



**SUMMARY TEST DATA
ON
SDLVA-218-75-16MV-12DBM**

Customer: _____	Tested By: <u>Jim Hopson</u>
SO No: _____	Temperature: <u>+25°C</u>
Model No: <u>SDLVA-218-75-16MV-12DBM</u>	Date: <u>12/21/2021</u>
Serial No: <u>PL34690/2151</u>	Drawing No: <u>27638980</u> Rev: <u>A1</u>

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range	2 GHz to 18 GHz	2 GHz to 18 GHz	<i>OK</i> 12/21
2	TSS	-64 dBm Max	-65 dBm	↓
3	Input Power Handling	+20 dBm	Pass	
4	Video Log Range	-60 dBm to +15 dBm	Pass	
5	Video Log Linearity	±2.2 dB Typ ± 2.5 dB Max	-3.98dB +2.94dB	
6	Video Log Slope	-16.0 ±2.0 mV/dB Nom	-19mV/dB Typ	
7	Video Freq Flatness	±4 dB Max	<i>SEE PLOT</i> dB	
8	Pulse Width Range	25 nsec to CW	25 nsec to CW	
9	Video Rise Time	10 nsec max	3.96 nsec	↓

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Email: sales@pmi-rf.com



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TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
10	Video Fall Time	20 nsec max	11.2 nsec	QB 12/21
11	Recovery Time	50 nsec max	25.0 nsec	↓
12	Delay	<2 nsec	1.74 nsec	
13	Video Output DC Offset	-100mV Nom	-100mV	
14	Video Output Impedance	50Ω	Pass	
15	RF In/Out Impedance	50Ω	Pass	
16	Input VSWR (50Ω)	2.0:1 Max	1.94:1	
17	DC Supply	+12 V @ 850 mA -12 V @ 250 mA	+470mA -30mA	↓

QA/QC Approval:

A. Zimmerman

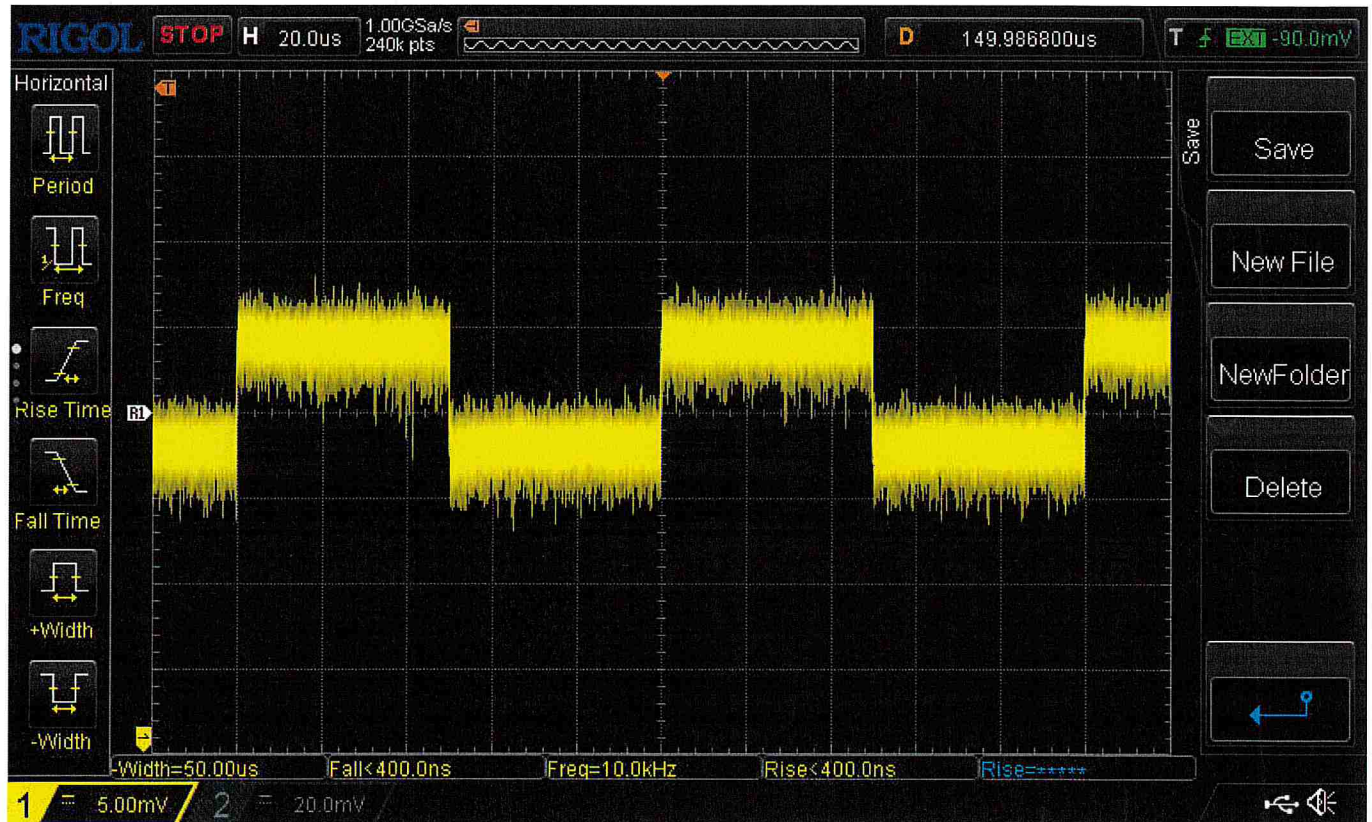
Date:

12-21-21



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TSS -65dBm





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Log Video Characteristics

Model: SDLVA-218-75-16MV-12DBM
Serial No: PL34690
Date: 12/17/2021
Tested By: J.Hopson
Test Temp: +25°C

GRAPH #1

Video Output Voltage With No RF 0.217



PLANAR MONOLITHICS INDUSTRIES
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Frequency

2 GHz	INTERCEPT (mV)	-892
	SLOPE (mV/dB)	-17.5

-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15
168	69	-69	-158	-212	-276	-375	-439	-488	-561	-666	-789	-873	-976	-1105	-1238
12	1	-50	-51	-18	5	-6	17	55	70	52	16	19	3	-38	-84
-0.70	-0.05	2.86	2.94	1.05	-0.28	0.37	-0.96	-3.13	-3.98	-2.96	-0.90	-1.09	-0.16	2.18	4.81

RF Input Power (dBm)

Measured Value (mV)	Error(dB)
Error (mV)	MAX MIN
LINEARITY ERROR (dB)	2.94 -3.98

6 GHz	INTERCEPT (mV)	-984
	SLOPE (mV/dB)	-19.1

178	99	-35	-148	-232	-330	-459	-538	-567	-646	-784	-902	-962	-1046	-1193	-1302
15	32	-6	-24	-12	-15	-48	-31	35	52	9	-14	23	34	-18	-31
-0.78	-1.65	0.31	1.25	0.63	0.79	2.50	1.63	-1.82	-2.69	-0.47	0.72	-1.18	-1.80	0.94	1.62

Measured Value (mV)	Error(dB)
Error (mV)	MAX MIN
LINEARITY ERROR (dB)	2.50 -2.69

10 GHz	INTERCEPT (mV)	-977
	SLOPE (mV/dB)	-20.2

197	163	69	-69	-187	-271	-399	-518	-562	-631	-759	-888	-976	-1055	-1189	-1292
-35	31	38	1	-17	0	-28	-45	11	43	16	-12	0	22	-10	-13
1.76	-1.53	-1.88	-0.03	0.85	0.01	1.37	2.24	-0.56	-2.13	-0.77	0.59	0.00	-1.09	0.52	0.66

Measured Value (mV)	Error(dB)
Error (mV)	MAX MIN
LINEARITY ERROR (dB)	2.24 -2.13

14 GHz	INTERCEPT (mV)	-950
	SLOPE (mV/dB)	-19.3

197	143	44	-99	-192	-276	-390	-508	-557	-631	-759	-883	-962	-1041	-1129	-1219
-9	33	31	-16	-13	-1	-18	-40	7	30	-2	-29	-12	6	13	20
0.47	-1.72	-1.60	0.82	0.68	0.04	0.92	2.06	-0.38	-1.54	0.12	1.51	0.61	-0.30	-0.69	-1.01

Measured Value (mV)	Error(dB)
Error (mV)	MAX MIN
LINEARITY ERROR (dB)	2.06 -1.72

18 GHz	INTERCEPT (mV)	-749
	SLOPE (mV/dB)	-15.6

187	158	59	-79	-168	-227	-286	-385	-424	-488	-597	-695	-745	-819	-878	-989
2	50	29	-31	-42	-23	-4	-25	13	27	-4	-24	4	8	27	-7
-0.11	-3.22	-1.88	1.98	2.68	1.48	0.28	1.62	-0.85	-1.73	0.23	1.57	-0.27	-0.52	-1.72	0.44

Measured Value (mV)	Error(dB)
Error (mV)	MAX MIN
LINEARITY ERROR (dB)	2.68 -3.22

Flatness +/- dB	0.80 2.60 3.80 2.40 1.80 2.80 4.70 4.20 3.90 4.30 5.10 5.70 6.30 6.50 8.60 8.50
Max Video Output Volts	0.197 0.163 0.069 -0.069 -0.168 -0.227 -0.286 -0.385 -0.424 -0.488 -0.597 -0.695 -0.745 -0.819 -0.878 -0.989
Min Video Output Volts	0.168 0.069 -0.069 -0.158 -0.232 -0.330 -0.459 -0.538 -0.567 -0.646 -0.784 -0.902 -0.976 -1.055 -1.193 -1.302

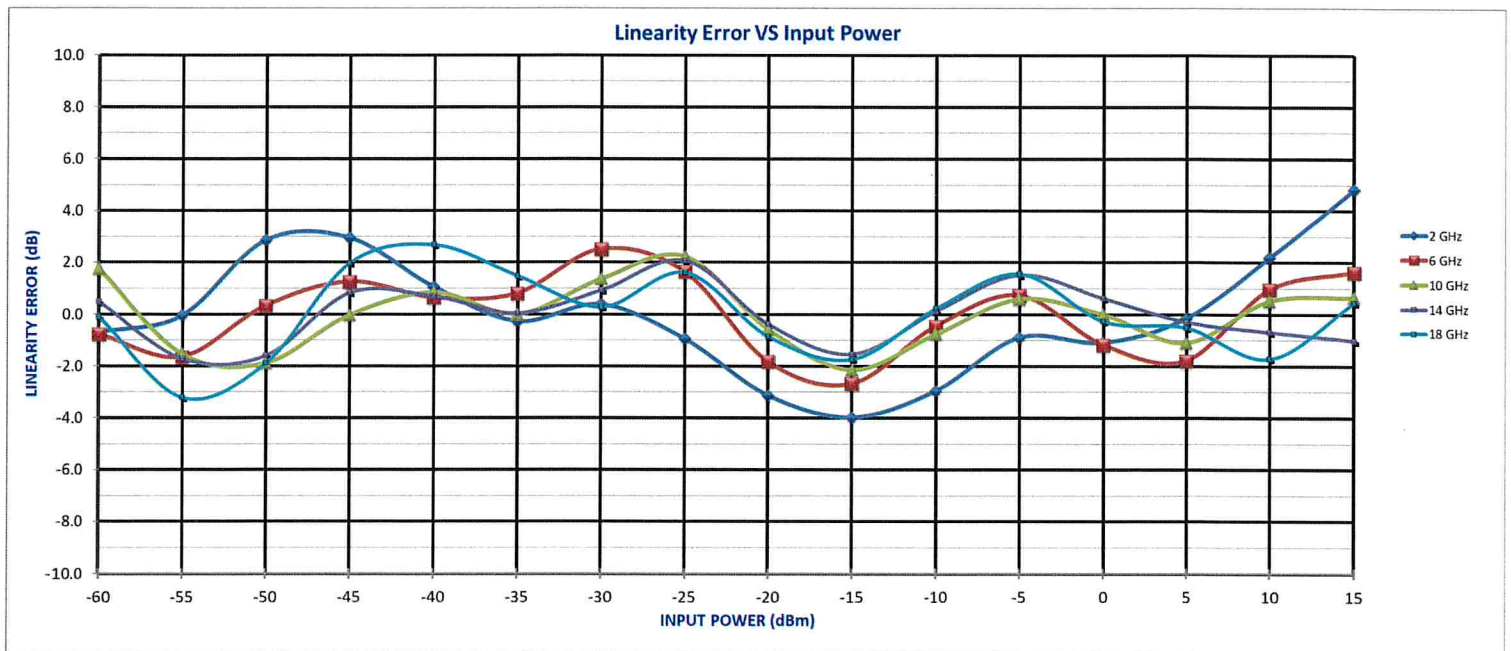
Log Slope Average: mV/dB	-18.3
Log Slope Variation: ± mV/dB	2.29

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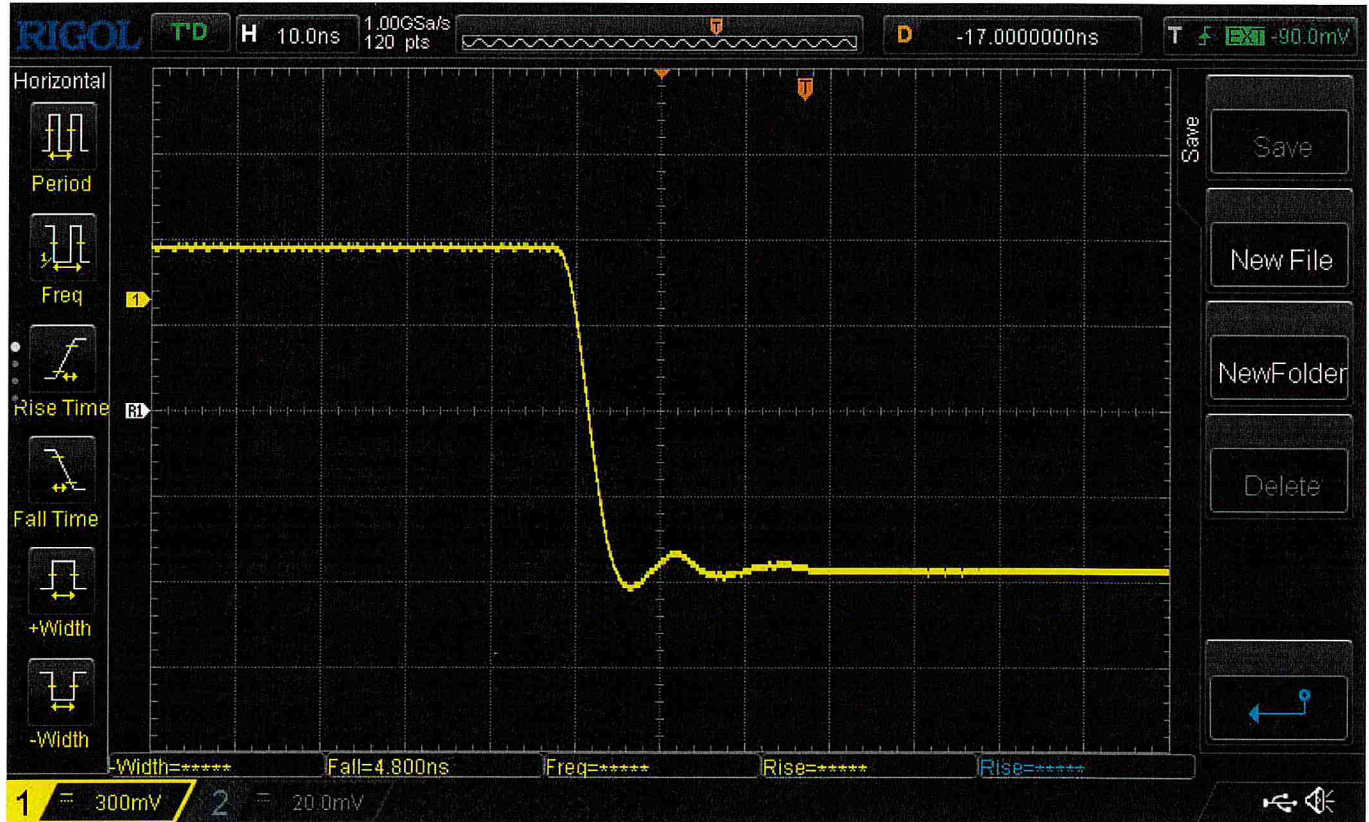
Log Video Characteristics





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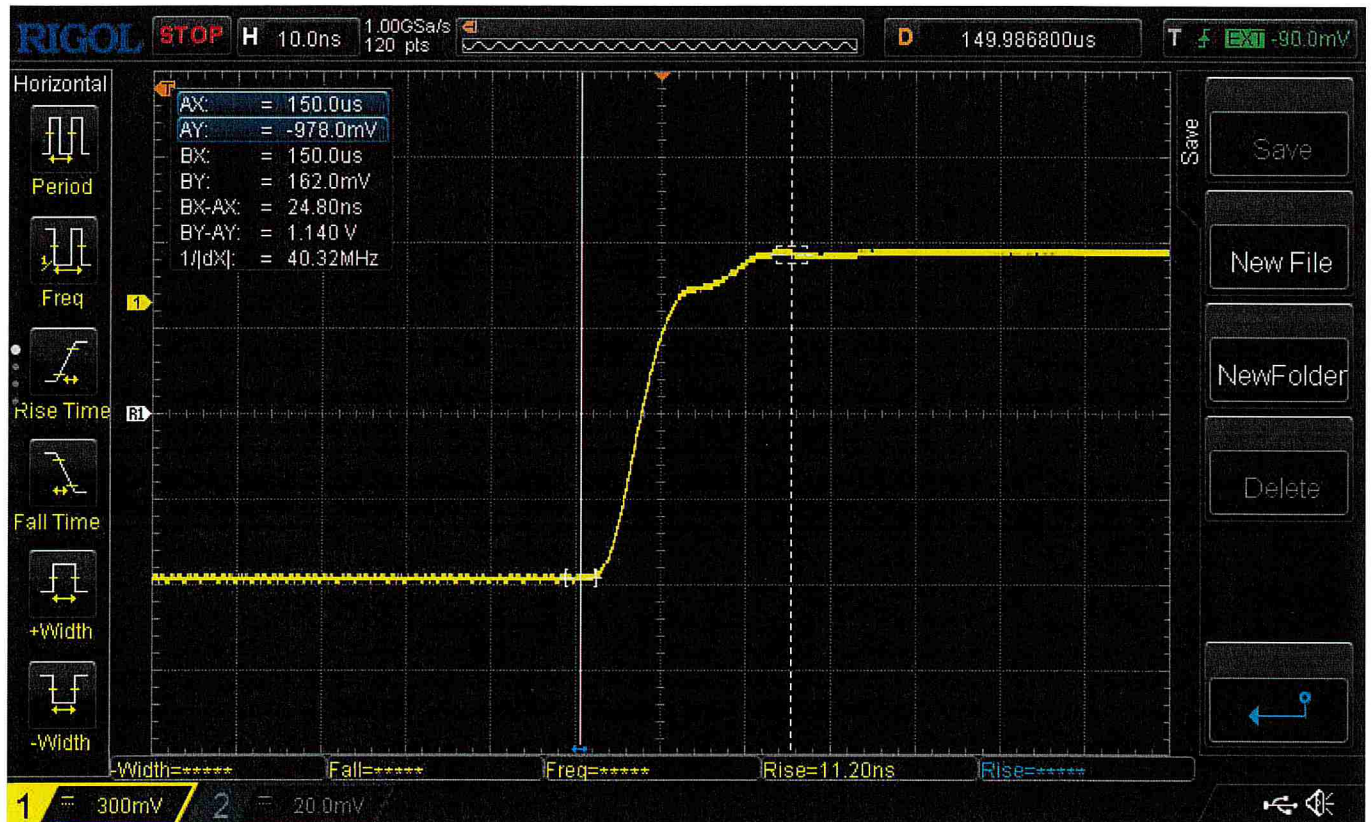
Rise Time





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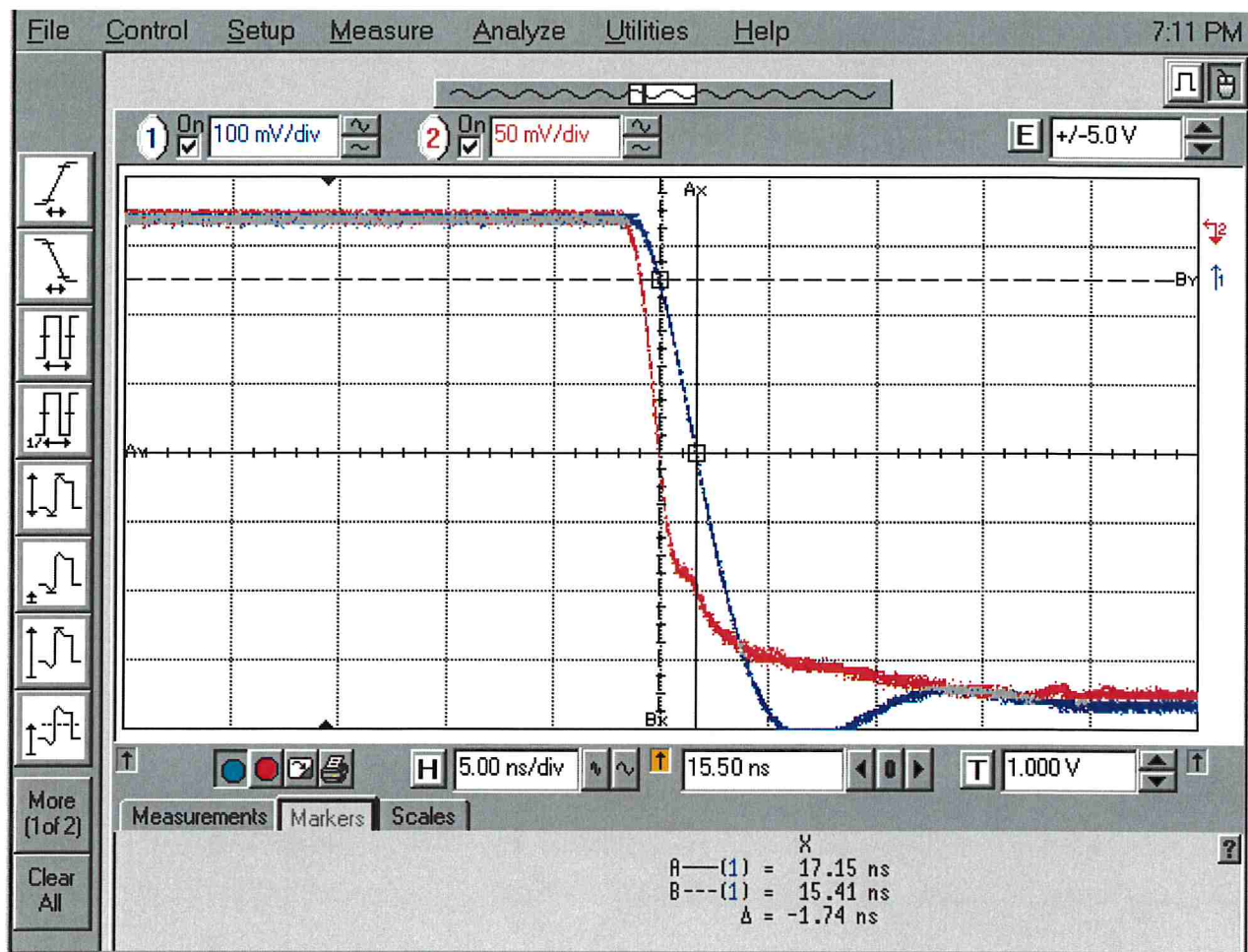
Recovery Time





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Delay Time





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VSWR

