



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

Customer: _____	Tested By: <u>Jim Hopson</u>
SO No: _____	Temperature: <u>+25°C</u>
Model No: <u>SDLVA-218-65-16MV-12DBM-OPTJE</u>	Date: <u>11/19/2021</u>
Serial No: <u>PL347717/2146</u>	Drawing No: <u>27336260</u> Rev: <u>A2</u>

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range	2 GHz to 18 GHz	2 GHz to 18 GHz	<b>PM QC</b>
2	TSS	-64 dBm max	-64 dBm	
3	Input Power Handling	+20 dBm	+20 dBm	
4	Video Output DC Offset	-100 mV nom (not greater than zero)	-120 mV	
5	Video Log Range	-55 dBm to +10 dBm	-55 to +10 dBm	
6	Video Log Linearity	+2.2 dB	+1.90 dB -1.62 dB	
7	Video Log Slope	16.0 ±2.0 mV/dB nom	17.1 / 15.4 mV/dB	
8	Video Freq Flatness	±4 dB max	+/- 3.0 dB	
9	Pulse Width Range	25 nsec to CW	Pass	
10	Video Rise Time	10 nsec max	4.8 nsec	

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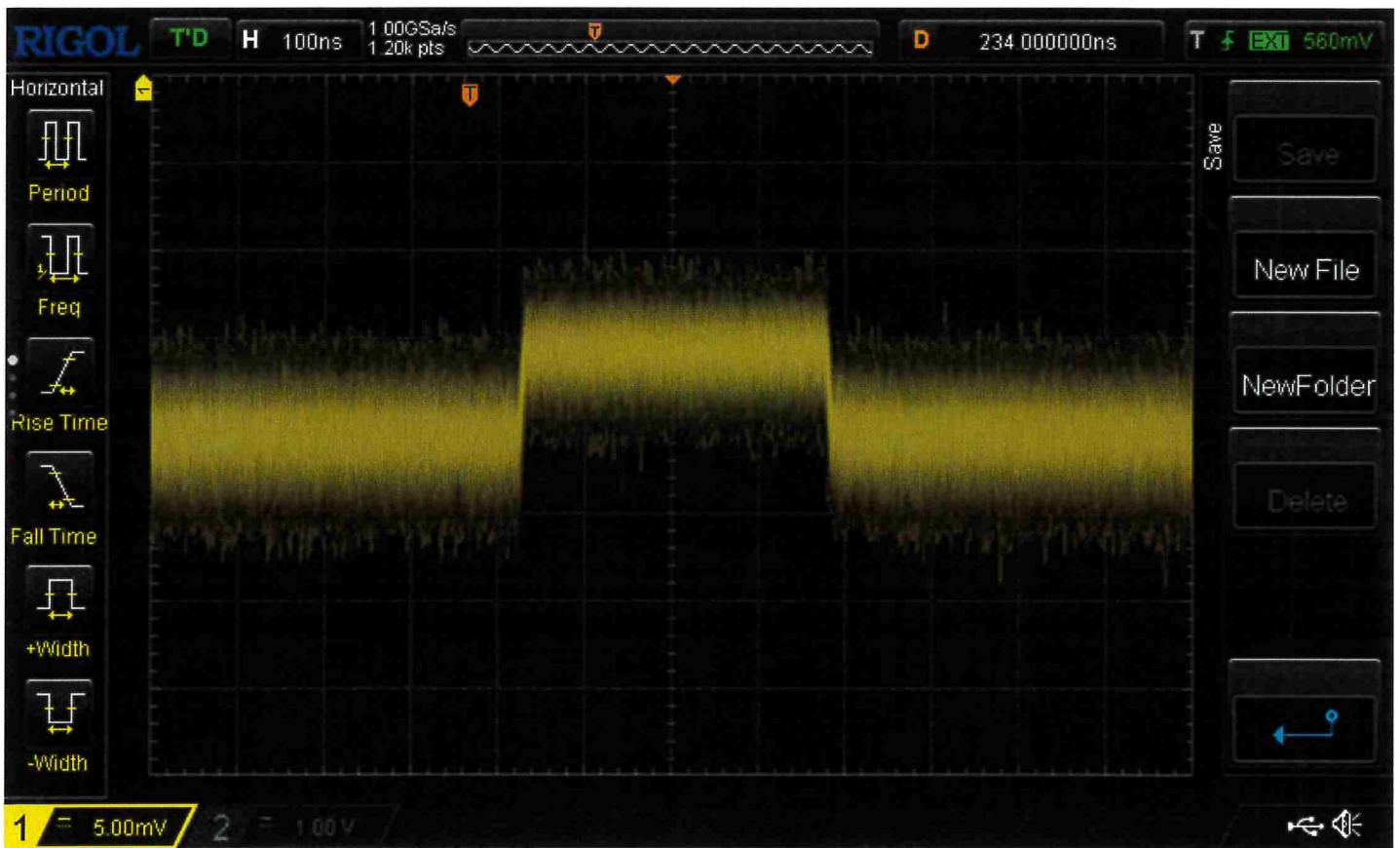
TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
11	Video Fall Time	20 nsec max	5.4 nsec	PMI QA3
12	Recovery Time	50 nsec max	13.0 nsec	
13	Delay	<2 nsec	< 2.0 nsec	
14	Video Output Impedance	50Ω	Pass	
15	RF In/Out Impedance	50Ω	Pass	
16	Input VSWR (50Ω)	2.0:1 max	1.96:1	
17	DC Supply	+12 V @ 850 mA -12 V @ 250 mA	480mA 30 mA	

QA/QC Approval: *H. Morten* Date: 11-19-21



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VIDEO TSS -64 dBm



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**SUMMARY TEST DATA  
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**VIDEO LOG LINEARITY**

MODEL: SDLVA-218-65-16MV-12DBM-OPTJE  
SERIAL NO: PL34771  
DATE: 11/19/21  
TESTED BY: Jim Hopson  
Test Temp: +25C



PLANAR MONOLITHICS INDUSTRIES  
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GRAPH #1

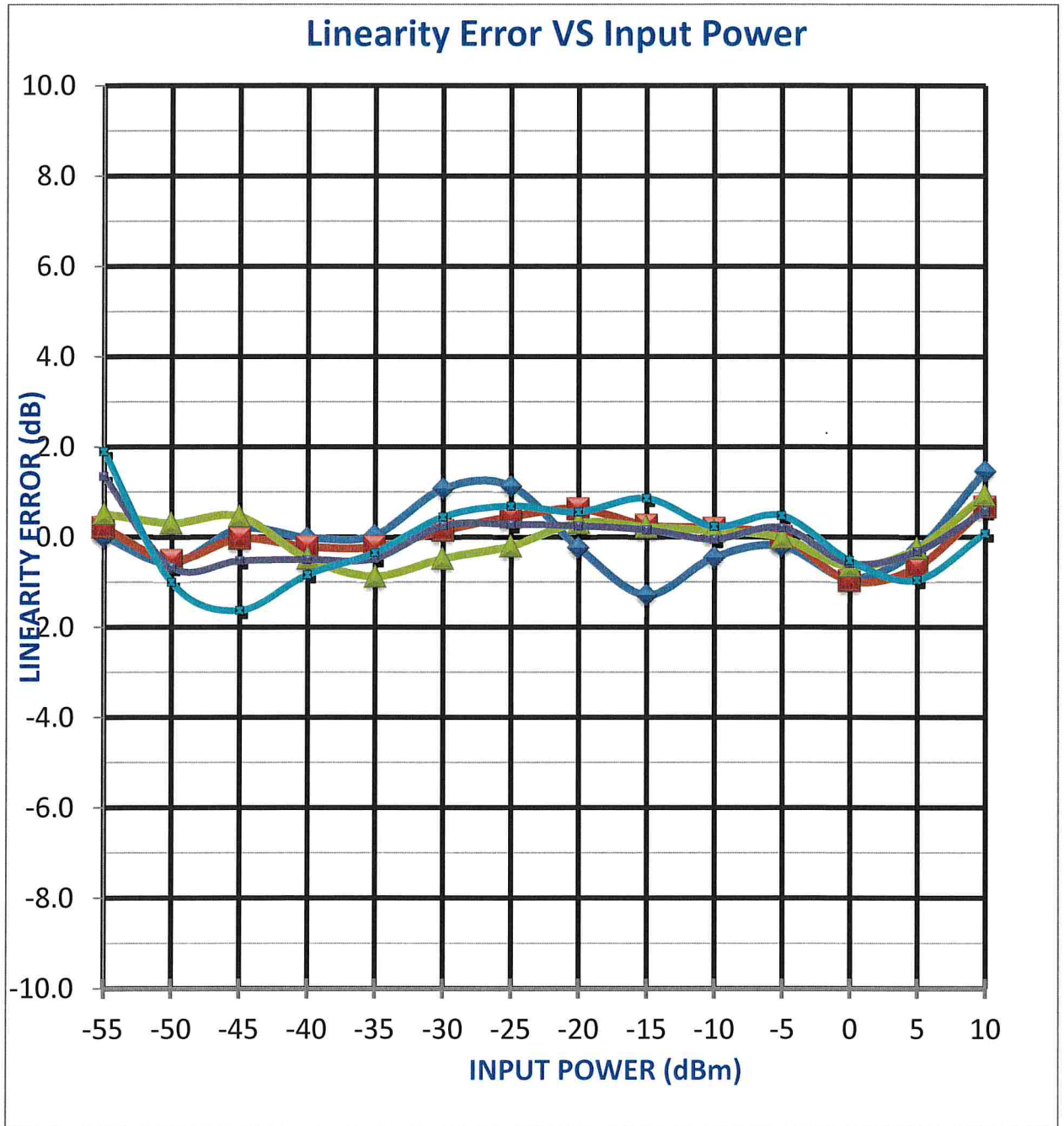
Video Output Voltage With No RF    -0.120

Frequency			-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	RF Input Power (dBm)			
2 GHz	INTERCEPT (mV)	-1006	-158	-226	-315	-389	-467	-560	-638	-694	-755	-845	-926	-992	-1079	-1183		Measured Value (mV)	Error(dB)	
	SLOPE (mV/dB)	-15.4	0	9	-3	0	-1	-17	-17	4	20	7	3	14	4	-23		Error (mV)	MAX	MIN
			0.01	-0.58	0.19	-0.01	0.05	1.08	1.13	-0.24	-1.28	-0.45	-0.19	-0.92	-0.28	1.47		LINEARITY ERROR (dB)	1.47	-1.28
6 GHz	INTERCEPT (mV)	-1065	-166	-236	-326	-405	-487	-575	-662	-747	-823	-904	-983	-1049	-1136	-1240		Measured Value (mV)	Error(dB)	
	SLOPE (mV/dB)	-16.4	-4	8	0	3	4	-2	-7	-10	-4	-3	0	16	11	-11		Error (mV)	MAX	MIN
			0.22	-0.51	-0.03	-0.21	-0.22	0.15	0.45	0.63	0.26	0.20	0.01	-0.96	-0.66	0.68		LINEARITY ERROR (dB)	0.68	-0.96
10 GHz	INTERCEPT (mV)	-1072	-173	-252	-337	-404	-480	-569	-656	-747	-828	-909	-989	-1061	-1150	-1252		Measured Value (mV)	Error(dB)	
	SLOPE (mV/dB)	-16.5	-9	-5	-8	8	14	8	3	-5	-4	-2	0	11	4	-15		Error (mV)	MAX	MIN
			0.52	0.31	0.46	-0.47	-0.87	-0.47	-0.20	0.32	0.23	0.14	-0.01	-0.65	-0.25	0.93		LINEARITY ERROR (dB)	0.93	-0.87
14 GHz	INTERCEPT (mV)	-1070	-152	-203	-291	-377	-463	-561	-647	-732	-816	-898	-988	-1060	-1150	-1251		Measured Value (mV)	Error(dB)	
	SLOPE (mV/dB)	-17.1	-23	11	9	8	8	-4	-5	-4	-3	1	-4	10	5	-10		Error (mV)	MAX	MIN
			1.35	-0.67	-0.52	-0.50	-0.47	0.26	0.28	0.25	0.16	-0.05	0.21	-0.58	-0.32	0.58		LINEARITY ERROR (dB)	1.35	-0.67
18 GHz	INTERCEPT (mV)	-996	-135	-169	-240	-334	-423	-517	-602	-681	-767	-838	-923	-988	-1062	-1160		Measured Value (mV)	Error(dB)	
	SLOPE (mV/dB)	-16.2	-31	16	26	13	6	-7	-11	-9	-14	-4	-8	8	15	-1		Error (mV)	MAX	MIN
			1.90	-1.00	-1.62	-0.83	-0.34	0.45	0.69	0.56	0.86	0.24	0.48	-0.52	-0.95	0.09		LINEARITY ERROR (dB)	1.90	-1.62
Flatness +/- dB		1.20	2.50	3.00	2.20	2.00	1.80	1.80	2.00	2.20	2.20	2.00	2.20	2.70	2.80					
Max Video Output Volts		-0.135	-0.169	-0.240	-0.334	-0.423	-0.517	-0.602	-0.681	-0.755	-0.838	-0.923	-0.988	-1.062	-1.160					
Min Video Output Volts		-0.173	-0.252	-0.337	-0.405	-0.487	-0.575	-0.662	-0.747	-0.828	-0.909	-0.989	-1.061	-1.150	-1.252					
Log Slope Average: mV/dB																		-16.3		
Log Slope Variation: ± mV/dB																			0.84	





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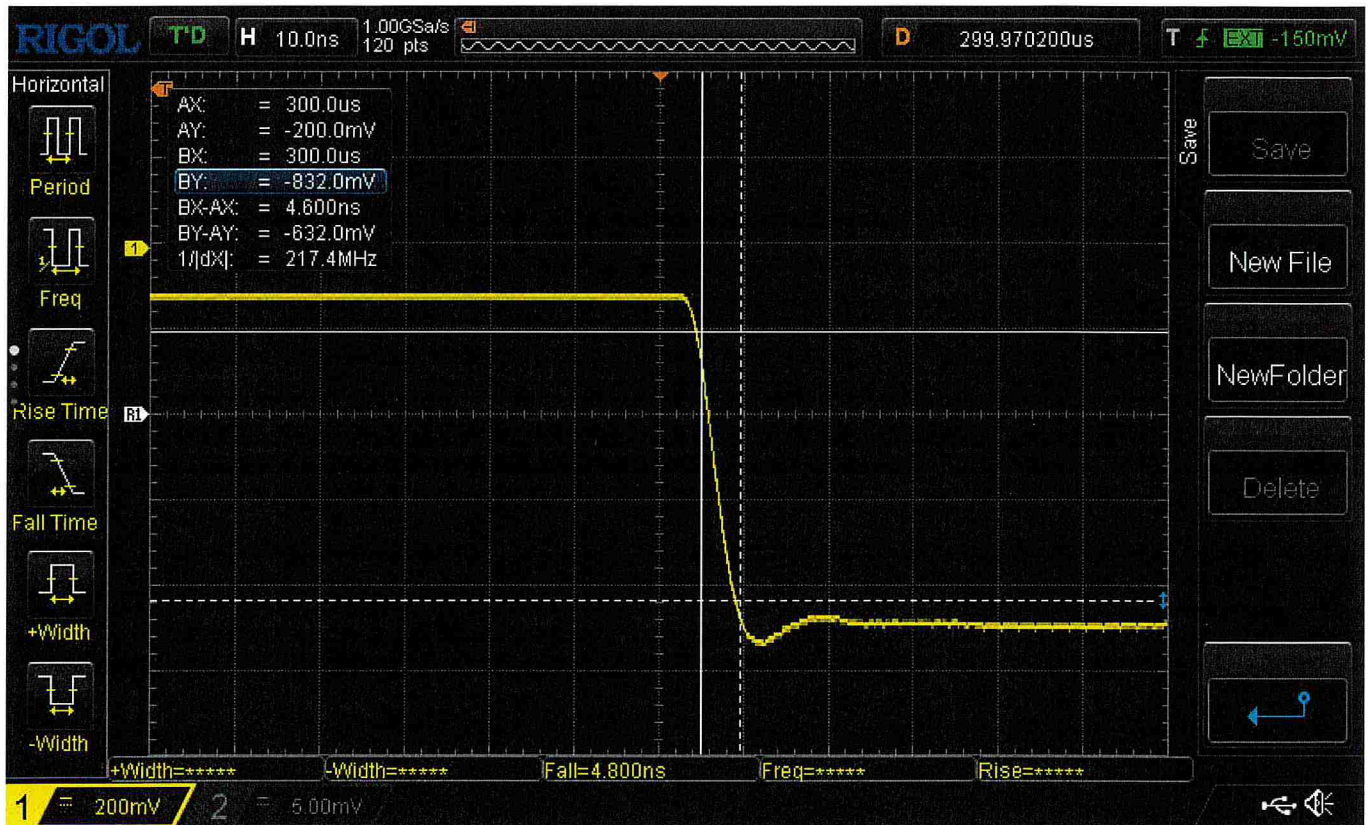


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**SUMMARY TEST DATA  
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**VIDEO RISE TIME (4.8ns)**

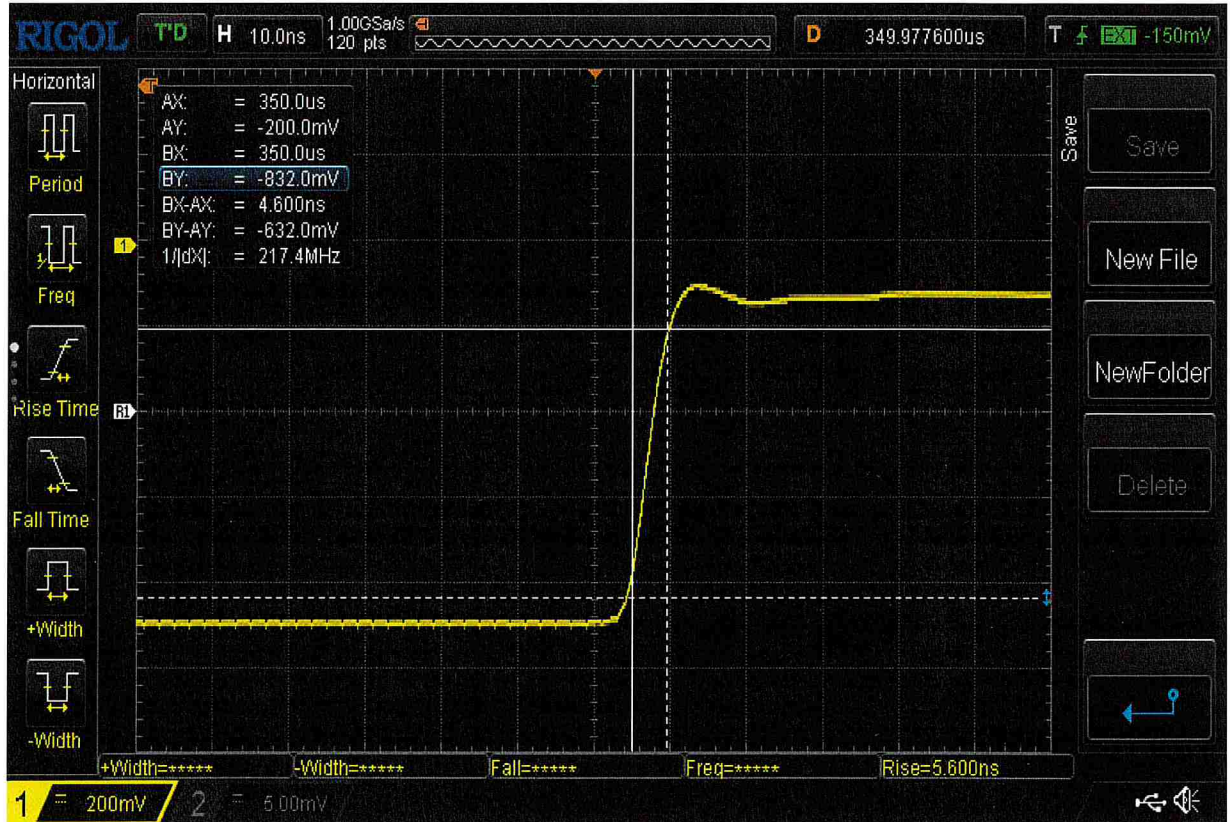


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**SUMMARY TEST DATA  
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**VIDEO FALL TIME (5.4 ns)**



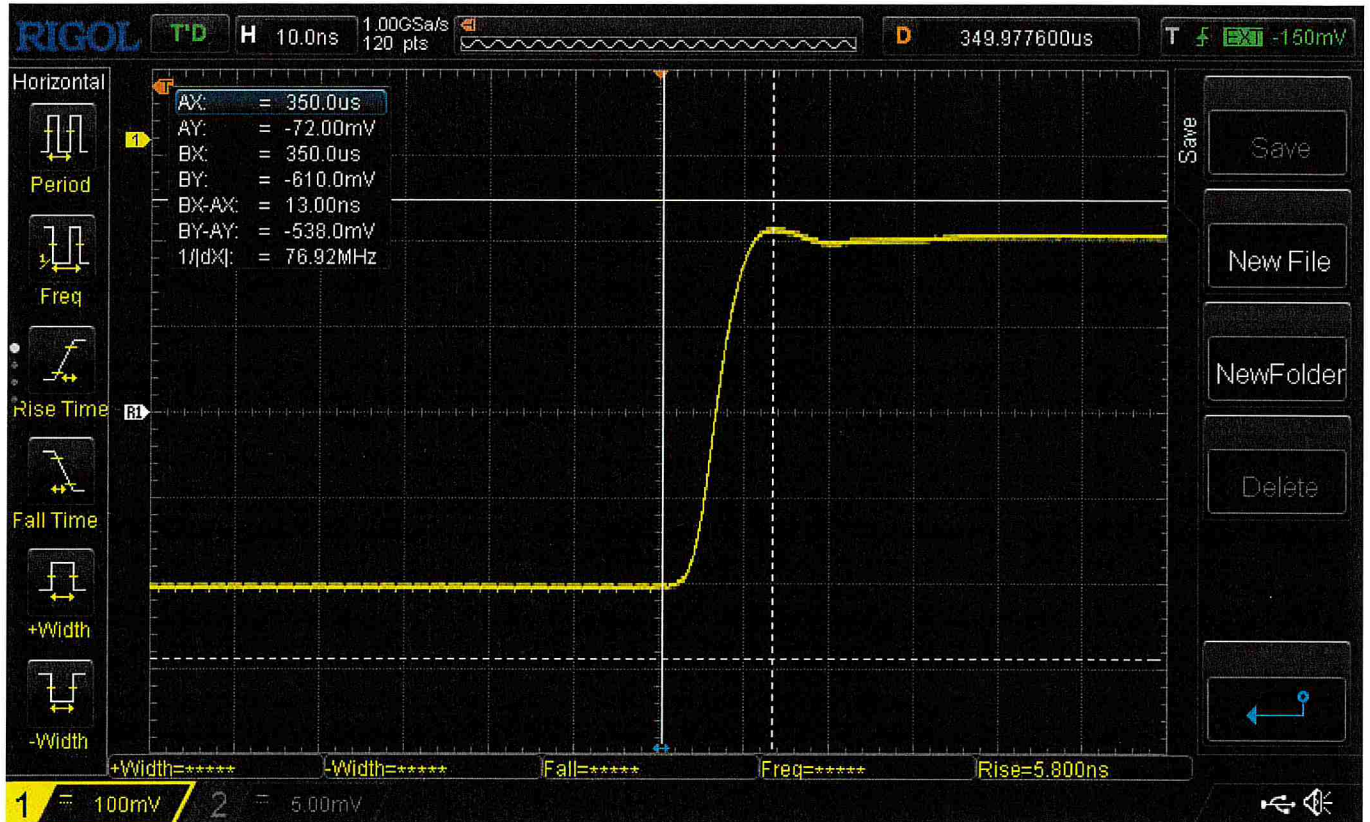
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**Recovery Time (13.0 ns)**



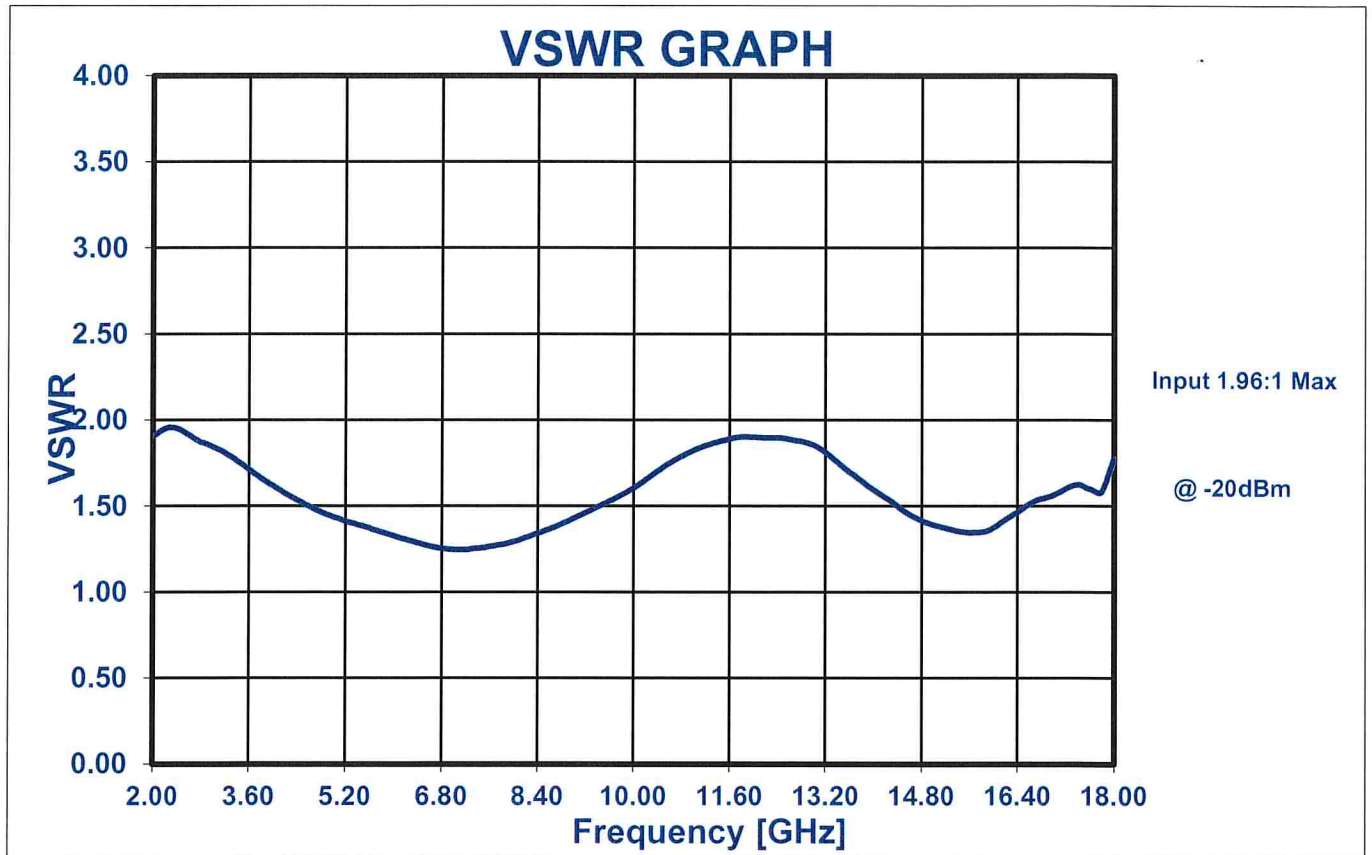
**VSWR (1.96:1)**

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