



**SUMMARY TEST DATA  
ON  
SDLVA-218-65-16MV-12DBM**

PL23272

Customer: _____	Tested By: <u>E.BENSON</u>	
SO No: _____	Temperature: <u>+25°C</u>	
Model No: <u>SDLVA-218-65-16MV-12DBM</u>	Date: <u>08/23/2018</u>	
Serial No: <u>PL23272/1834</u>	Drawing No: <u>27618694</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	JRP
2	TSS	-64 dBm max	-65dBm	
3	Input Power Handling	+20 dBm	+20dBm	
4	Video Log Range	-55 dBm to +10 dBm	-55 to +10dBm	
5	Video Log Linearity	+2.2 dB	+1.88dB -1.65dB	
7	Video Log Slope	16.0 ±2.0 mV/dB nom	16.1mV/dB ±0.46dB	
8	Video Freq Flatness	±4 dB max	±1.90dB	
9	Pulse Width Range	25 nsec to CW	PASS	
10	Video Rise Time	10 nsec max	3.965nsec	JRP

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TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
11	Video Fall Time	15 nsec max	8.449nsec	JRP
12	Recovery Time	30 nsec max	17.910nsec	
13	Delay	<2 nsec	1.739nsec	
14	Video Output Impedance	50Ω	Pass	
15	RF In/Out Impedance	50Ω	Pass	
16	Input VSWR (50Ω)	2.0:1 max	1.95:1	
17	DC Supply	+12 V @ 850 mA -12 V @ 250 mA	456mA 22mA	JRP

QA/QC Approval:  Date: 8/24/18

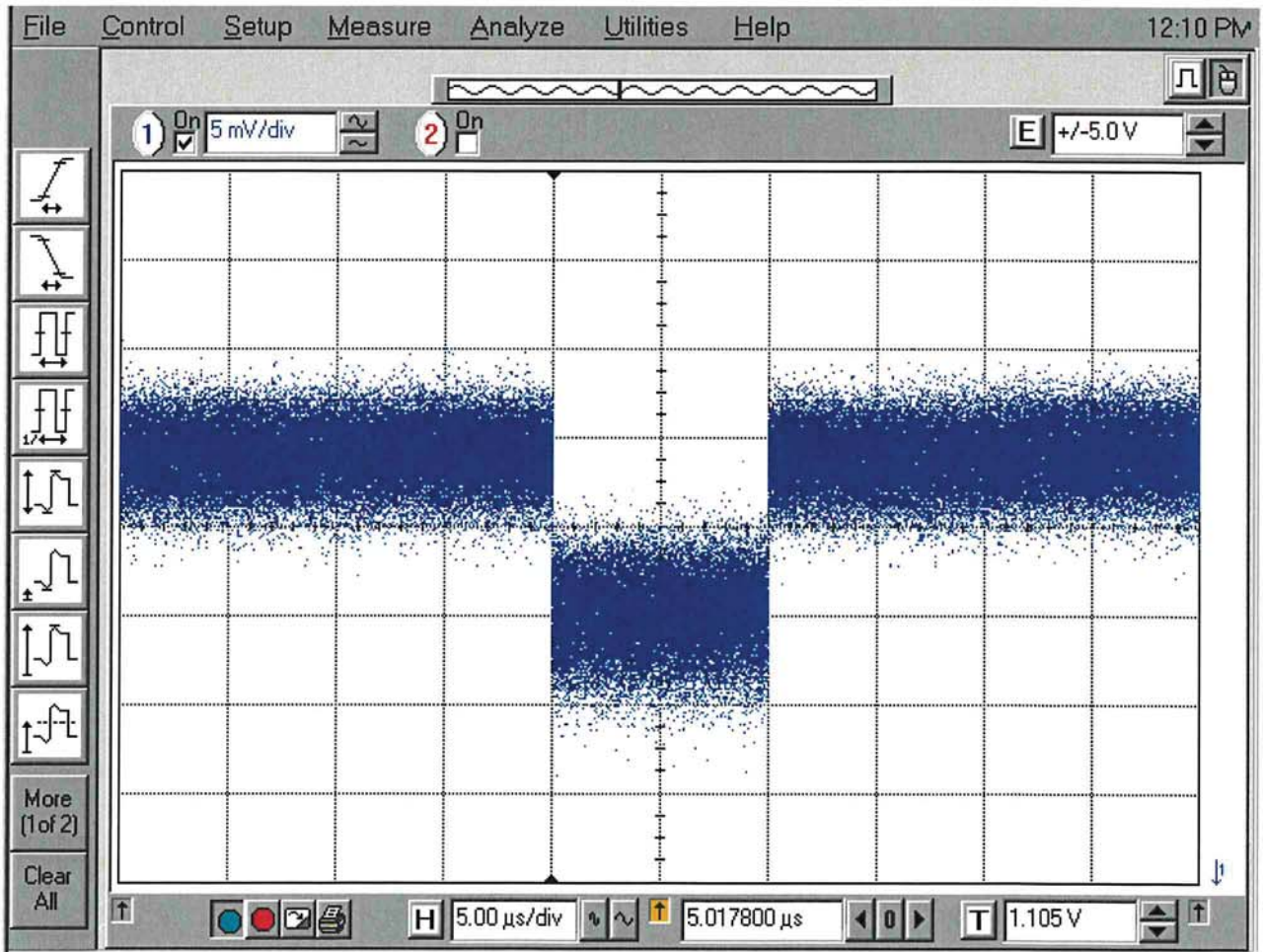
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TSS



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**VIDEO LOG LINEARITY**

**MODEL: SDLVA-218-65-16MV-12DBM**  
**SERIAL NO: PL23272**  
**DATE: 08/23/18**  
**TESTED BY: E.Benson**  
**Test Temp: +25C**



**PLANAR MONOLITHICS INDUSTRIES**  
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**GRAPH #1**

Video Output Voltage With No RF      0.157

Frequency	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	RF Input Power (dBm)	
<b>2 GHz</b>	<b>INTERCEPT (mV)</b>														<b>-861</b>	
	<b>SLOPE (mV/dB)</b>														<b>-15.8</b>	
	4	-71	-146	-232	-310	-379	-464	-539	-609	-701	-790	-867	-952	-1011		
	-6	-1	3	-4	-3	7	1	5	14	2	-8	-6	-12	8		
	0.35	0.09	-0.17	0.26	0.19	-0.45	-0.08	-0.34	-0.91	-0.10	0.52	0.39	0.76	-0.51		
	Measured Value (mV)														Error(dB)	
	Error (mV)														MAX	MIN
	<b>LINEARITY ERROR (dB)</b>														<b>0.76</b>	<b>-0.91</b>
<b>3 GHz</b>	<b>INTERCEPT (mV)</b>														<b>-864</b>	
	<b>SLOPE (mV/dB)</b>														<b>-16.3</b>	
	36	-48	-136	-230	-306	-370	-447	-528	-606	-701	-791	-868	-957	-1018		
	6	3	-4	-17	-11	6	10	10	14	0	-9	-4	-12	8		
	-0.34	-0.18	0.24	1.02	0.70	-0.37	-0.63	-0.65	-0.85	0.00	0.53	0.27	0.75	-0.50		
	Measured Value (mV)														Error(dB)	
	Error (mV)														MAX	MIN
	<b>LINEARITY ERROR (dB)</b>														<b>1.02</b>	<b>-0.85</b>
<b>10 GHz</b>	<b>INTERCEPT (mV)</b>														<b>-860</b>	
	<b>SLOPE (mV/dB)</b>														<b>-16.2</b>	
	35	-45	-128	-224	-307	-379	-453	-531	-607	-698	-784	-859	-947	-1019		
	5	6	4	-11	-13	-4	3	6	11	1	-4	1	-6	3		
	-0.30	-0.36	-0.23	0.69	0.82	0.27	-0.16	-0.35	-0.65	-0.03	0.28	-0.09	0.34	-0.21		
	Measured Value (mV)														Error(dB)	
	Error (mV)														MAX	MIN
	<b>LINEARITY ERROR (dB)</b>														<b>0.82</b>	<b>-0.65</b>
<b>14 GHz</b>	<b>INTERCEPT (mV)</b>														<b>-851</b>	
	<b>SLOPE (mV/dB)</b>														<b>-16.6</b>	
	66	-13	-102	-206	-298	-364	-432	-505	-583	-670	-764	-854	-948	-1023		
	6	9	3	-18	-27	-10	5	15	20	15	4	-3	-14	-6		
	-0.34	-0.57	-0.20	1.07	1.62	0.60	-0.29	-0.89	-1.18	-0.93	-0.26	0.17	0.84	0.37		
	Measured Value (mV)														Error(dB)	
	Error (mV)														MAX	MIN
	<b>LINEARITY ERROR (dB)</b>														<b>1.62</b>	<b>-1.18</b>
<b>18 GHz</b>	<b>INTERCEPT (mV)</b>														<b>-831</b>	
	<b>SLOPE (mV/dB)</b>														<b>-15.7</b>	
	41	-36	-123	-229	-312	-371	-438	-508	-570	-653	-747	-832	-921	-998		
	10	12	3	-25	-29	-10	1	10	26	21	5	-1	-12	-11		
	-0.67	-0.75	-0.20	1.57	1.88	0.64	-0.08	-0.61	-1.65	-1.35	-0.34	0.09	0.77	0.69		
	Measured Value (mV)														Error(dB)	
	Error (mV)														MAX	MIN
	<b>LINEARITY ERROR (dB)</b>														<b>1.88</b>	<b>-1.65</b>
<b>Flatness +/- dB</b>	1.90	1.80	1.40	0.80	0.40	0.50	1.00	1.10	1.20	1.50	1.40	1.10	1.10	0.80		
<b>Max Video Output Volts</b>	0.066	-0.013	-0.102	-0.206	-0.298	-0.364	-0.432	-0.505	-0.570	-0.653	-0.747	-0.832	-0.921	-0.998		
<b>Min Video Output Volts</b>	0.004	-0.071	-0.146	-0.232	-0.312	-0.379	-0.464	-0.539	-0.609	-0.701	-0.791	-0.868	-0.957	-1.023		
<b>Log Slope Average: mV/dB</b>														<b>-16.1</b>		
<b>Log Slope Variation: ± mV/dB</b>														<b>0.46</b>		

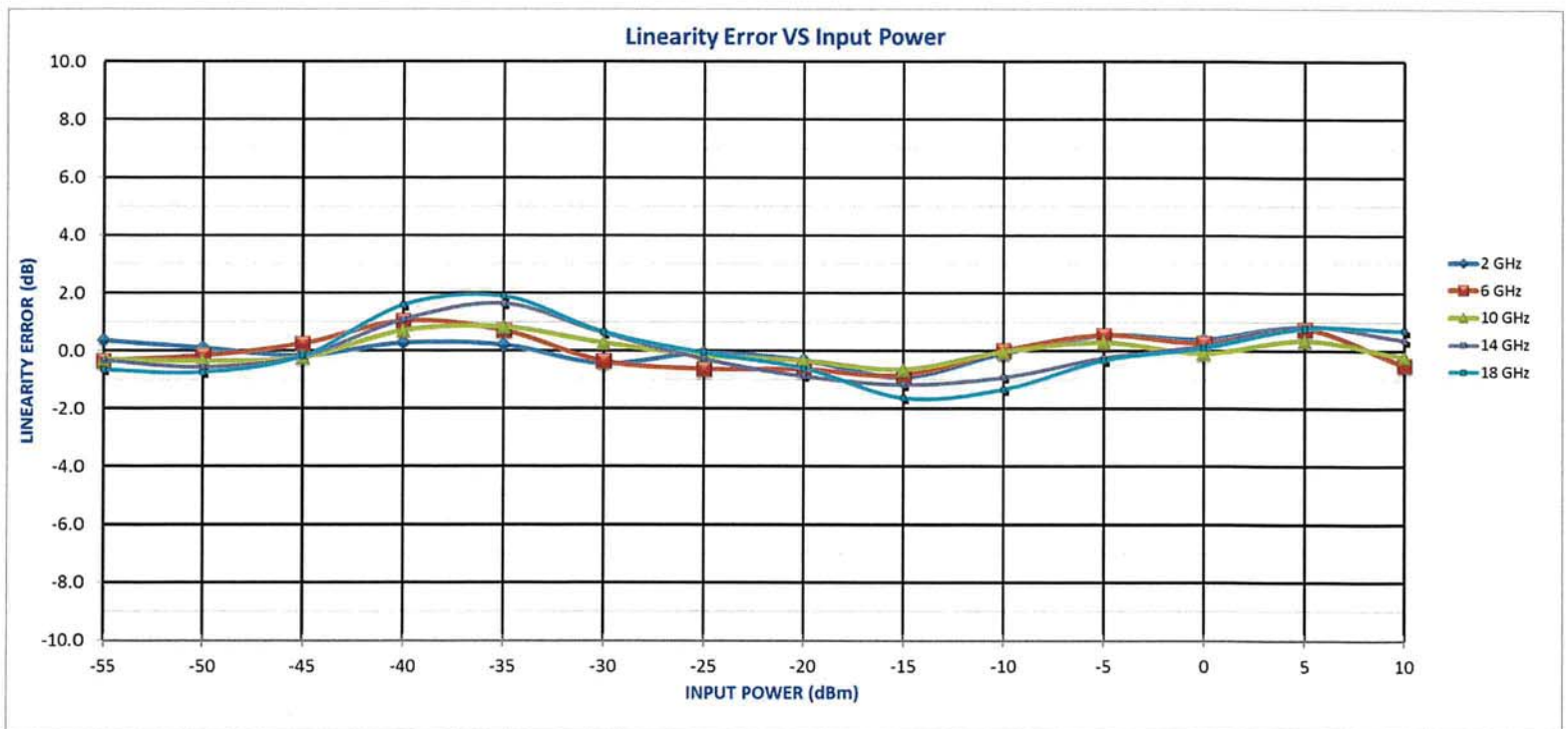
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**VIDEO LOG LINEARITY**



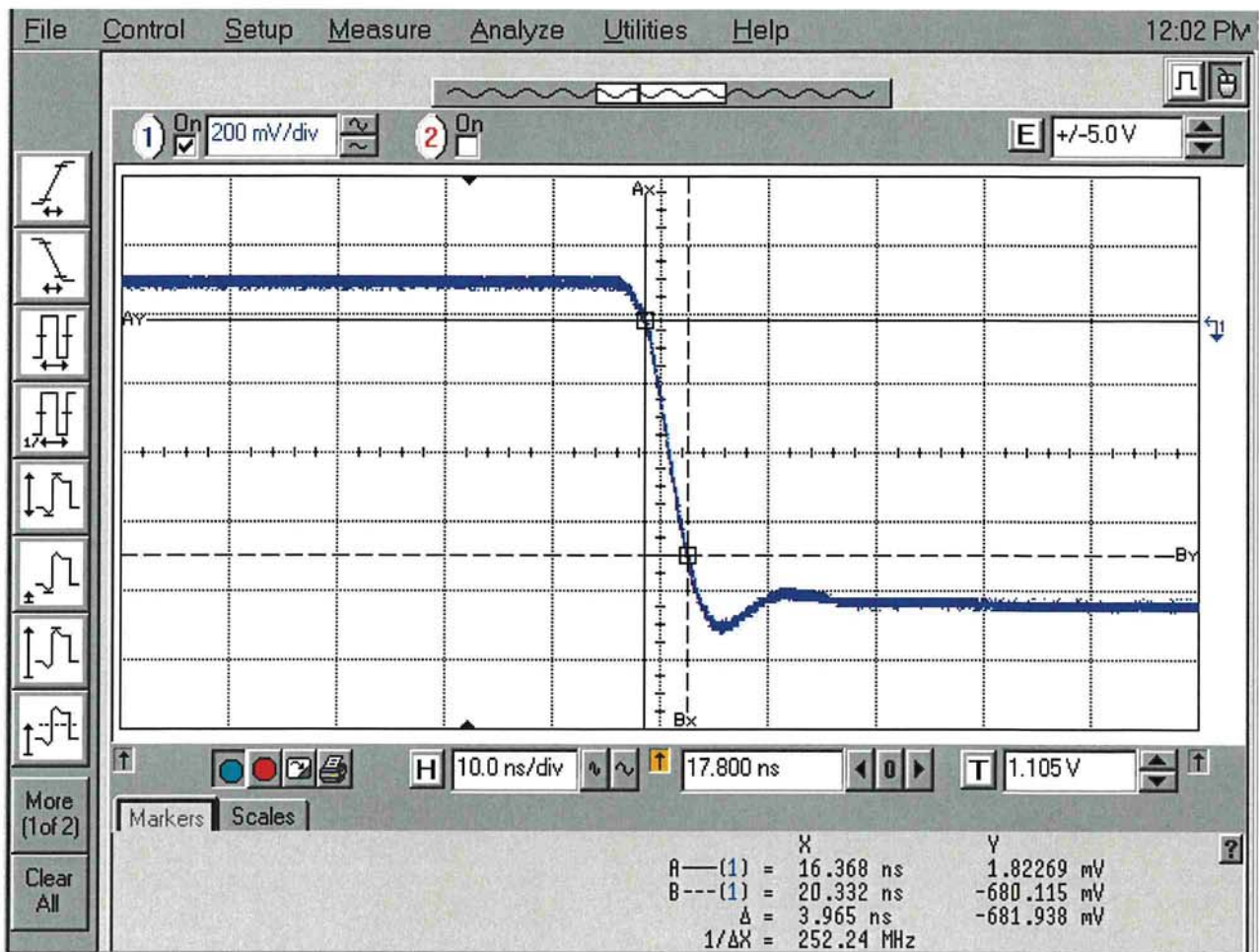
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**RISE TIME**



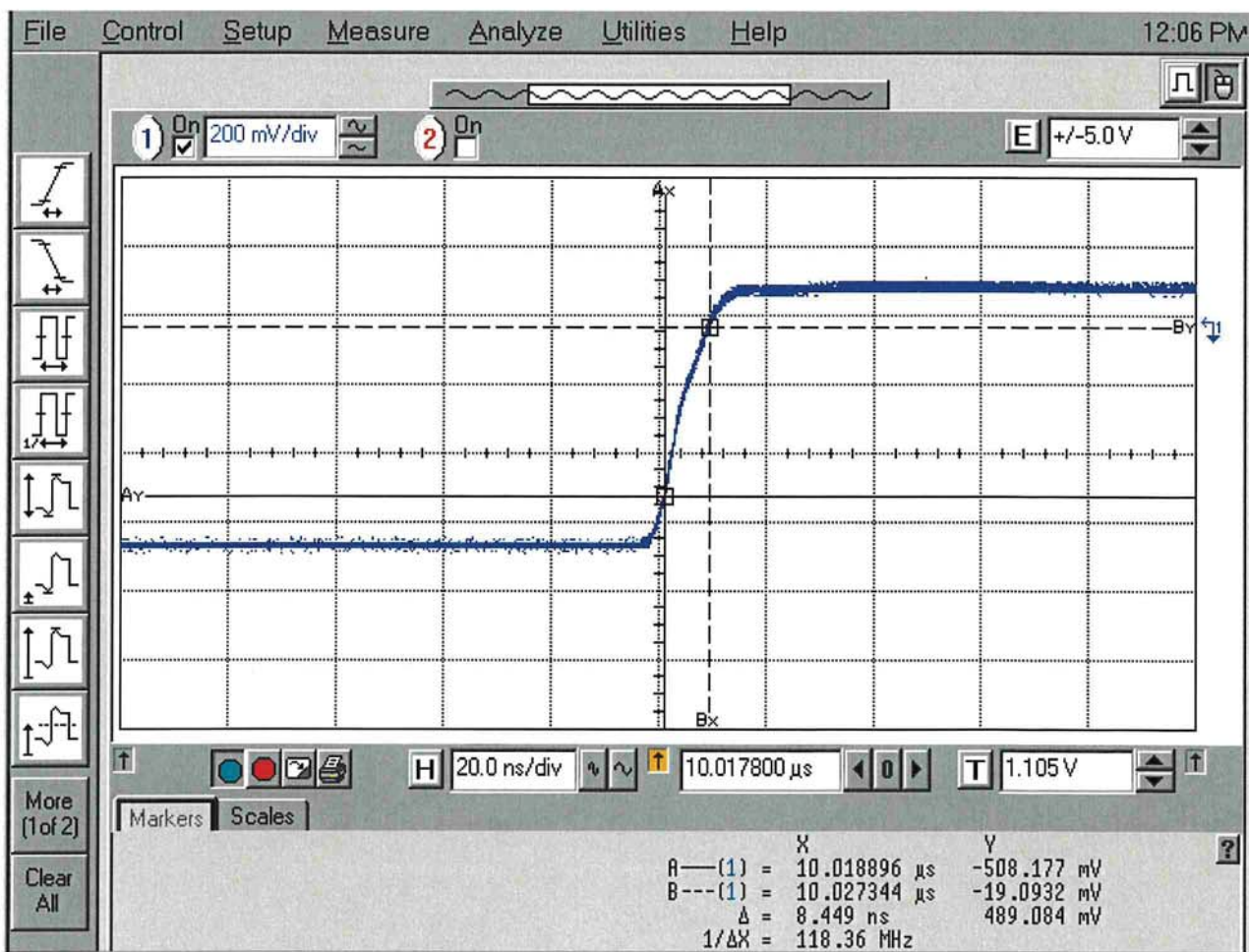
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**VIDEO FALL TIME**



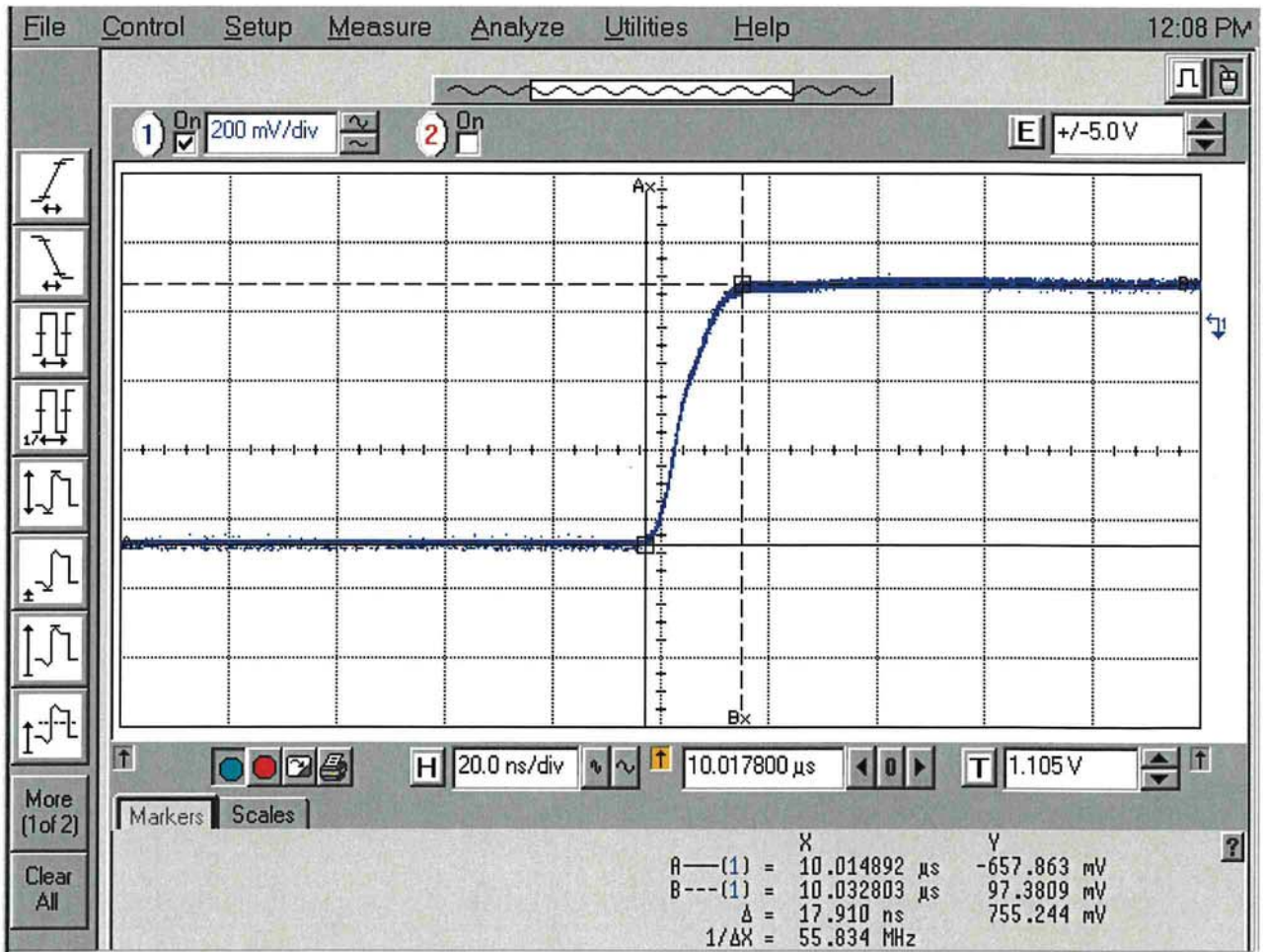
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**VIDEO RECOVERY TIME**



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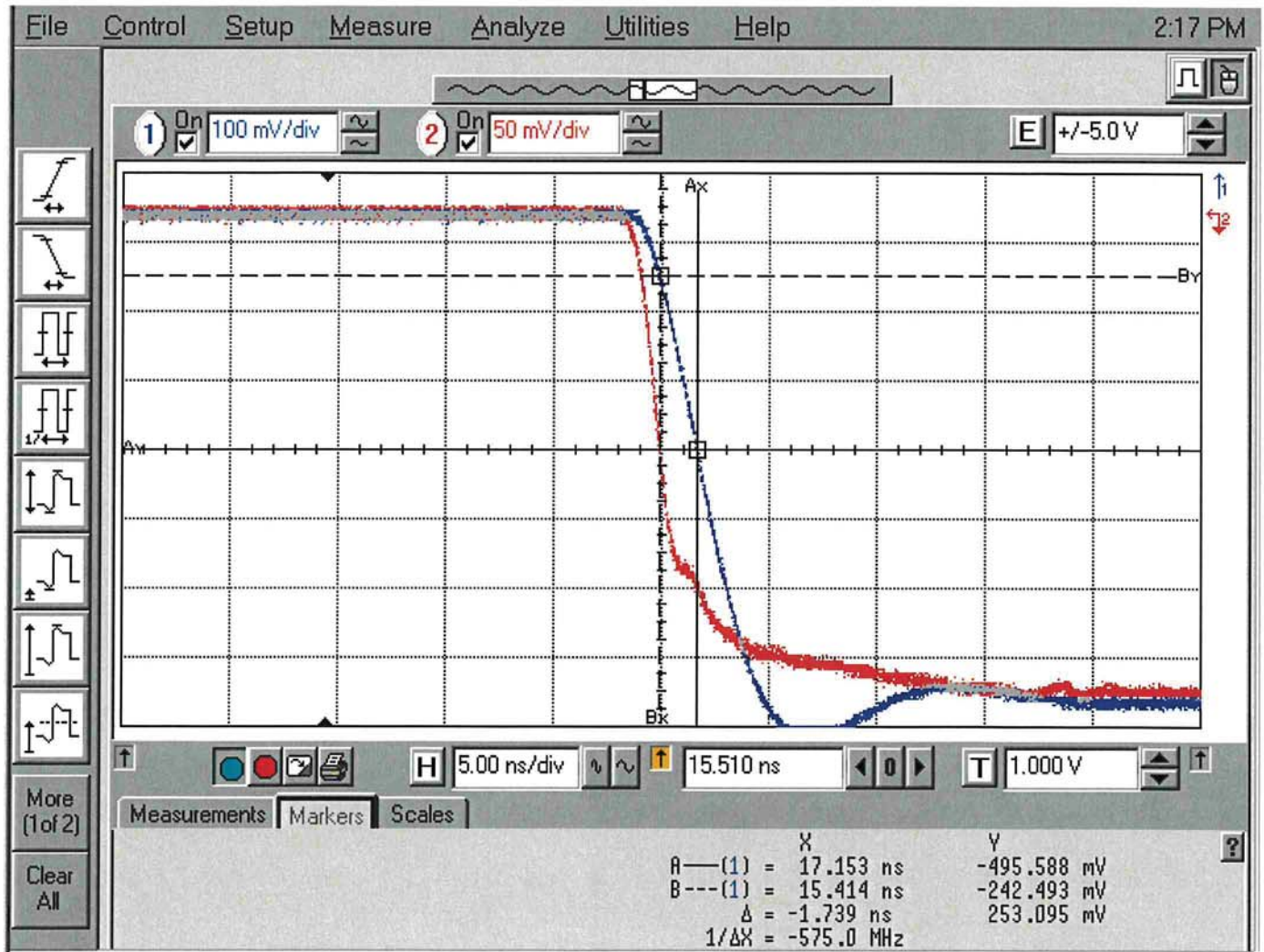




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**VIDEO DELAY TIME**



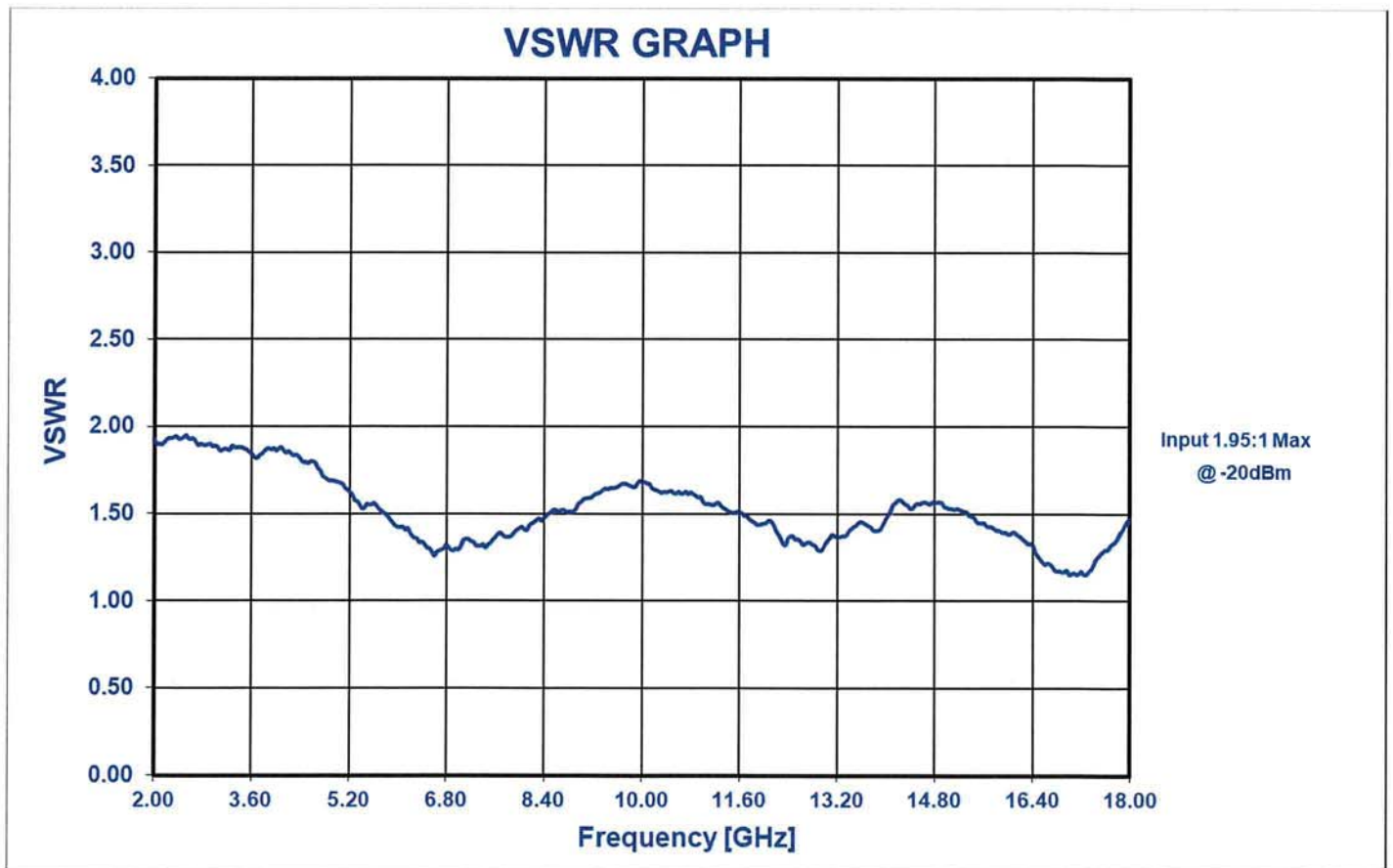
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**INPUT VSWR**



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