



**SUMMARY TEST DATA
ON
SDLVA-18G40G-65-CD-292FF**

PL43171/2351

Customer: _____ Tested By: DA
SO No: _____ Temperature: +25°C
Model No: SDLVA-18G40G-65-CD-292FF-OPTHS Date: 12/21/23
Serial No: PL43171/2351 Drawing No: 27637200

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	18.0 to 40.0GHz	18.0 to 40.0GHz	PMI
2	TSS	-65 dBm @25°C	-67 dBm	QA3
3	Input Power Handling	+10dBm Max.	Pass	
4	Video Log Range:	-63dBm to +2dBm	-63dBm to +2dBm	
5	Video Log Linearity:	± 2.0 dB @25°C ±3.0 dB over temp.	+1.26 dB -1.15 dB	
6	Video Log Slope:	25 mV/dB Nom.	25.0 mV/dB	
7	Video Log Intercepts: Video Output:	At 2 dBm 1940 mV Max. 1476 mV Min. At -63 dBm 280 mV Max. 65 mV Min.	1879 mV 1801 mV 262 mV 209 mV	
8	Video Frequency Flatness:	±2.5dB Max. @ 25°	1.6 dB	
9	Pulse Width Range:	25 ns to CW	Pass	
10	Video Rise Time:	11ns (8 ns Typ.)	8.0ns	
11	Recovery Time:	60ns (40 ns Typ.)	32.0ns	
12	Delay Time:	15 ns (5 ns Typ.) 7 ns over temp. Typ.	<15ns by design	
13	Video Output Impedance:	50 Ω	50 Ω	
14	Input VSWR (50Ω):	2.5:1	2.08:1	
15	DC Power Supply:	+12V @ 400mA -12V @ 200mA	+12V@ 390mA -12V@ 157mA	

QA/QC Approval: K. Lutz Date: 12-21-23



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Graph #1

Log Transfer vs Frequency @+25C

MODEL: SDLVA-18G40G-65-CD-292FF-OTPHS
SERIAL NO: PL43171
DATE: 12-15-2023
TESTED BY: DA
Test Temp: +25C

PLANAR MONOLITHICS INDUSTRIES
4921 Robert J. Mathews Parkway Suit 1
El Dorado Hills, CA 95762
TEL: 916-542-1401 FAX: 916-265-2597
EMAIL: SALES@PMI-RF.COM

GRAPH #1

Frequency			-63	-58	-53	-48	-43	-38	-33	-28	-23	-18	-13	-8	-3	2	RF Input Power (dBm)		
18 GHz	INTERCEPT (mV)	1813	262	376	499	628	725	838	965	1098	1230	1377	1493	1617	1748	1877	Measured Value (mV)	Error(dB)	
	SLOPE (mV/dB)	25	21	10	8	12	-15	-27	-25	-17	-10	13	4	3	9	14	Error (mV)	MAX MIN	
			0.83	0.40	0.33	0.50	-0.62	-1.09	-1.00	-0.67	-0.38	0.51	0.16	0.13	0.38	0.54	LINEARITY ERROR (dB)	0.83 -1.09	
23.5 GHz	INTERCEPT (mV)	1797	222	328	450	581	701	813	938	1067	1198	1349	1479	1606	1729	1851	Measured Value (mV)	Error(dB)	
	SLOPE (mV/dB)	25.4	25	4	-1	3	-4	-19	-21	-19	-15	9	12	12	8	3	Error (mV)	MAX MIN	
			1.00	0.17	-0.02	0.13	-0.15	-0.74	-0.82	-0.74	-0.58	0.36	0.48	0.47	0.32	0.12	LINEARITY ERROR (dB)	1.00 -0.82	
29 GHz	INTERCEPT (mV)	1817	213	318	440	564	696	809	935	1069	1204	1361	1492	1617	1747	1879	Measured Value (mV)	Error(dB)	
	SLOPE (mV/dB)	26	33	8	0	-8	-4	-21	-25	-21	-15	12	13	9	8	10	Error (mV)	MAX MIN	
			1.26	0.31	0.00	-0.23	-0.15	-0.80	-0.95	-0.79	-0.59	0.45	0.49	0.30	0.30	0.38	LINEARITY ERROR (dB)	1.26 -0.95	
34.5 GHz	INTERCEPT (mV)	1753	255	368	494	625	703	816	944	1080	1215	1342	1429	1553	1682	1815	Measured Value (mV)	Error(dB)	
	SLOPE (mV/dB)	23.9	10	3	9	21	-21	-28	-19	-3	13	20	-13	-8	1	15	Error (mV)	MAX MIN	
			0.40	0.12	0.39	0.87	-0.87	-1.15	-0.80	-0.11	0.53	0.84	-0.52	-0.34	0.05	0.61	LINEARITY ERROR (dB)	0.87 -1.15	
40 GHz	INTERCEPT (mV)	1752	209	306	430	557	694	811	936	1074	1208	1336	1416	1537	1667	1801	Measured Value (mV)	Error(dB)	
	SLOPE (mV/dB)	24.7	13	-14	-13	-10	4	-2	-1	14	24	29	-15	-17	-11	0	Error (mV)	MAX MIN	
			0.52	-0.55	-0.53	-0.39	0.16	-0.10	-0.04	0.55	0.97	1.16	-0.60	-0.70	-0.44	-0.01	LINEARITY ERROR (dB)	1.16 -0.70	
Flatness +/- dB			1.10	1.40	1.40	1.40	0.60	0.60	0.60	0.60	0.60	0.80	1.50	1.60	1.60	1.60			
Max Video Output Volts			0.26	0.38	0.50	0.63	0.73	0.84	0.97	1.10	1.23	1.38	1.49	1.62	1.75	1.88			
Min Video Output Volts			0.21	0.31	0.43	0.56	0.69	0.81	0.94	1.07	1.20	1.34	1.42	1.54	1.67	1.80			
Nominal Log Slope mV/dB		25.0																	
Log Slope Variation: ± mV/dB		1.03																	
Video Output @ -63dBm																			
Min(V)=	209.0	65																	
Max(V)=	262.0	280																	
Video Output @ +2dBm																			
Min(V)=	1801.0	1476																	
Max(V)=	1879.0	1940																	

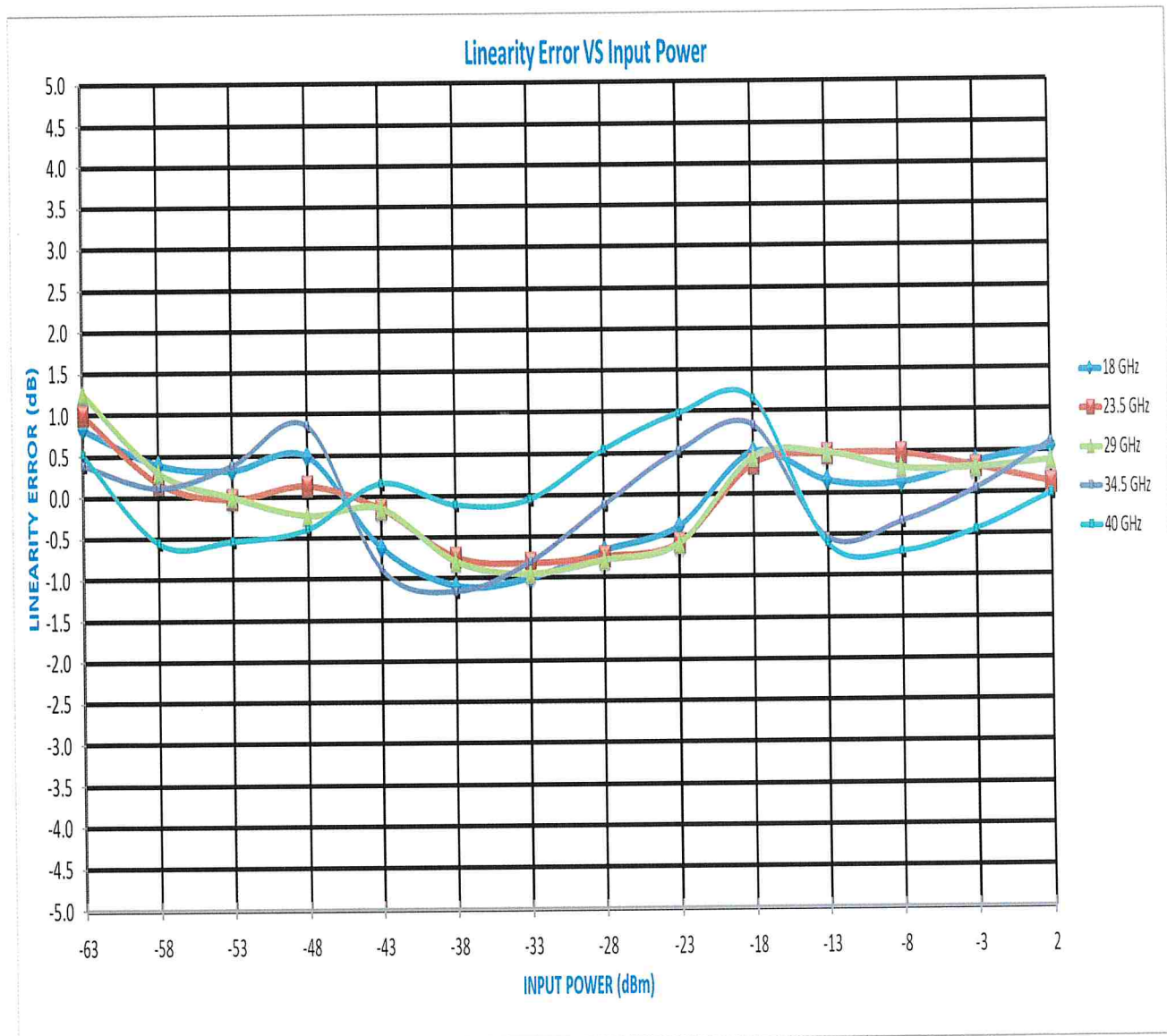


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Graph #1 (cont.)

Log Transfer vs Frequency @+25C





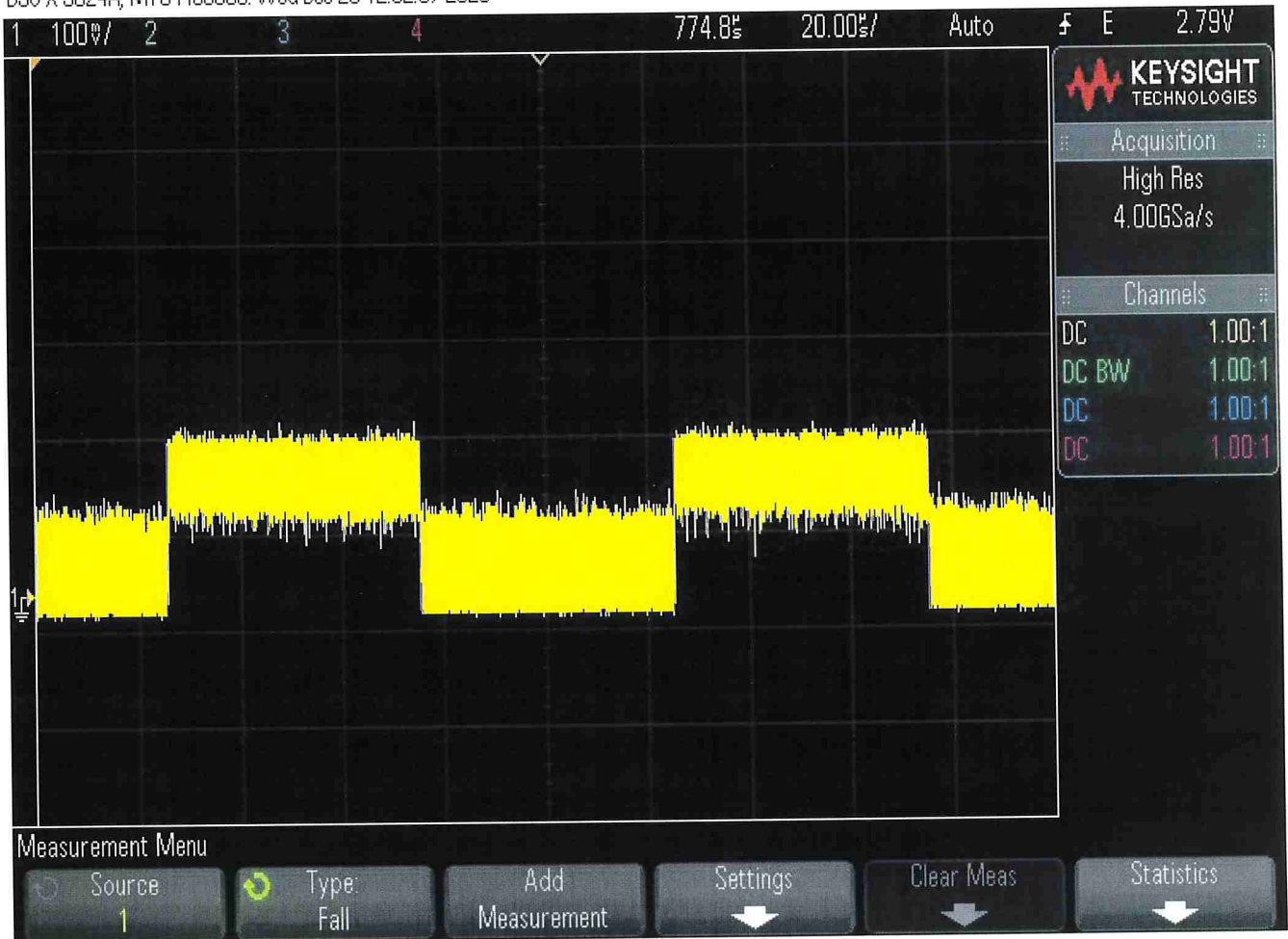
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Graph #2

TSS-67dBm @+25C

DSO-X 3024A, MY54490369: Wed Dec 20 12:02:07 2023





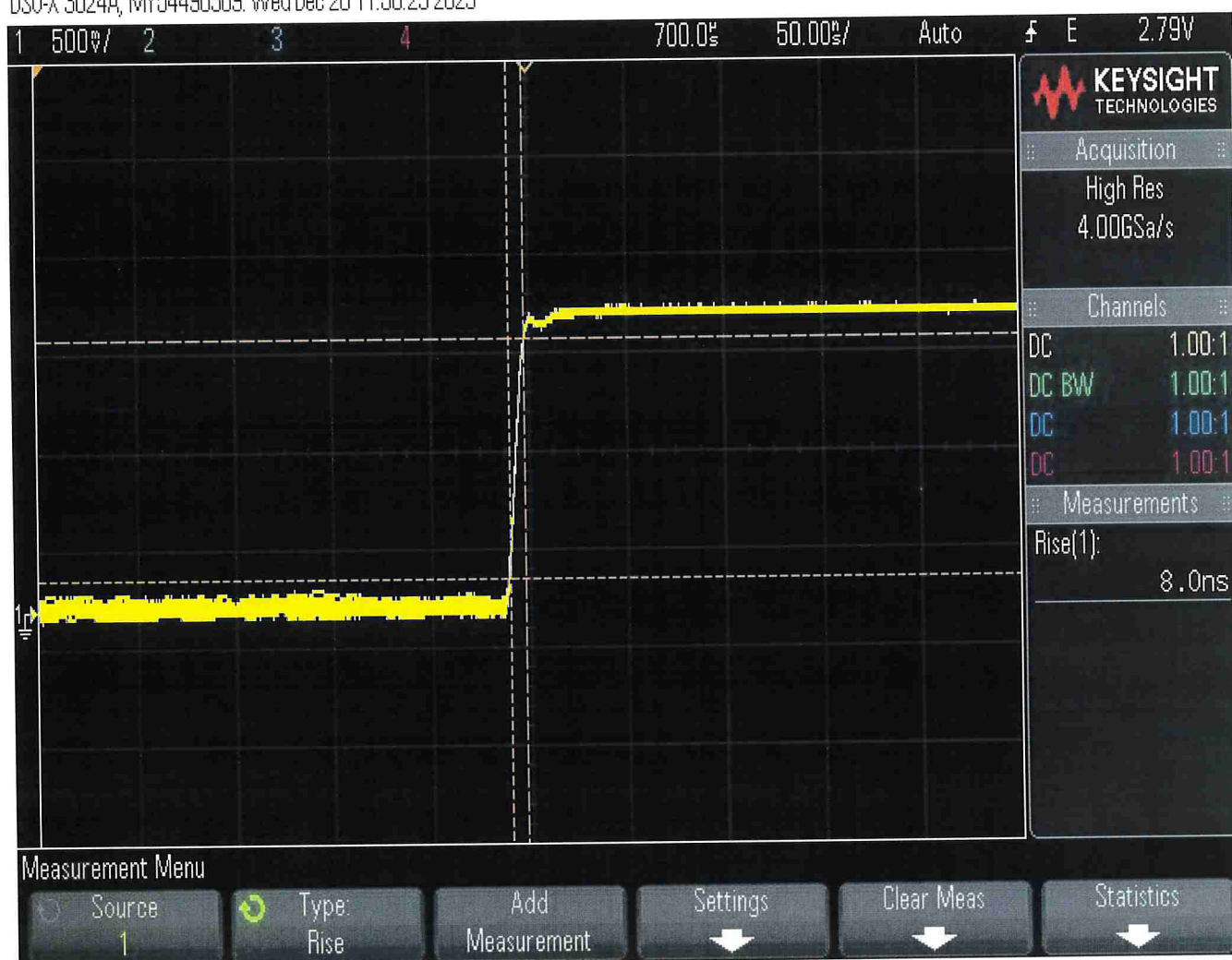
SUMMARY TEST DATA
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Graph#3

Rise Time 8.0ns @+25C & +2dBm

DSO-X 3024A, MY54490369: Wed Dec 20 11:58:23 2023



4921 Robert J. Mathews Pkwy Suite 1 Ph: (916)542-1401 Fax: (916)265-2597
Email: sales@pmi-rf.com



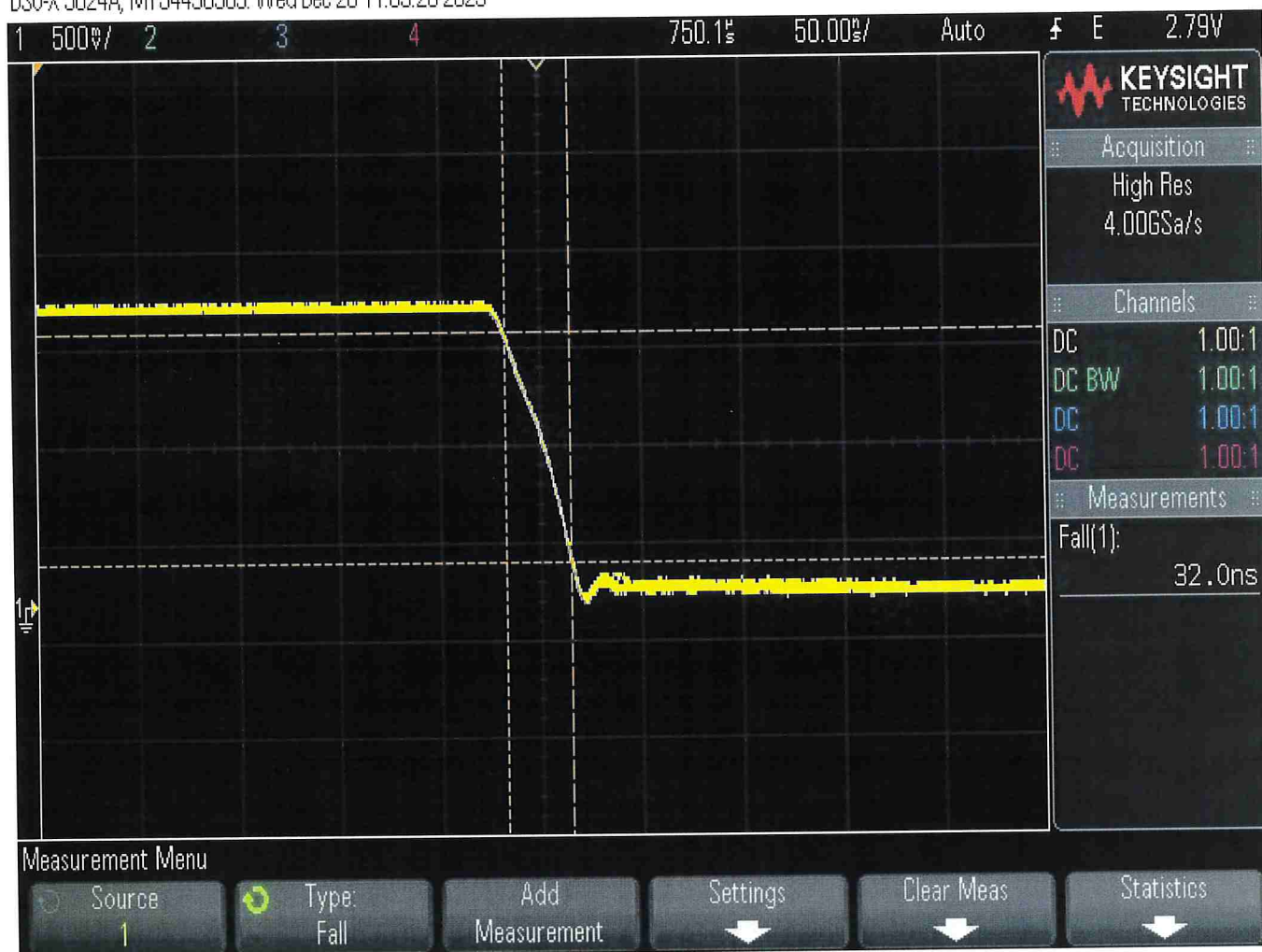
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Graph#4

Recovery Time 32.0ns @+25C & +2dBm

DSO-X 3024A, MY54490369: Wed Dec 20 11:59:25 2023





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Graph #5

VSWR 2.08:1 @+25C & -20dBm

