



PLANAR MONOLITHIC INDUSTRIES  
7311 F GROVE ROAD, FREDERICK MD. 21701  
TEL: (301)831-4257 FAX: (301)662-4938

JOB NO: P20619

SUMMARY TEST DATA  
ON  
SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER--SDLVA

CUSTOMER: LITTON ADVANCE SYSTEM  
JOB NO: P20619  
MODEL NO: SDLVAC-06135M-A08-LA  
SERIAL NO: PM206570 7

TESTED BY: R. Hobbie  
TEMPERATURE: 25°C  
DATE: 6/29/02

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	FREQUENCY RANGE	600 TO 1350 MHz	600 MHz To 1350 MHz.	Set ✓
2	INPUT VSWR	1.8:1 (MAX)	1.22:1	✓
3	LOGGING RANGE	-65 dB TO +5 dB (MIN) PLOTS ATTACHED	-65 TO +5 dBm	✓
4	TSS	-65 dBm (TYP)	-65 dBm	✓
5	LOG SLOPE ±10%	ADJUSTABLE PLOTS ATTACHED	23.16 mu/dB	✓
6	LOG LINEARITY: @ -60 TO +5 dBm	±2.0 dB MAXIMUM PLOTS ATTACHED	+0.68 dB -0.61 dB	✓
7	RISE TIME (10% to 90% POINTS)	25 nsec (MAX)	225 ns	✓
8	FALL TIME (90% TO 10% POINTS)	30 nsec (MAX)	230 ns	✓
9	LIMITED IF OUTPUT	-14 dBm (TYPICAL)	-17.02 dBm	✓
10	DC POWER @ +5 VDC (NO LOAD)	30 mA MAXIMUM	14 mA	✓
11	DC POWER @ -5 VDC (NO LOAD)	170 mA MAXIMUM	116 mA	✓

PRODUCTION MANAGER APPROVAL: H. Steinhaus DATED: 7/2/02

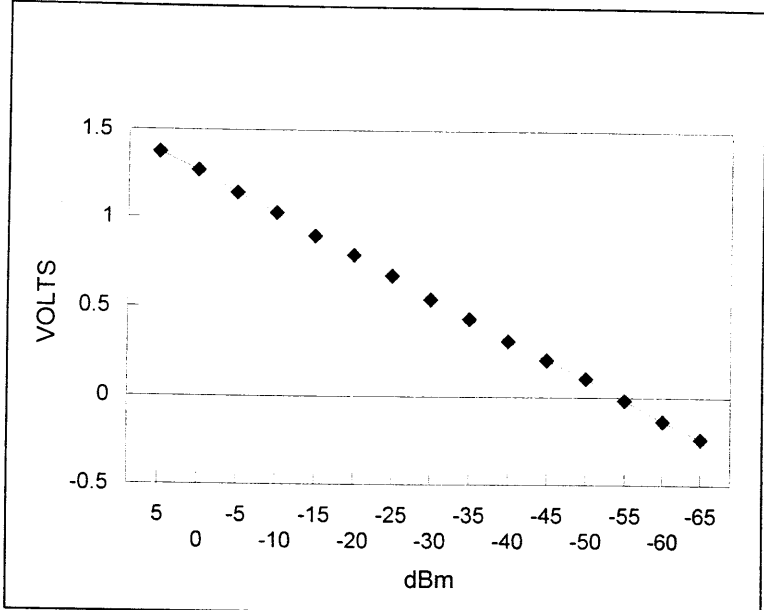
QA/QC APPROVAL: \_\_\_\_\_ DATED: 7/2/02

MSP: [Signature]

SDLVAC-06135M-A08-LA  
S/N: PM206570  
RF IN 7

LITTON ADVANCE  
JOB#: P20619  
V OUT 1.0 GHZ.

5 dBm	1.374 VOLTS
0 dBm	1.271 VOLTS
-5 dBm	1.142 VOLTS
-10 dBm	1.027 VOLTS
-15 dBm	0.897 VOLTS
-20 dBm	0.79 VOLTS
-25 dBm	0.675 VOLTS
-30 dBm	0.546 VOLTS
-35 dBm	0.438 VOLTS
-40 dBm	0.315 VOLTS
-45 dBm	0.21 VOLTS
-50 dBm	0.106 VOLTS
-55 dBm	-0.017 VOLTS
-60 dBm	-0.135 VOLTS
-65 dBm	-0.236 VOLTS



LOG SLOPE 23.1664 mv/dB  
BEST FIT 0.0232  
STRAIGHT 0.68 dB  
LINE -0.61 dB

INSP.  
BY  
Q1 7/2/02

JOB NO: P20619

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

CUSTOMER: LITTON ADVANCE SYSTEM  
 JOB NO: P20619  
 MODEL NO: SDLVAC-06135M-A08-LA  
 SERIAL NO: PM206571 17

TESTED BY: R. Hable  
 TEMPERATURE: 25°C  
 DATE: 6/29/02

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	FREQUENCY RANGE	600 TO 1350 MHz	600 MHz TO 1350 MHz	Set ✓
2	INPUT VSWR	1.8:1 (MAX)	1.21:1	✓
3	LOGGING RANGE	-65 dB TO +5 dB (MIN) PLOTS ATTACHED	-65 dBm TO +5 dBm	✓
4	TSS	-65 dBm (TYP)	-65 dBm	✓
5	LOG SLOPE ±10%	ADJUSTABLE PLOTS ATTACHED	23.23 mV/dB	✓
6	LOG LINEARITY: @ -60 TO +5 dBm	±2.0 dB MAXIMUM PLOTS ATTACHED	+0.70 dB -0.67 dB	✓
7	RISE TIME (10% TO 90% POINTS)	25 nsec (MAX)	<25 nS	✓
8	FALL TIME (90% TO 10% POINTS)	30 nsec (MAX)	<30 nS	✓
9	LIMITED IF OUTPUT	-14 dBm (TYPICAL)	-17.03 dBm	✓
10	DC POWER @ +5 VDC (NO LOAD)	30 mA MAXIMUM	14 mA	✓
11	DC POWER @ -5 VDC (NO LOAD)	170 mA MAXIMUM	115 mA	✓

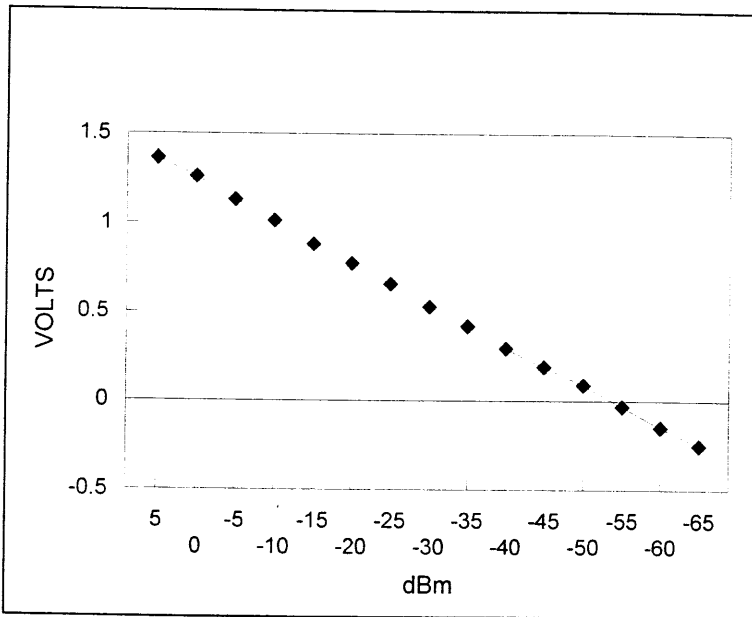
PRODUCTION MANAGER APPROVAL: H. Steinhaus DATED: 7/2/02  
 QA/QC APPROVAL: \_\_\_\_\_ DATED: 7/2/02

MSF  
REV  
Q1

SDLVAC-06135M-A08-LA  
S/N: PM206571 17  
RF IN

LITTON ADVANCE  
JOB#: P20619 1.0 GHz.  
V OUT

5 dBm	1.363 VOLTS
0 dBm	1.26 VOLTS
-5 dBm	1.131 VOLTS
-10 dBm	1.015 VOLTS
-15 dBm	0.885 VOLTS
-20 dBm	0.778 VOLTS
-25 dBm	0.661 VOLTS
-30 dBm	0.532 VOLTS
-35 dBm	0.424 VOLTS
-40 dBm	0.299 VOLTS
-45 dBm	0.194 VOLTS
-50 dBm	0.091 VOLTS
-55 dBm	-0.032 VOLTS
-60 dBm	-0.149 VOLTS
-65 dBm	-0.25 VOLTS



LOG SLOPE 23.2314 mv/dB  
BEST FIT 0.0232  
STRAIGHT 0.70 dB  
LINE -0.67 dB

INSP.  
EY  
QE

7/2/02

JOB NO: P20619

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

CUSTOMER: LITTON ADVANCE SYSTEM  
 JOB NO: P20619  
 MODEL NO: SDLVAC-06135M-A08-LA  
 SERIAL NO: PM206572 9

TESTED BY: R. Hable  
 TEMPERATURE: 25°C  
 DATE: 6/29/02

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	FREQUENCY RANGE	600 TO 1350 MHz	600 MHz TO 1350 MHz	Set ✓
2	INPUT VSWR	1.8:1 (MAX)	1.14:1	✓
3	LOGGING RANGE	-65 dB TO +5 dB (MIN) PLOTS ATTACHED	-65 dBm TO +5 dBm	✓
4	TSS	-65 dBm (TYP)	-65 dBm	✓
5	LOG SLOPE ±10%	ADJUSTABLE PLOTS ATTACHED	27.16 mV/dB	✓
6	LOG LINEARITY: @ -60 TO +5 dBm	±2.0 dB MAXIMUM PLOTS ATTACHED	+0.71 dB -0.63 dB	✓
7	RISE TIME (10% to 90% POINTS)	25 nsec (MAX)	225 ns	✓
8	FALL TIME (90% TO 10% POINTS)	30 nsec (MAX)	230 ns	✓
9	LIMITED IF OUTPUT	-14 dBm (TYPICAL)	-17 dBm	✓
10	DC POWER @ +5 VDC (NO LOAD)	30 mA MAXIMUM	14 mA	✓
11	DC POWER @ -5 VDC (NO LOAD)	170 mA MAXIMUM	116 mA	✓

PRODUCTION MANAGER APPROVAL: H. Steinhaus DATED: 7/2/02

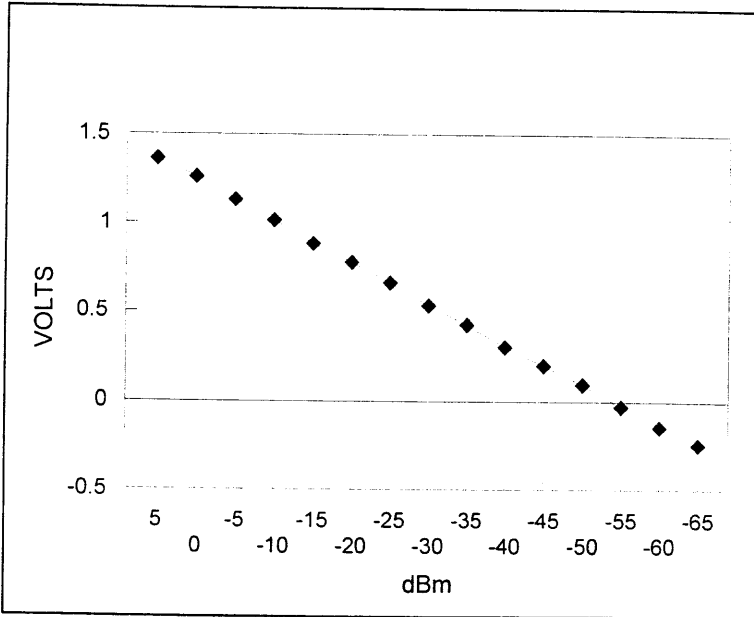
QA/QC APPROVAL: \_\_\_\_\_ DATED: 7/2/02

INSTR. BY Q1

SDLVAC-06135M-A08-LA  
S/N: PM206572 9  
RF IN

LITTON ADVANCE  
JOB#: P20619  
V OUT 1.0 GHz.

5 dBm	1.364 VOLTS
0 dBm	1.262 VOLTS
-5 dBm	1.133 VOLTS
-10 dBm	1.017 VOLTS
-15 dBm	0.887 VOLTS
-20 dBm	0.781 VOLTS
-25 dBm	0.665 VOLTS
-30 dBm	0.536 VOLTS
-35 dBm	0.429 VOLTS
-40 dBm	0.305 VOLTS
-45 dBm	0.2 VOLTS
-50 dBm	0.095 VOLTS
-55 dBm	-0.027 VOLTS
-60 dBm	-0.144 VOLTS
-65 dBm	-0.244 VOLTS



LOG SLOPE 23.1636 mv/dB  
BEST FIT 0.0232  
STRAIGHT 0.71 dB  
LINE -0.63 dB

INSP. BY 01  
7/2/02

JOB NO: P20619

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

CUSTOMER: LITTON ADVANCE SYSTEM  
 JOB NO: P20619  
 MODEL NO: SDLVAC-06135M-A08-LA  
 SERIAL NO: PM206573 16

TESTED BY: R. Hable  
 TEMPERATURE: 25°C  
 DATE: 6/29/02

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	FREQUENCY RANGE	600 TO 1350 MHz	600 MHz TO 1350 MHz	Set ✓
2	INPUT VSWR	1.8:1 (MAX)	1.19:1	✓
3	LOGGING RANGE	-65 dB TO +5 dB (MIN) PLOTS ATTACHED	-65 dBm TO +5 dBm	✓
4	TSS	-65 dBm (TYP)	-65 dBm	✓
5	LOG SLOPE ±10%	ADJUSTABLE PLOTS ATTACHED	23.17 mV/dB	✓
6	LOG LINEARITY: @ -60 TO +5 dBm	±2.0 dB MAXIMUM PLOTS ATTACHED	+0.75 dB -0.71 dB	✓
7	RISE TIME (10% to 90% POINTS)	25 nsec (MAX)	425 nS	✓
8	FALL TIME (90% TO 10% POINTS)	30 nsec (MAX)	430 nS	✓
9	LIMITED IF OUTPUT	-14 dBm (TYPICAL)	-17.08 dB	✓
10	DC POWER @ +5 VDC (NO LOAD)	30 mA MAXIMUM	14 mA	✓
11	DC POWER @ -5 VDC (NO LOAD)	170 mA MAXIMUM	120 mA	✓

PRODUCTION MANAGER APPROVAL: H. Steinhaus DATED: 7/2/02

QA/QC APPROVAL: \_\_\_\_\_ DATED: 7/2/02

INSPECTED  
DATE: 7/2/02

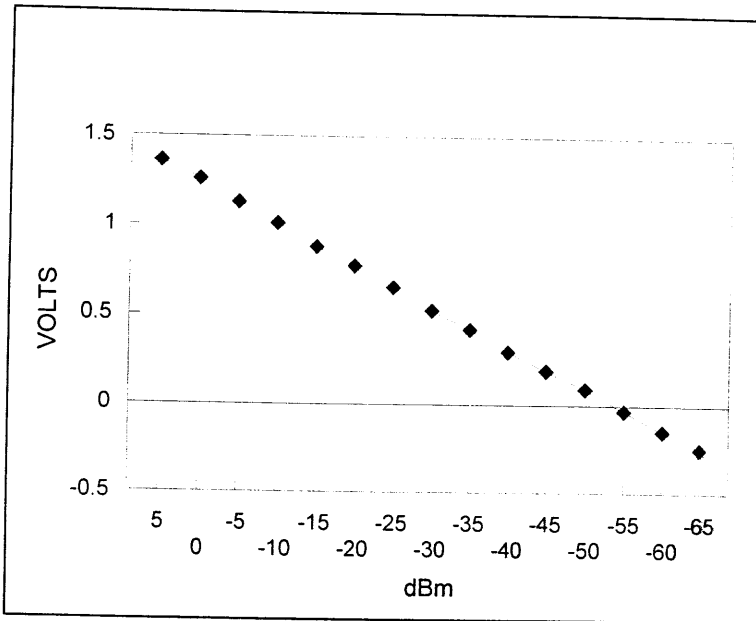
SDLVAC-06135M-A08-LA  
S/N: PM206573 16

LITTON ADVANCE  
JOB#: P20619  
V OUT

1.0 GHz.

RF IN

5 dBm	1.361 VOLTS
0 dBm	1.259 VOLTS
-5 dBm	1.13 VOLTS
-10 dBm	1.013 VOLTS
-15 dBm	0.883 VOLTS
-20 dBm	0.777 VOLTS
-25 dBm	0.66 VOLTS
-30 dBm	0.531 VOLTS
-35 dBm	0.423 VOLTS
-40 dBm	0.298 VOLTS
-45 dBm	0.194 VOLTS
-50 dBm	0.092 VOLTS
-55 dBm	-0.031 VOLTS
-60 dBm	-0.147 VOLTS
-65 dBm	-0.248 VOLTS



LOG SLOPE  
BEST FIT  
STRAIGHT  
LINE

23.1786 mv/dB  
0.0232  
0.75 dB  
-0.71 dB





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JOB NO: P20619

SUMMARY TEST DATA  
ON  
SUCCESSIVE DETECTION LOG VIDEO AMPLIFIER--SDLVA

CUSTOMER: LITTON ADVANCE SYSTEM  
JOB NO: P20619  
MODEL NO: SDLVAC-06135M-A08-LA  
SERIAL NO: PM206574 5

TESTED BY: R. Hable  
TEMPERATURE: 25°C  
DATE: 6/29/02

TEST ITEM NO.	PARAMETERS	SPECIFIED VALUE	MEASURED VALUE	REMARKS QA/QC
1	FREQUENCY RANGE	600 TO 1350 MHz	600 MHz To 1350 MHz	Set ✓
2	INPUT VSWR	1.8:1 (MAX)	1.2:1	✓
3	LOGGING RANGE	-65 dB TO +5 dB (MIN) PLOTS ATTACHED	-65 dBm To +5 dBm	✓
4	TSS	-65 dBm (TYP)	-65 dBm	✓
5	LOG SLOPE ±10%	ADJUSTABLE PLOTS ATTACHED	23.29 mV/dB	✓
6	LOG LINEARITY: @ -60 TO +5 dBm	±2.0 dB MAXIMUM PLOTS ATTACHED	+0.69 dB -0.65 dB	✓
7	RISE TIME (10% to 90% POINTS)	25 nsec (MAX)	225 nS	✓
8	FALL TIME (90% TO 10% POINTS)	30 nsec (MAX)	430 nS	✓
9	LIMITED IF OUTPUT	-14 dBm (TYPICAL)	-17 dBm	✓
10	DC POWER @ +5 VDC (NO LOAD)	30 mA MAXIMUM	15 mA	✓
11	DC POWER @ -5 VDC (NO LOAD)	170 mA MAXIMUM	116 mA	✓

PRODUCTION MANAGER APPROVAL: H. Steinhaus DATED: 7/2/02  
QA/QC APPROVAL: \_\_\_\_\_ DATED: 7/2/02

INSPECTED BY: \_\_\_\_\_

SDLVAC-06135M-A08-LA  
S/N: PM206574

RF IN

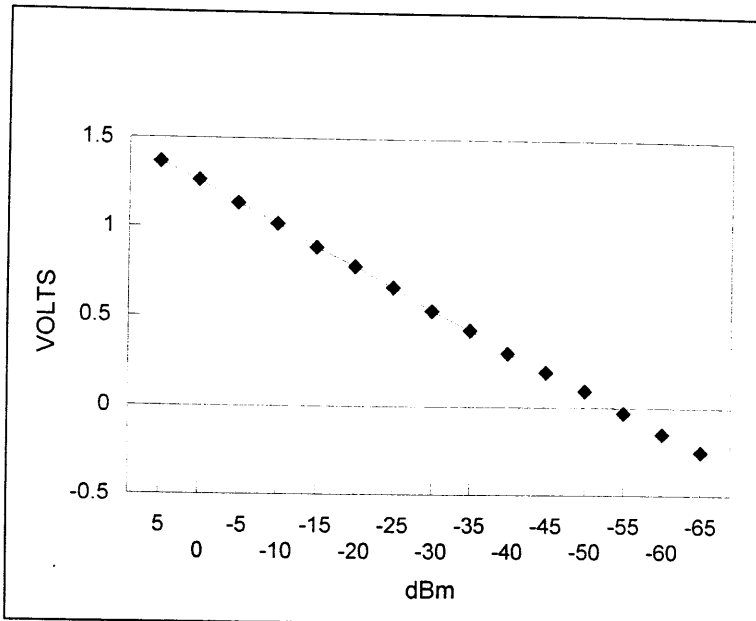
LITTON ADVANCE

JOB#: P20619

1.0 GHz.

V OUT

5 dBm	1.368 VOLTS
0 dBm	1.266 VOLTS
-5 dBm	1.137 VOLTS
-10 dBm	1.02 VOLTS
-15 dBm	0.89 VOLTS
-20 dBm	0.783 VOLTS
-25 dBm	0.667 VOLTS
-30 dBm	0.537 VOLTS
-35 dBm	0.429 VOLTS
-40 dBm	0.303 VOLTS
-45 dBm	0.198 VOLTS
-50 dBm	0.094 VOLTS
-55 dBm	-0.03 VOLTS
-60 dBm	-0.148 VOLTS
-65 dBm	-0.248 VOLTS



LOG SLOPE

23.2921 mv/dB

BEST FIT

0.0233

STRAIGHT

0.69 dB

LINE

-0.65 dB

INSP.  
BY  
Q1

7/2/02