2 dB (MAX) ±1.5 dB(MAX)	0.83 dB 1.01 dB	
6	RISE TIME (10% TO 90% POINTS)	25 nSec (MAX)	10 nS	
7	FALL TIME (90% TO 10% POINTS)	30 nSec (MAX)	12 nS	
8	SETTLING TIME	40 nSEC (MAX)	34 nS	
9	LIMITED IF OUTPUT	-16 dBm (TYPICAL)	-15.99 dBm TO -16.52 dBm	
10	DC POWER @ +5 VDC (NO LOAD)	30 mA (MAX)	12 mA	
11	VIDEO LOAD	100 OHMS MINIMUM	100 OHMS	
12	DC POWER @ -5 VDC (NO LOAD)	170 mA (MAX)	119 mA	

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

**Q4**

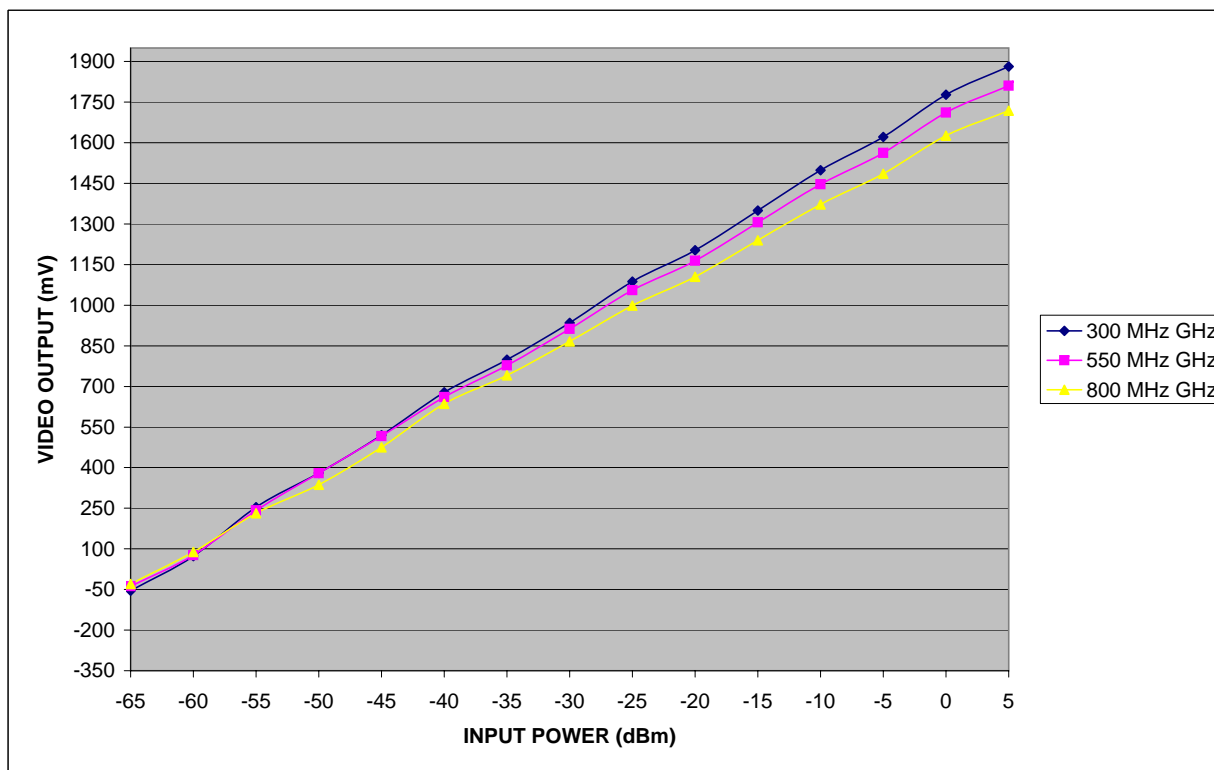
DATED: 3/6/07

LOG TRANSFER WITH FREQUENCY @ -54 °C  
 MODEL: SDLVAC-0120-70M    OPTION : 0308    SERIAL No. :PM703796  
 TESTED BY: Loc Chau  
 DATE: March 1, 2007



PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704 USA  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
300 MHz	INTERCEPT (mV)	1767																Measured Value (mV)
	SLOPE (mV/dB)	27.79	-55	73	254	381	520	678	799	935	1087	1203	1350	1498	1622	1777	1881	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16	-27	15	3	3	22	4	1	14	-8	0	9	-6	10	-25	Measured Value (mV)
550 MHz	INTERCEPT (mV)	1704																Measured Value (mV)
	SLOPE (mV/dB)	26.62	-38	77	242	379	516	661	777	912	1055	1164	1306	1446	1562	1711	1810	Error (mV)
	LIMITED IF OUTPUT (dBm)		-12	-30	2	6	10	22	5	7	17	-7	1	8	-9	7	-27	Measured Value (mV)
800 MHz	INTERCEPT (mV)	1617																Measured Value (mV)
	SLOPE (mV/dB)	25.25	-30	89	232	337	475	636	741	866	999	1105	1240	1372	1485	1626	1718	Error (mV)
	LIMITED IF OUTPUT (dBm)		-6	-13	4	-17	-6	29	8	7	13	-7	2	8	-6	9	-25	Measured Value (mV)
LINEARITY(-60 TO 0dBm)			± 1.15															
LINEARITY(-65 TO +5dBm)			± 1.15															

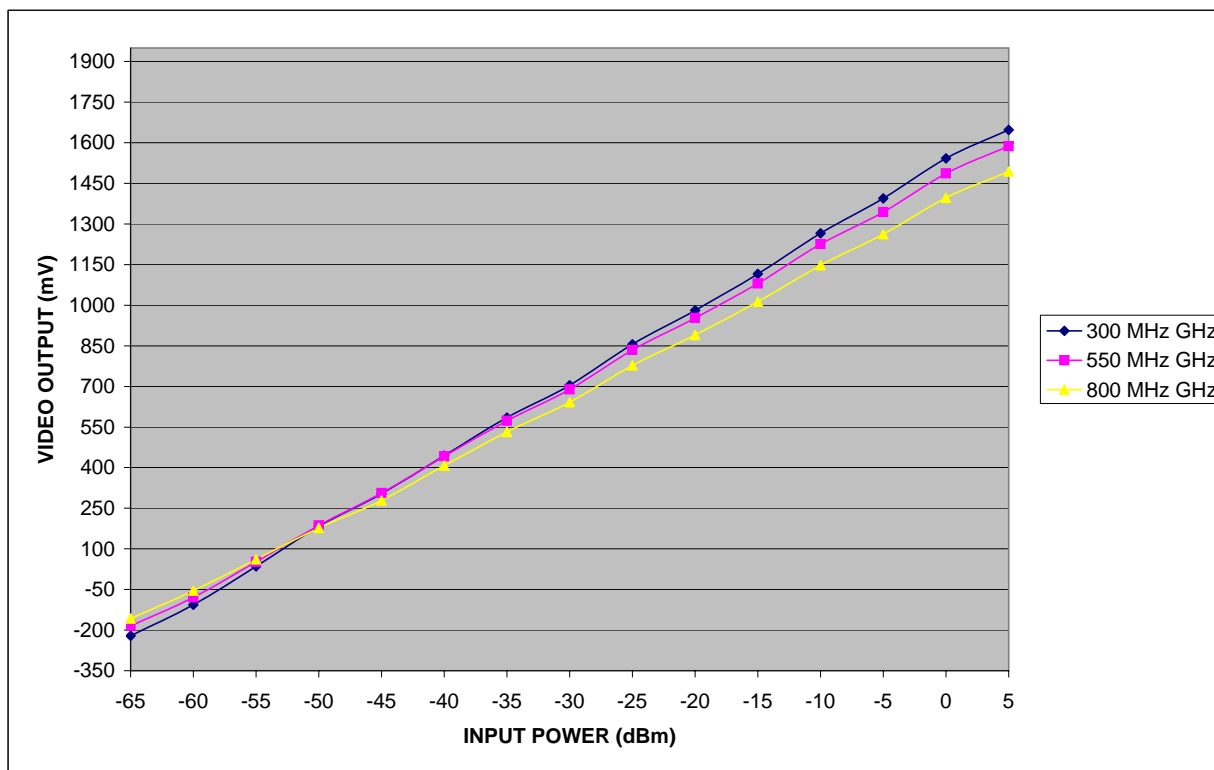


LOG TRANSFER WITH FREQUENCY @ 25 °C  
 MODEL: SDLVAC-0120-70M OPTION :0308 SERIAL No. :PM703796  
 TESTED BY: Loc Chau  
 DATE: March 1, 2007



PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704 USA  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
300 MHz	INTERCEPT (mV)	1527	-221	-106	35	183	304	444	585	704	855	981	1115	1266	1394	1542	1648	Measured Value (mV)
	SLOPE (mV/dB)	27.05	11	-10	-4	9	-5	-1	5	-11	4	-5	-6	10	2	15	-14	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.52	-16.27	-16.19	-16.13	-16.08	-16.03	-16.01	-15.99	-15.98	-15.99	-15.99	-16.00	-16.01	-16.01	-16.02	
550 MHz	INTERCEPT (mV)	1471	-185	-79	52	187	306	442	573	689	834	952	1080	1225	1344	1487	1587	Measured Value (mV)
	SLOPE (mV/dB)	25.73	16	-7	-4	2	-8	0	2	-11	6	-5	-5	11	1	16	-13	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.45	-16.31	-16.20	-16.11	-16.03	-16.00	-16.04	-16.05	-16.05	-16.07	-16.07	-16.07	-16.07	-16.09	-16.12	
800 MHz	INTERCEPT (mV)	1377	-157	-55	61	177	279	408	532	642	778	890	1013	1147	1262	1397	1494	Measured Value (mV)
	SLOPE (mV/dB)	23.98	24	6	3	-1	-19	-10	-6	-16	0	-8	-5	10	5	20	-3	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.36	-16.21	-16.14	-16.11	-16.07	-15.99	-16.00	-16.03	-16.05	-16.07	-16.06	-16.06	-16.06	-16.07	-16.11	
LINEARITY(-60 TO 0dBm)			± 0.83															
LINEARITY(-65 TO +5dBm)			± 1.01															



LOG TRANSFER WITH FREQUENCY @ 85 °C  
 MODEL: SDLVAC-0120-70M    OPTION :0308    SERIAL No. :PM703796  
 TESTED BY: Loc Chau  
 DATE: March 1, 2007



PLANAR MONOLITHICS INDUSTRIES  
 7311-G GROVE ROAD, FREDERICK, MD 21704 USA  
 TEL: 301-631-1579 FAX: 301-662-2029  
 URL: WWW.PLANARMONOLITHICS.COM  
 EMAIL: SALES@PLANARMONOLITHICS.COM  
 ISO 9001:2000 CERTIFIED

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	RF Input Power (dBm)
300 MHz	INTERCEPT (mV)	1368	-345	-248	-125	11	149	273	422	547	687	828	956	1107	1242	1388	1499	Measured Value (mV)
	SLOPE (mV/dB)	26.96	39	1	-10	-9	-6	-17	-3	-12	-7	-1	-8	8	9	20	-4	Error (mV)
	LIMITED IF OUTPUT (dBm)		-17.19	-16.54	-16.24	-16.11	-16.02	-15.96	-15.92	-15.90	-15.89	-15.89	-15.89	-15.90	-15.90	-15.91	-15.91	
550 MHz	INTERCEPT (mV)	1318	-312	-218	-106	25	153	275	417	533	668	801	923	1068	1194	1343	1449	Measured Value (mV)
	SLOPE (mV/dB)	25.7	40	5	-11	-9	-9	-16	-2	-15	-8	-4	-10	6	4	25	2	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.96	-16.53	-16.28	-16.12	-16.02	-15.97	-15.95	-15.96	-15.97	-15.98	-15.99	-15.99	-16.00	-16.01	-16.04	
800 MHz	INTERCEPT (mV)	1227	-310	-208	-103	18	136	247	379	490	617	742	858	994	1114	1246	1347	Measured Value (mV)
	SLOPE (mV/dB)	24.08	28	10	-6	-5	-7	-17	-5	-14	-8	-3	-8	8	8	19	0	Error (mV)
	LIMITED IF OUTPUT (dBm)		-16.88	-16.41	-16.19	-16.07	-16.01	-16.00	-16.00	-16.00	-16.02	-16.02	-16.03	-16.03	-16.03	-16.05	-16.09	
LINEARITY(-60 TO 0dBm)			± 0.95															
LINEARITY(-65 TO +5dBm)			± 1.55															

