



Summary Data
For
ERDLVA-2G18G-65-70MV-70C

Customer: _____
 SO No: _____
 Model No: ERDLVA-2G18G-65-70MV-70C
 Serial No: PL49264/2448

Tested By: Anton L.
 Temperature: -40°C TO +70°C
 Date 11/25/2024
 Drawing No: 27642020 Rev: A1

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	2 to 18 GHz	2 to 18 GHz	
2	VSWR:	2.2:1 MAX @ 50 Ω	1.94 :1 MAX	
3	Input Power:	(1) 1 W CW, Max. (2) 100 W Peak @ PW = 1 us & Duty Cycle = 1%, Max.	Pass	
4	VIDEO OUT TSS:	-71 dBm MAX	- 71.9 dBm	
5	VIDEO OUT Dynamic Range:	-65 to 0 dBm	-65 to 0 dBm	
6	VIDEO OUT Log Slope Fixed:	70 ± 3mV/dB	71.1 mV/dB 69.8 mV/dB	
7	VIDEO OUT Log Linearity:	±1.0 dB MAX @25C	0.51 dB -0.60 dB	
8	VIDEO OUT Log Accuracy:	±2.3 dB MAX @25C	1.31 dB -0.84 dB	
9	VIDEO OUT Absolute Log Accuracy:	±2.9 dB MAX Over Freq & temp	1.61 dB -1.44 dB	
10	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On) @25C	17 mV	
11	VIDEO OUT Rise Time (10% to 90%):	28 ns MAX	21 ns	
12	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	166.3 ns	



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13	VIDEO OUT Settling Time:	50 ns With in ± 70 mV of final value @-10 dBm	23.5 ns	PMI QA3
14	VIDEO OUT Recovery Time:	1 us MAX to within 1 dB of baseline for PW <10us & Power = -10dBm	0.44 us	
15	VIDEO OUT Video Frequency Flatness:	± 2.0 dB MAX @25C	± 0.93 dB	
16	VIDEO OUT CW Immunity:	CW Immune Power TSS to -40 dBm	Pass	
		Pulse Peak Amplitude Loss; 2 dB MAX @ -40dBm CW	< 2 dB	
		Baseline shift 200mV @-40dBm CW	< 200 mV	
		CW Immunity Time at CW = -40 dBm, ≤ 4 ms	1.35 ms	
		CW Recovery Time at CW = -40 dBm, ≤ 20 us	<20 us	
17	Pulse droop	1dB Max for 300us pulse at or above -65dBm	<1dB	
18	VIDEO OUT Pulse Response, input Signal:	100 ns to 300 us	100 ns to 300 us	
19	VIDEO LOAD Impedance:	$75 \pm 1 \Omega$	75 Ω	
20	VIDEO driver capability	100 ft RG11 into 75 ohm load	Pass	
21	Pulse density capability	10% duty cycle 100 ns, 70% duty cycle 300 us at peak power -10 dBm with 1 dB variable for pulse amplitude and baseline	Pass	



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22	VIDEO OUT Noise Level (Vp-p):	160 mV max	119.9 mV	PMI QAS
23	VIDEO OUT Propagation Delay:	50 ns MAX from RF 50% to 10% video (excluding cable)	< 50 ns	
24	Power Supply	+15 V @ 500 mA MAX -15 V @ 100 mA MAX	+15 V @ 320 mA -15 V @ 80 mA	
25	Power Supply Ripple From DC to 10 MHz	100 mV MAX	Pass	

QA/QC Approval: *K. Klauinger*

Date: 11.25.23



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LOG TRANSFER WITH FREQUENCY

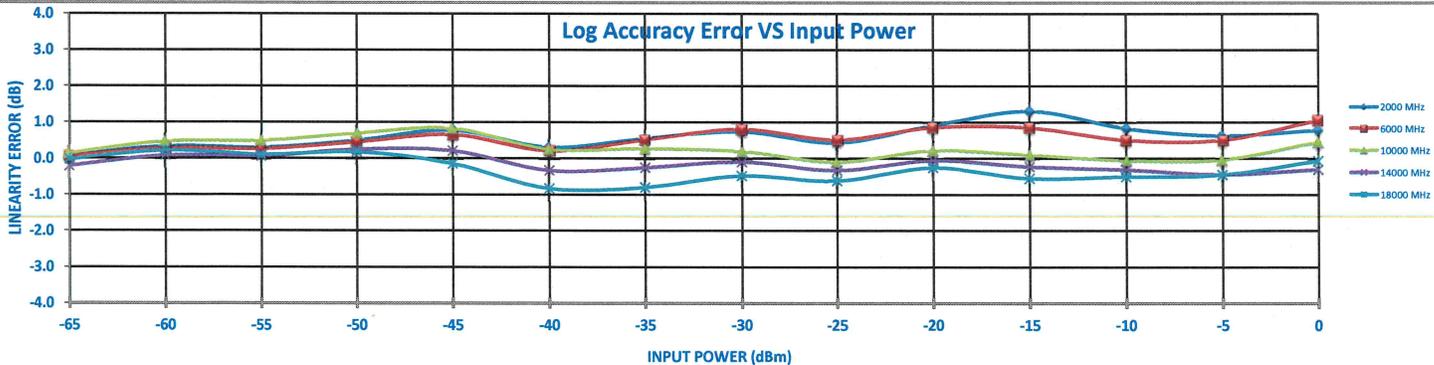
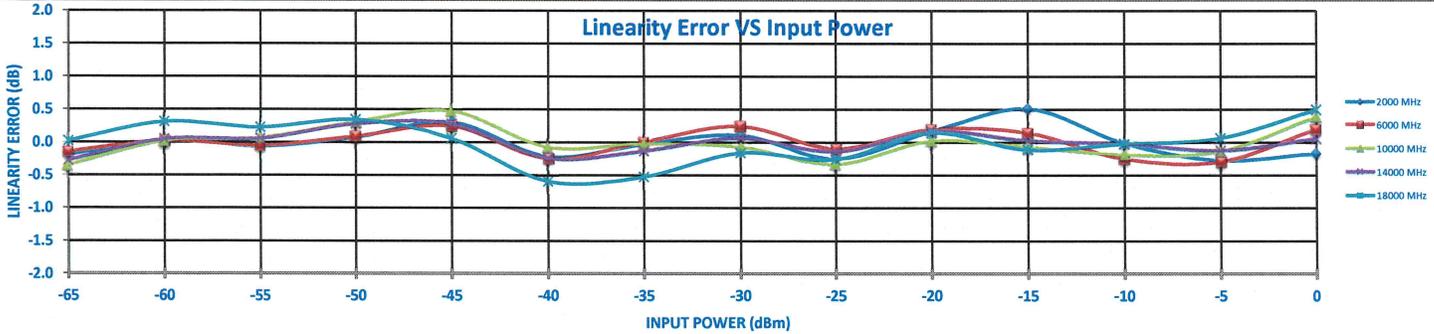
TESTED BY: Anton L.
MODEL: ERDLVA-2G18G-65-70MV-70C
SERIAL NO: PL49264/2448
DATE: 11/25/2024

Test Temp: 25 °C
Video Offset: 17 mV

Frequency

Frequency	Intercept (mV)	Slope (mV/dB)	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2000 MHz	4929	71.1	295	666	1015	1380	1752	2070	2439	2804	3134	3519	3899	4217	4554	4917	Measured Value (mV) Error (mV) LINEARITY ERROR (dB) 0.51 ACCURACY ERROR (dB) 1.31
6000 MHz	4921	71.0	295	662	1012	1377	1743	2063	2436	2808	3139	3515	3866	4193	4545	4935	Measured Value (mV) Error (mV) LINEARITY ERROR (dB) -0.30 ACCURACY ERROR (dB) 1.05
10000 MHz	4866	69.9	300	675	1028	1394	1755	2066	2419	2765	3096	3470	3813	4154	4507	4893	Measured Value (mV) Error (mV) LINEARITY ERROR (dB) 0.47 ACCURACY ERROR (dB) 0.82
14000 MHz	4836	69.9	276	648	998	1363	1712	2025	2382	2745	3080	3451	3790	4136	4478	4840	Measured Value (mV) Error (mV) LINEARITY ERROR (dB) -0.28 ACCURACY ERROR (dB) -0.45
18000 MHz	4822	69.8	289	658	1001	1358	1687	1990	2344	2718	3060	3437	3768	4123	4478	4857	Measured Value (mV) Error (mV) LINEARITY ERROR (dB) -0.60 ACCURACY ERROR (dB) -0.84

Flatness	+/- dB	0.17	0.19	0.21	0.26	0.48	0.57	0.68	0.64	0.56	0.58	0.93	0.67	0.54	0.68	0.93
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Summary Data For ERDLVA-2G18G-65-70MV-70C

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TESTED BY: Anton L.
MODEL: ERDLVA-2G18G-65-70MV-70C
SERIAL NO: PL49264/2448
DATE: 11/25/2024

Test Temp: -40 °C
Video Offset: -19 mV

Frequency

2000 MHz	INTERCEPT (mV)	4879
	SLOPE (mV/dB)	71.3

6000 MHz	INTERCEPT (mV)	4886
	SLOPE (mV/dB)	71.2

10000 MHz	INTERCEPT (mV)	4850
	SLOPE (mV/dB)	70.2

14000 MHz	INTERCEPT (mV)	4831
	SLOPE (mV/dB)	70.6

18000 MHz	INTERCEPT (mV)	4850
	SLOPE (mV/dB)	70.6

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
248	610	948	1315	1689	2013	2380	2744	3078	3463	3848	4167	4506	4875	
1	7	-12	-1	17	-16	-5	3	-20	9	38	0	-17	-4	
0.02	0.09	-0.16	-0.01	0.23	-0.22	-0.07	0.04	-0.28	0.13	0.53	0.00	-0.24	-0.06	
-0.18	-0.07	-0.29	-0.10	0.18	-0.24	-0.05	0.09	-0.19	0.25	0.69	0.20	-0.01	0.20	

	262	621	963	1328	1701	2021	2392	2762	3099	3476	3835	4156	4511	4903
1	4	-9	0	17	-19	-4	11	-8	13	16	-19	-19	17	
0.02	0.06	-0.13	0.00	0.24	-0.27	-0.05	0.15	-0.12	0.18	0.23	-0.26	-0.27	0.24	
-0.02	0.09	-0.08	0.08	0.35	-0.13	0.12	0.34	0.11	0.43	0.51	0.04	0.06	0.60	

	273	636	989	1350	1716	2029	2383	2736	3072	3450	3801	4129	4490	4877
-10	7	3	13	-20	-11	8	-8	-21	5	5	-19	8	27	
-0.15	0.02	0.04	0.18	0.39	-0.15	-0.11	-0.09	-0.30	0.08	0.07	-0.26	-0.12	0.39	
0.17	0.30	0.29	0.39	0.56	-0.01	-0.01	-0.02	-0.28	0.07	0.03	-0.34	-0.24	0.23	

	242	601	948	1307	1663	1977	2344	2721	3060	3437	3788	4120	4475	4826
0	6	0	6	9	-30	-16	8	-6	18	16	-5	-3	-5	
0.00	0.09	0.00	0.09	0.13	-0.42	-0.22	0.12	-0.08	0.26	0.23	-0.07	-0.04	-0.07	
-0.27	-0.19	-0.29	-0.22	-0.19	-0.75	-0.56	-0.24	-0.45	-0.12	-0.16	-0.47	-0.45	-0.49	

	279	640	984	1334	1669	1969	2346	2734	3075	3451	3793	4133	4505	4882
15	24	15	12	-6	-59	-34	1	-11	12	1	-11	8	32	
0.22	0.34	0.21	0.17	-0.08	-0.83	-0.49	0.01	-0.15	0.17	0.02	-0.16	0.11	0.45	
0.26	0.36	0.22	0.17	-0.10	-0.86	-0.53	-0.05	-0.23	0.08	-0.09	-0.28	-0.03	0.30	

RF Input Power (dBm)	
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.53
ACCURACY ERROR (dB)	0.69

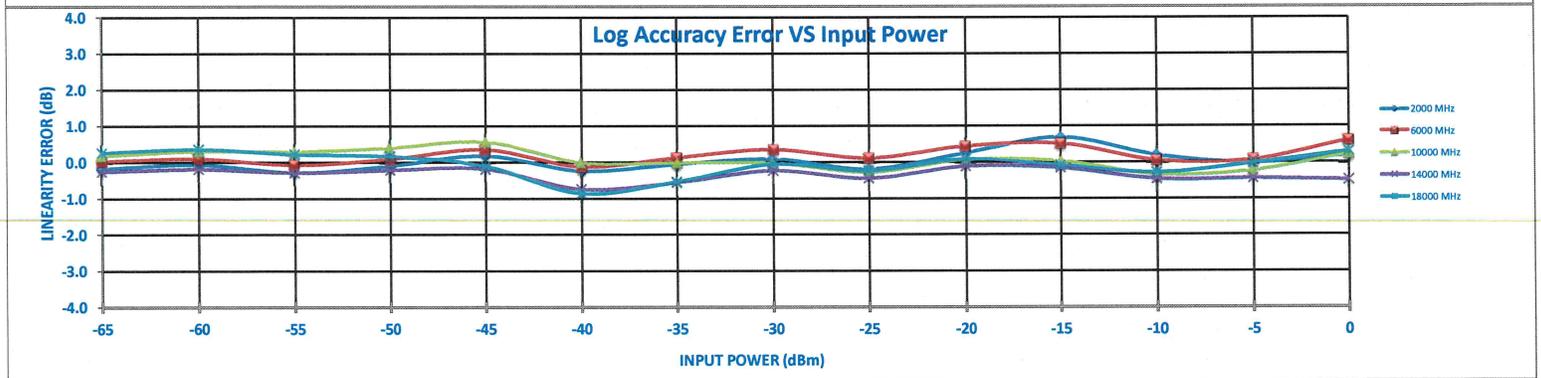
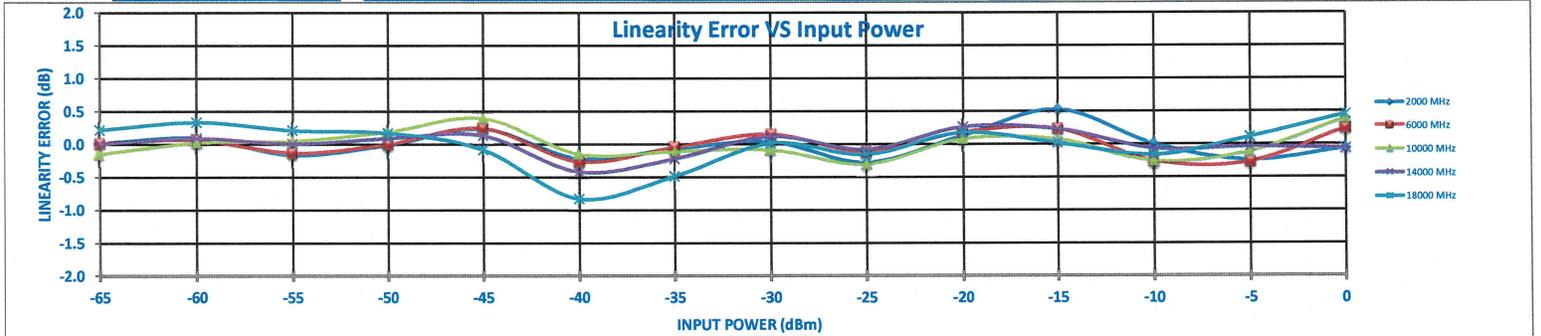
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.27
ACCURACY ERROR (dB)	0.60

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.39
ACCURACY ERROR (dB)	0.56

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.42
ACCURACY ERROR (dB)	-0.75

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.83
ACCURACY ERROR (dB)	-0.86

Flatness	+/- dB	0.26	0.28	0.29	0.30	0.37	0.42	0.34	0.29	0.28	0.42	0.33	0.25	0.54
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Summary Data For ERDLVA-2G18G-65-70MV-70C

LOG TRANSFER WITH FREQUENCY

TESTED BY: Anton L.
MODEL: ERDLVA-2G18G-65-70MV-70C
SERIAL NO: PL49264/2448
DATE: 11/25/2024

Test Temp: 70 °C
Video Offset: 25 mV

Frequency

2000 MHz	INTERCEPT (mV)	4877
	SLOPE (mV/dB)	70.5

6000 MHz	INTERCEPT (mV)	4861
	SLOPE (mV/dB)	70.5

10000 MHz	INTERCEPT (mV)	4785
	SLOPE (mV/dB)	69.0

14000 MHz	INTERCEPT (mV)	4747
	SLOPE (mV/dB)	68.7

18000 MHz	INTERCEPT (mV)	4697
	SLOPE (mV/dB)	68.8

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
281	647	990	1353	1721	2041	2409	2776	3100	3477	3852	4174	4507	4861	
-11	2	-8	2	18	-15	0	15	-14	10	33	2	-18	-16	
-0.16	0.03	-0.11	0.04	0.25	-0.21	0.01	0.21	-0.20	0.15	0.46	0.03	-0.25	-0.23	
0.23	0.49	0.43	0.65	0.95	0.55	0.85	1.13	0.79	1.21	1.61	1.24	1.03	1.13	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
273	631	981	1342	1704	2026	2396	2769	3095	3463	3808	4142	4489	4872	
-8	-2	-4	4	14	-16	1	22	-4	11	4	-14	-20	11	
-0.11	-0.03	-0.06	0.06	0.20	-0.23	0.02	0.31	-0.06	0.16	0.06	-0.20	-0.28	0.16	
0.11	0.26	0.30	0.49	0.70	0.34	0.66	1.03	0.72	1.01	0.98	0.78	0.77	1.29	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
279	647	995	1355	1714	2026	2374	2716	3037	3398	3735	4088	4434	4814	
-23	0	3	18	33	0	3	0	-24	-8	-15	-8	-8	25	
-0.34	0.00	0.04	0.26	0.47	-0.01	0.04	0.00	-0.35	-0.11	-0.23	-0.11	-0.09	0.42	
0.20	0.49	0.50	0.68	0.85	0.34	0.34	0.26	-0.12	0.08	-0.07	0.00	-0.02	0.45	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
259	621	973	1332	1674	1989	2335	2689	3015	3371	3706	4061	4392	4765	
-20	-2	7	22	20	-8	-6	4	-14	-1	-10	1	-11	18	
-0.29	-0.02	0.10	0.32	0.29	-0.12	-0.09	0.06	-0.20	-0.02	-0.15	0.02	-0.17	0.26	
-0.09	0.12	0.18	0.35	0.27	-0.20	-0.22	-0.13	-0.43	-0.31	-0.49	-0.38	-0.62	-0.25	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
234	580	929	1287	1604	1923	2250	2612	2954	3320	3651	4014	4357	4741	
8	10	16	30	3	-22	-39	-21	-23	-1	-14	5	4	44	
0.12	0.15	0.23	0.43	0.04	-0.32	-0.57	-0.31	-0.33	-0.01	-0.20	0.08	0.06	0.64	
-0.45	-0.47	-0.45	-0.30	-0.74	-1.15	-1.44	-1.23	-1.31	-1.05	-1.28	-1.06	-1.12	-0.60	

RF Input Power (dBm)	
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.46
ACCURACY ERROR (dB)	1.61

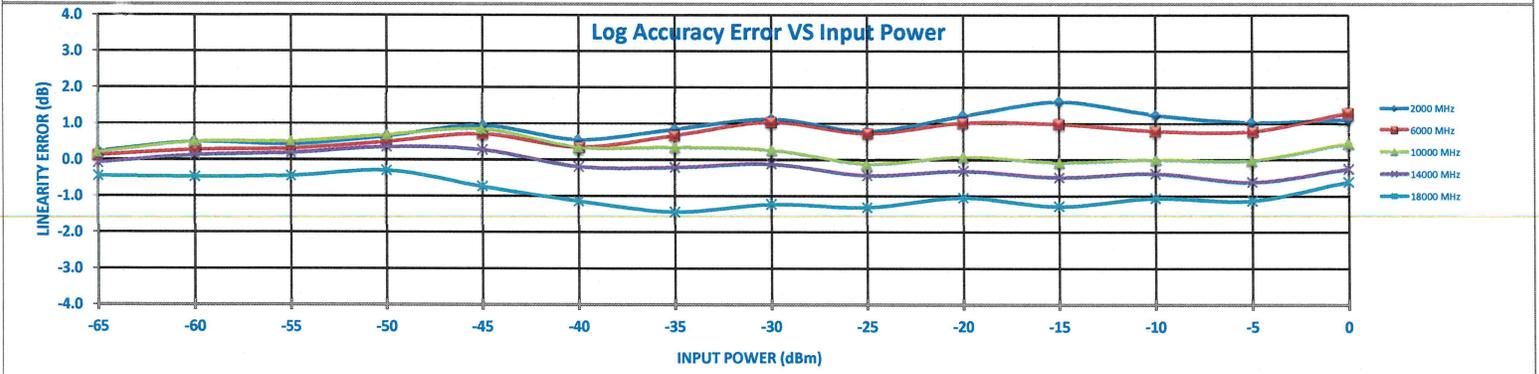
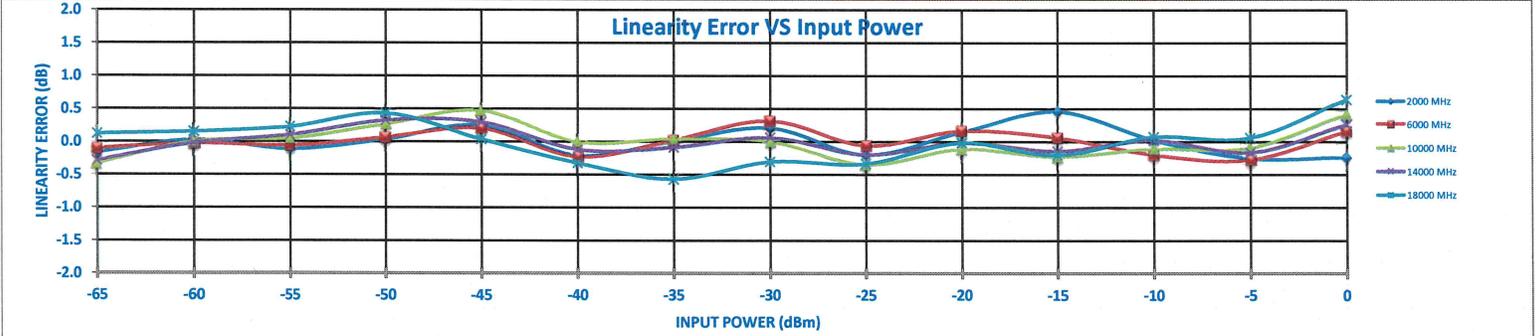
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.31
ACCURACY ERROR (dB)	1.29

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.47
ACCURACY ERROR (dB)	0.85

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.32
ACCURACY ERROR (dB)	-0.62

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.64
ACCURACY ERROR (dB)	-1.44

Flatness	+/- dB	0.34	0.48	0.47	0.49	0.84	0.85	1.14	1.18	1.05	1.13	1.45	1.15	1.08	0.94	1.45
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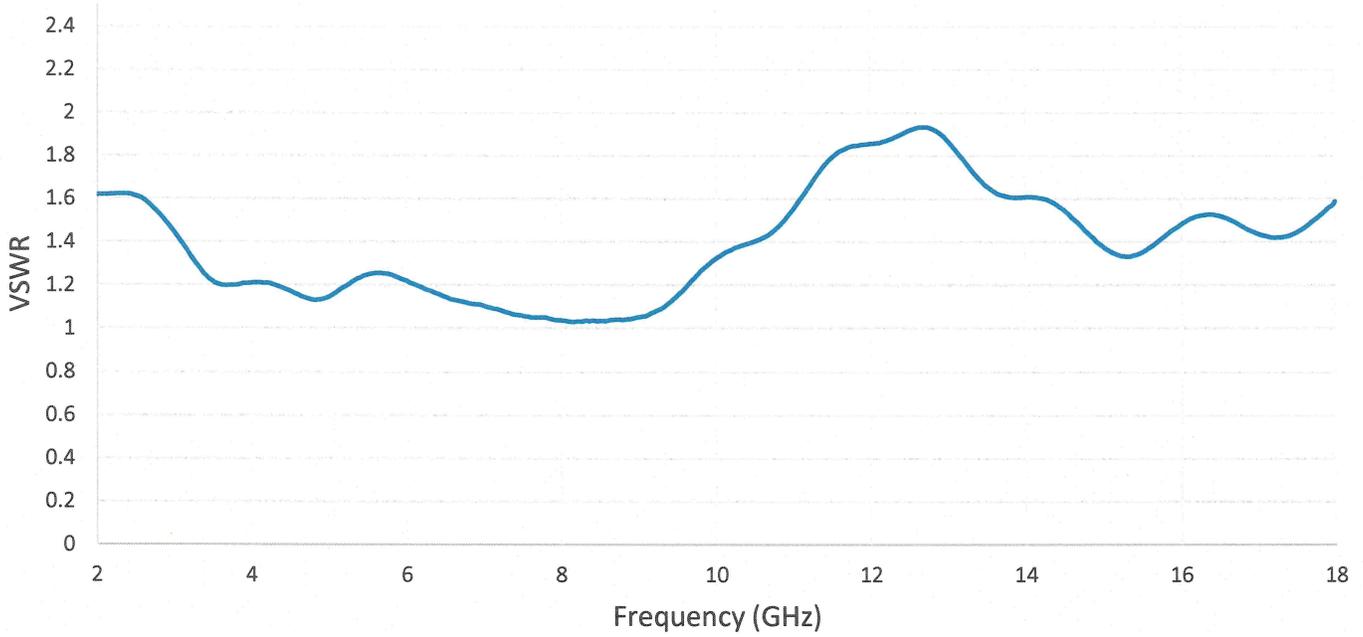




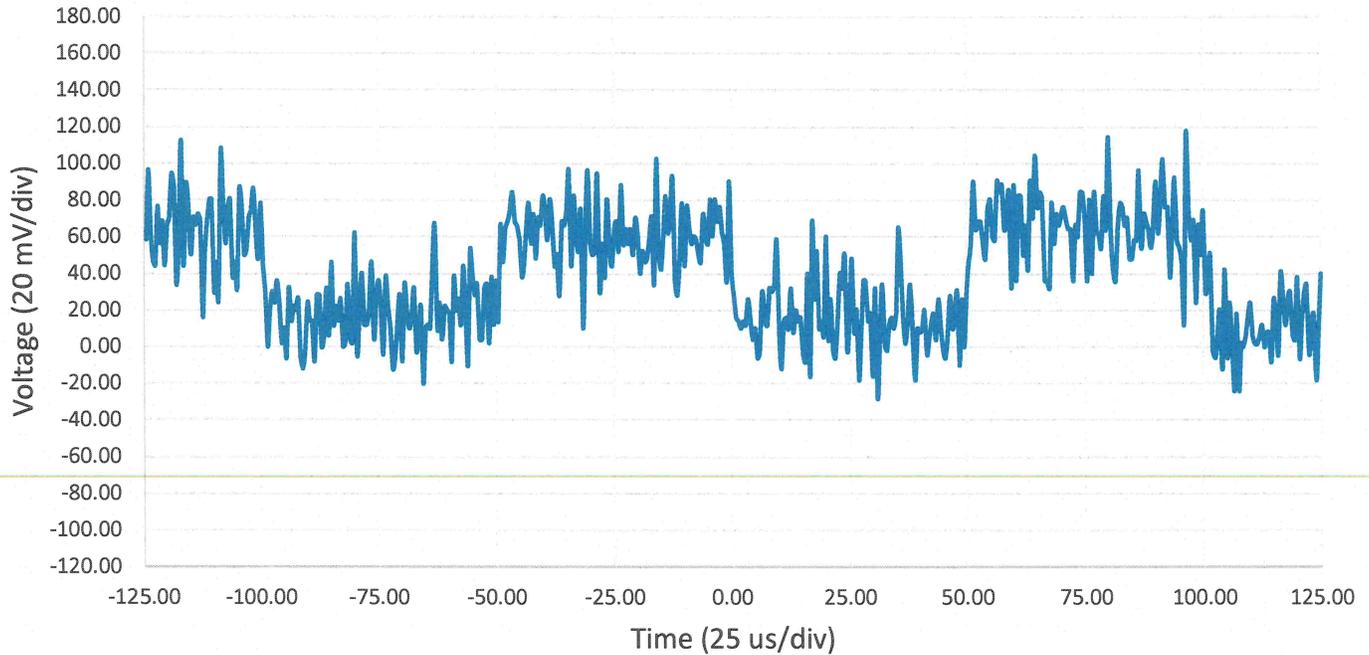
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For
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PL49264/2448

VSWR 1.94:1



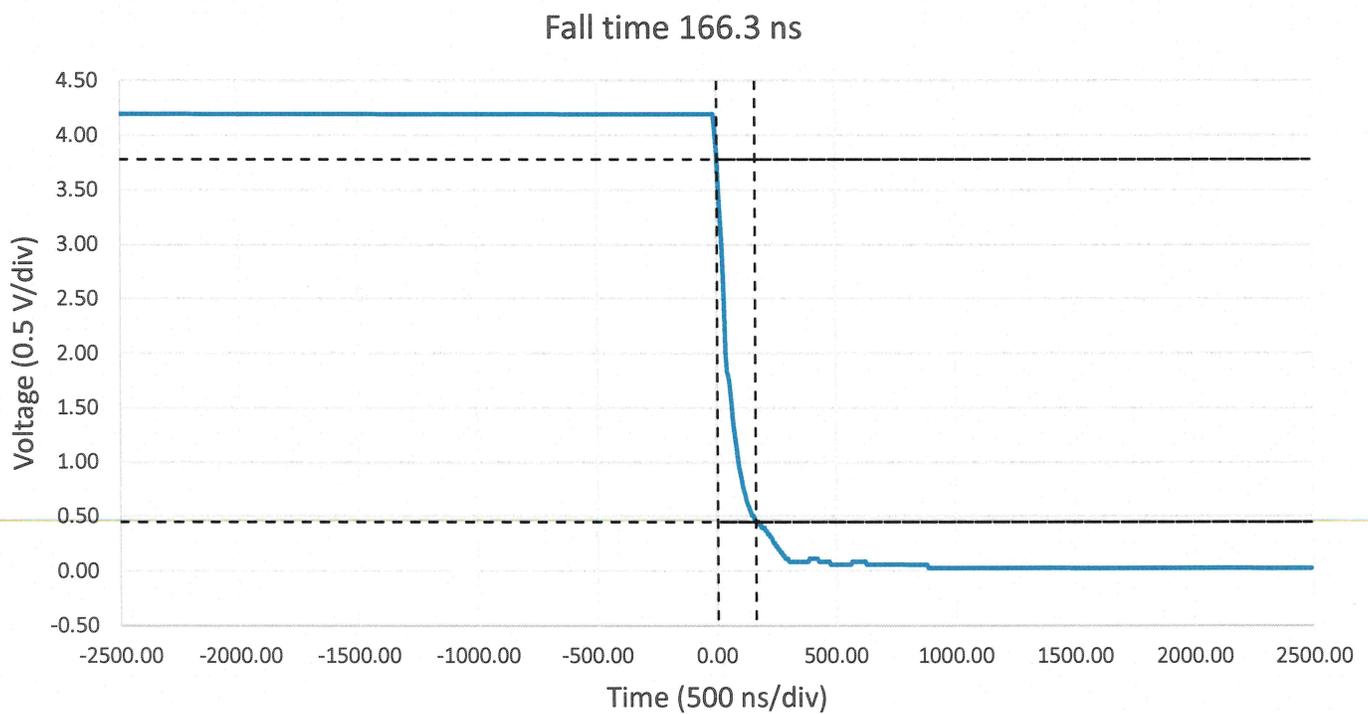
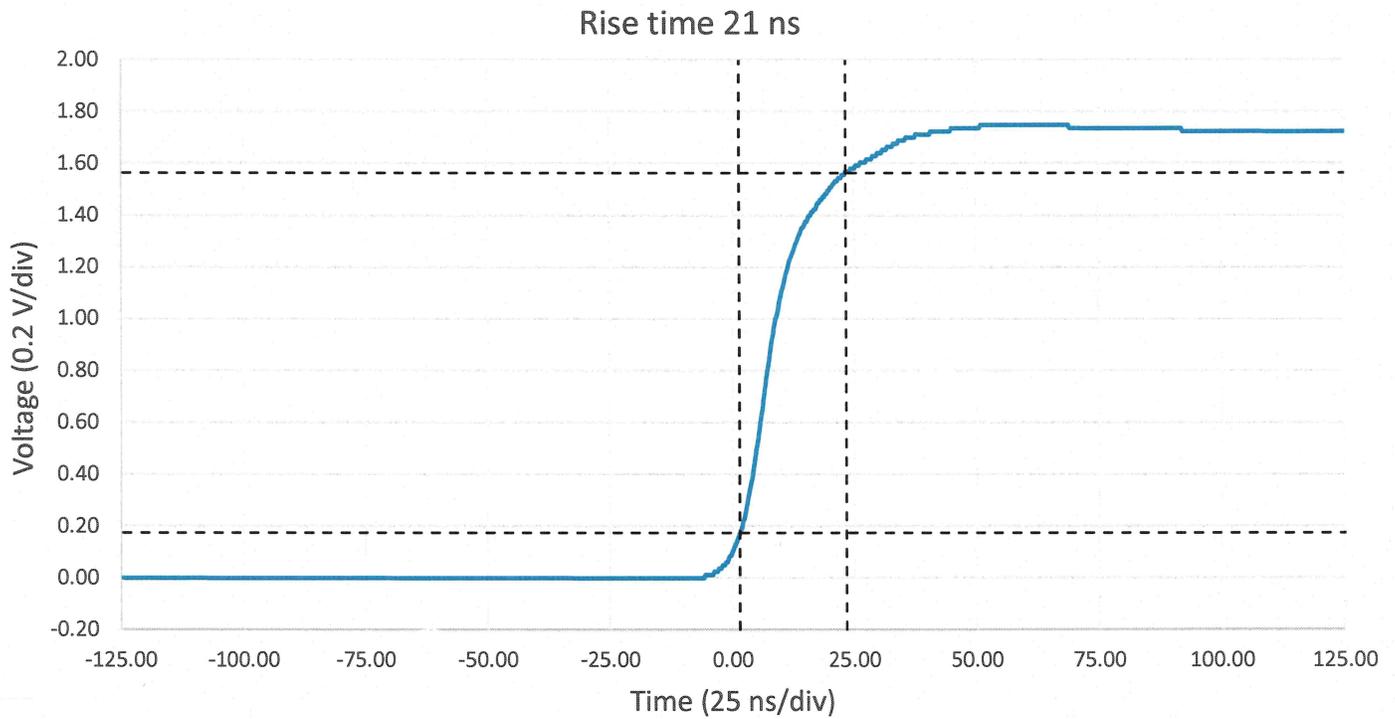
TSS @ -71.9 dBm





**Summary Data
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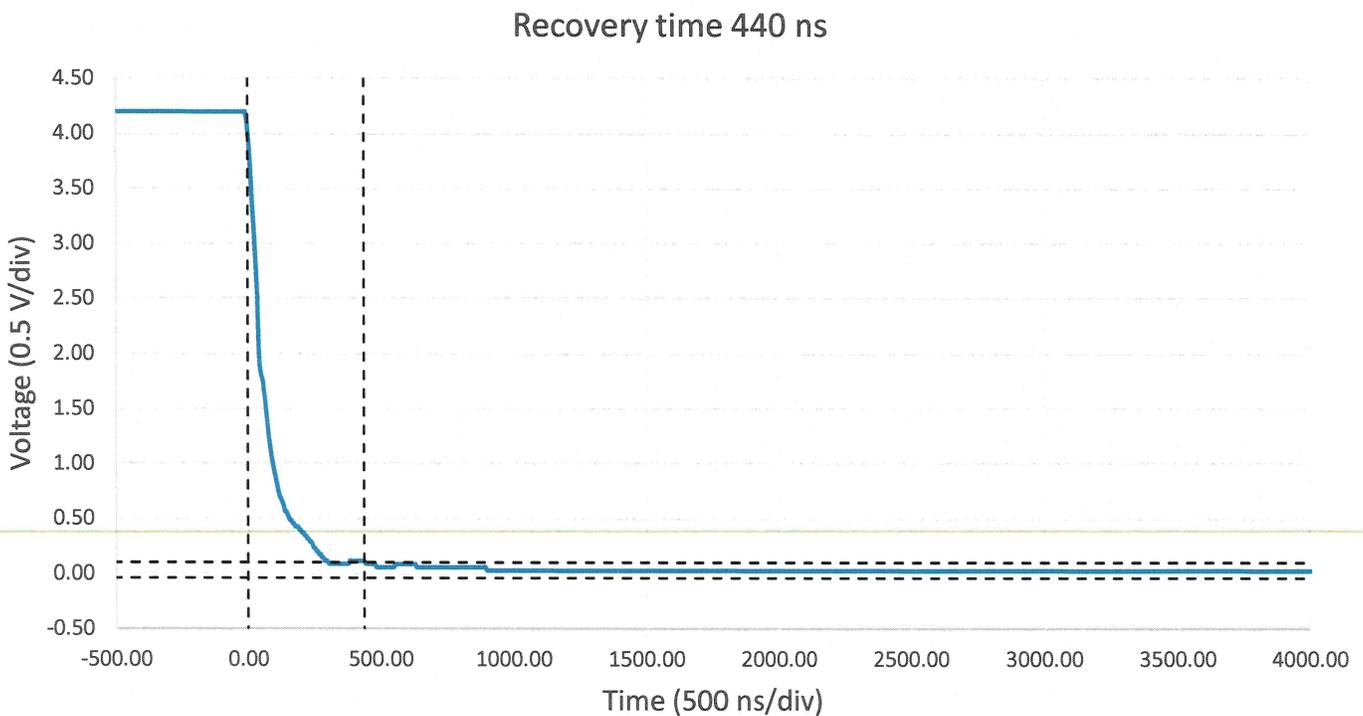
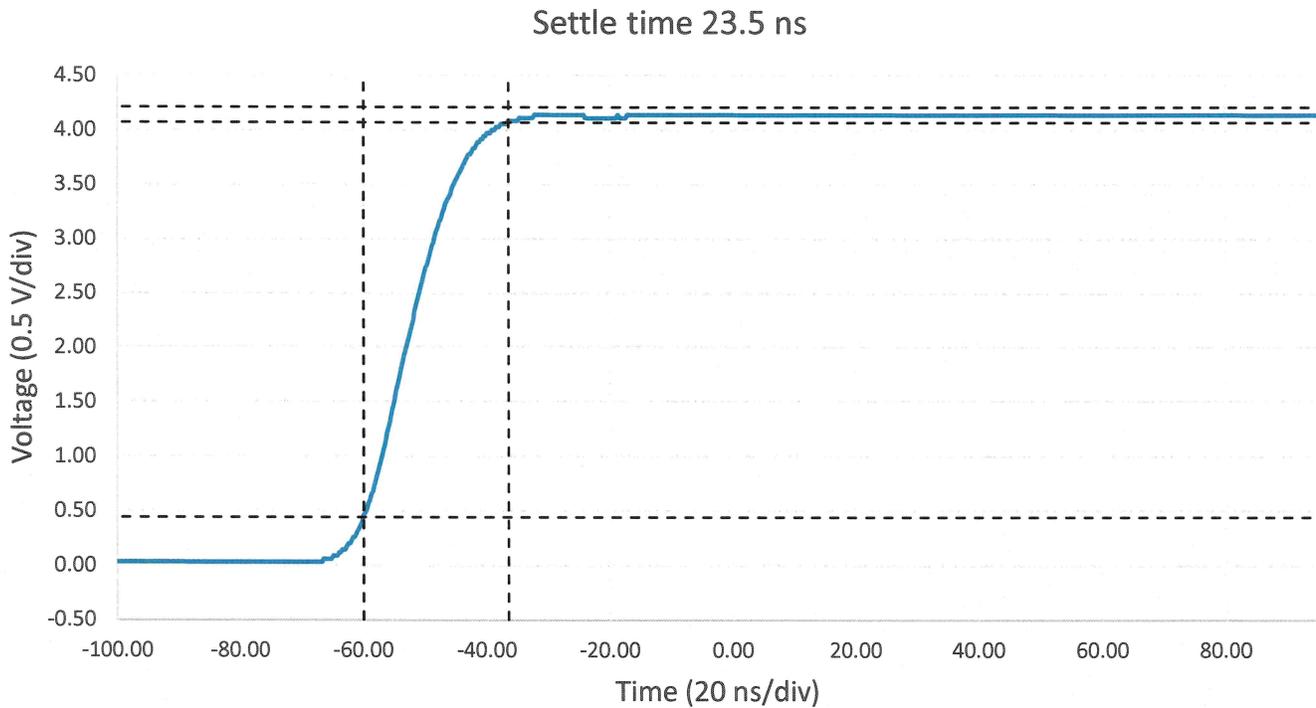
PL49264/2448





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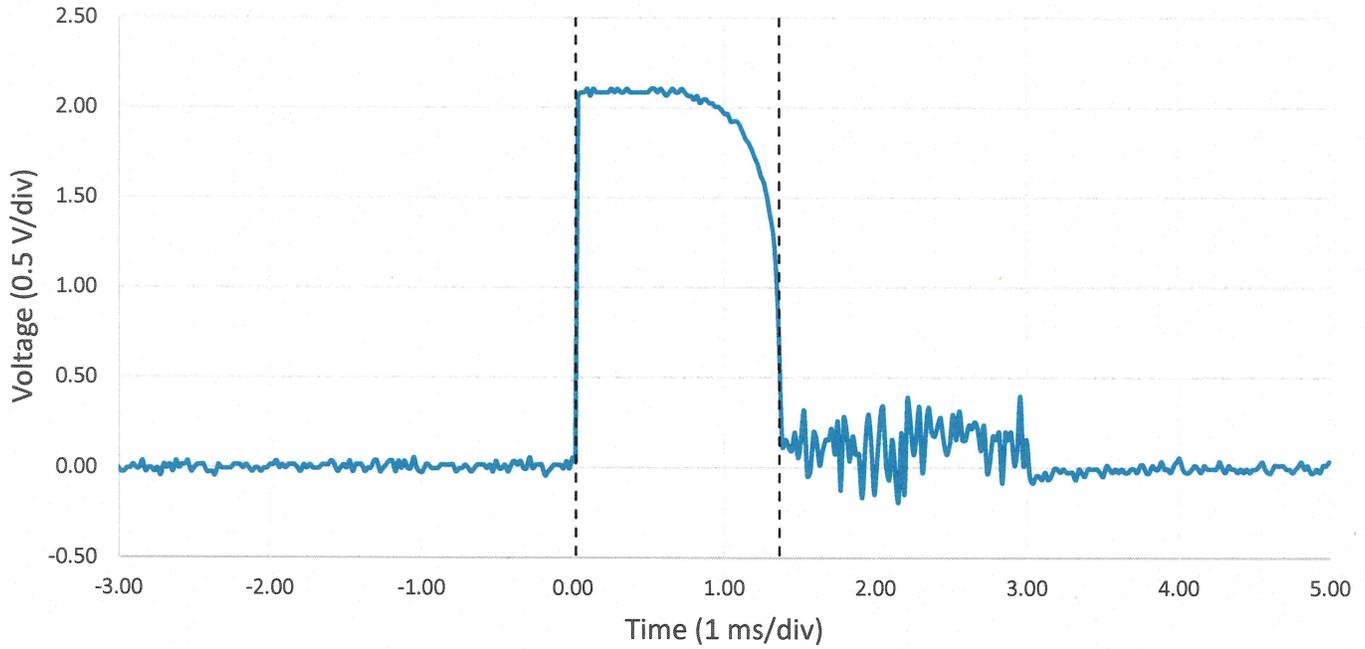




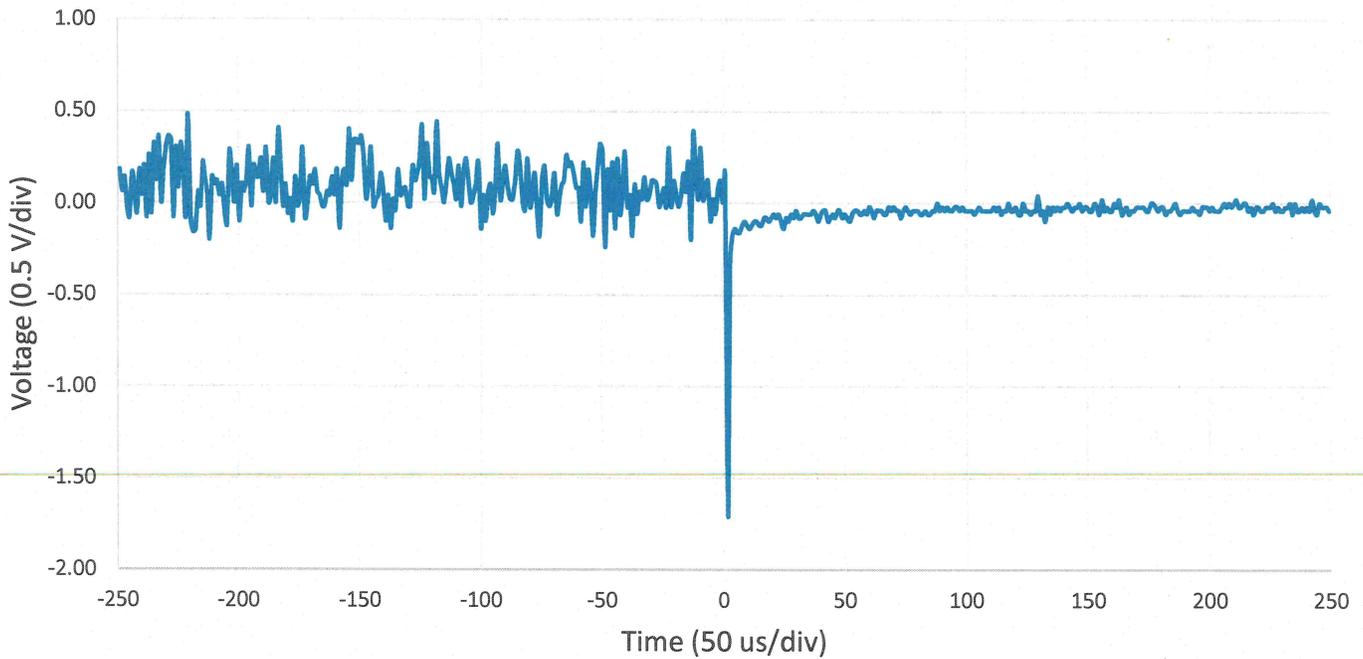
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CW Immunity 1.35 ms



CW Recovery Plot





**Summary Data
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PL49264/2448

RMS Noise 18.2 mV

