



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

Customer: _____
 SO No: _____
 Model No: ERDLVA-2G18G-65-70MV-70C
 Serial No: PL48059/2444

Tested By: Anton L.
 Temperature: -40°C TO +70°C
 Date 10/30/2024
 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	PMI QAS
2	VSWR:	2.2:1 MAX @ 50 Ω	1.86 :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	- 71.7 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 70.2 mV/dB	
7	VIDEO OUT Log Linearity:	±1.0 dB MAX @25C	0.65 dB -0.60 dB	
8	VIDEO OUT Log Accuracy:	±2.3 dB MAX @25C	1.10 dB -1.09 dB	
9	VIDEO OUT Absolute Log Accuracy:	±2.9 dB MAX Over Freq & temp	1.48 dB -1.62 dB	
10	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On) @25C	32 mV	
11	VIDEO OUT Rise Time (10% to 90%):	28 ns MAX	23.5 ns	
12	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	185 ns	



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13	VIDEO OUT Settling Time:	50 ns With in ± 70 mV of final value @-10 dBm	23.2 ns	PMI QA3
14	VIDEO OUT Recovery Time:	1 us MAX to within 1 dB of baseline for PW <10us & Power = -10dBm	0.445 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	1.4 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 ± 1 Ω	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 (V _{p-p}):	160 mV max	144.9 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 @ 310 mA -15 V @ 80 mA	
25	Power Supply Ripple From DC to 10 MHz	100 mV MAX	Pass	

QA/QC Approval: K. Klamm

Date: 11-1-24



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

LOG TRANSFER WITH FREQUENCY

TESTED BY: Anton L.
MODEL: ERDLVA-2G18G-65-70MV-70C
SERIAL NO: PL48059/2444
DATE: 10/30/2024

Test Temp: 25 °C
Video Offset: 32 mV

Frequency		
2000 MHz	INTERCEPT (mV)	4949
	SLOPE (mV/dB)	70.4

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
368	741	1090	1435	1792	2112	2463	2832	3166	3543	3939	4268	4605	4918	
-8	14	11	4	9	-23	-23	-6	-24	1	45	23	8	-31	
-0.11	0.19	0.15	0.06	0.13	-0.32	-0.33	-0.09	-0.34	0.02	0.65	0.32	0.11	-0.44	
0.53	0.81	0.75	0.64	0.69	0.23	0.20	0.42	0.15	0.49	1.10	0.76	0.53	-0.04	

RF Input Power (dBm)	
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.65
ACCURACY ERROR (dB)	1.10

6000 MHz	INTERCEPT (mV)	4938
	SLOPE (mV/dB)	70.7

	343	709	1058	1401	1757	2081	2445	2820	3157	3526	3889	4231	4594	4940
2	15	10	-1	2	-28	-18	4	-13	2	12	0	9	2	
0.03	0.21	0.14	-0.01	0.03	-0.39	-0.25	0.05	-0.18	0.04	0.17	0.00	0.13	0.03	
0.17	0.36	0.30	0.16	0.20	-0.21	-0.06	0.25	0.03	0.25	0.39	0.24	0.38	0.28	

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

10000 MHz	INTERCEPT (mV)	4902
	SLOPE (mV/dB)	71.1

	285	646	993	1348	1705	2030	2401	2779	3116	3485	3836	4188	4558	4904
9	11	2	2	3	-23	-13	19	3	5	9	-3	11	2	
0.07	0.15	0.03	0.02	0.04	-0.39	-0.17	0.14	-0.12	0.07	0.01	-0.04	0.16	0.02	
-0.65	-0.54	-0.62	-0.59	-0.54	-0.94	-0.68	-0.33	-0.56	-0.33	-0.36	-0.37	-0.13	-0.23	

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.39
ACCURACY ERROR (dB)	-0.94

14000 MHz	INTERCEPT (mV)	4916
	SLOPE (mV/dB)	70.2

	348	722	1070	1416	1758	2081	2442	2806	3143	3513	3868	4216	4587	4917
-5	18	15	10	1	-27	-17	-4	-18	1	5	2	22	1	
-0.07	0.25	0.21	0.14	0.01	-0.39	-0.25	-0.06	-0.26	0.01	0.07	0.02	0.31	0.01	
0.24	0.54	0.47	0.37	0.21	-0.21	-0.10	0.05	-0.17	0.07	0.09	0.02	0.28	-0.05	

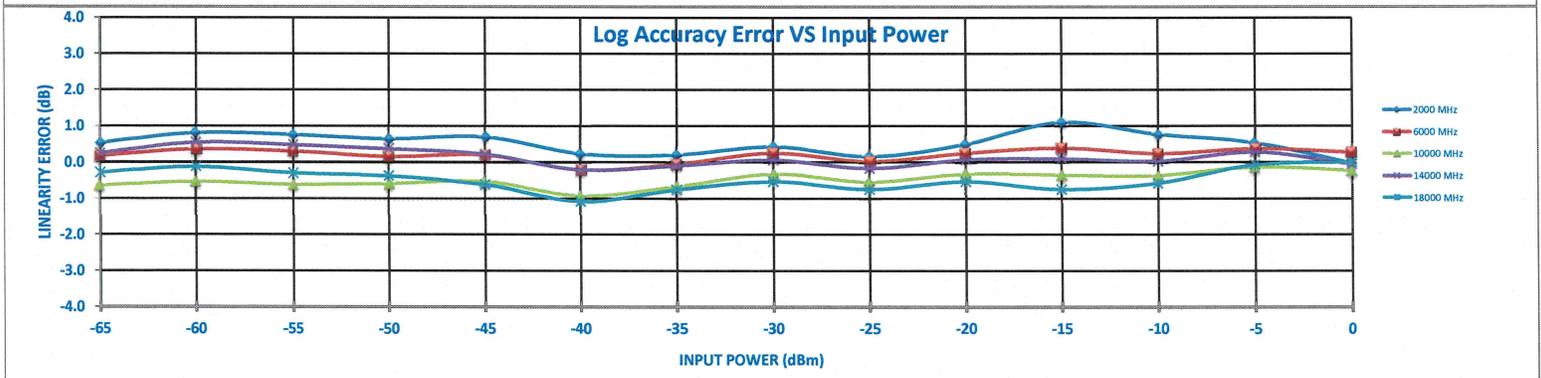
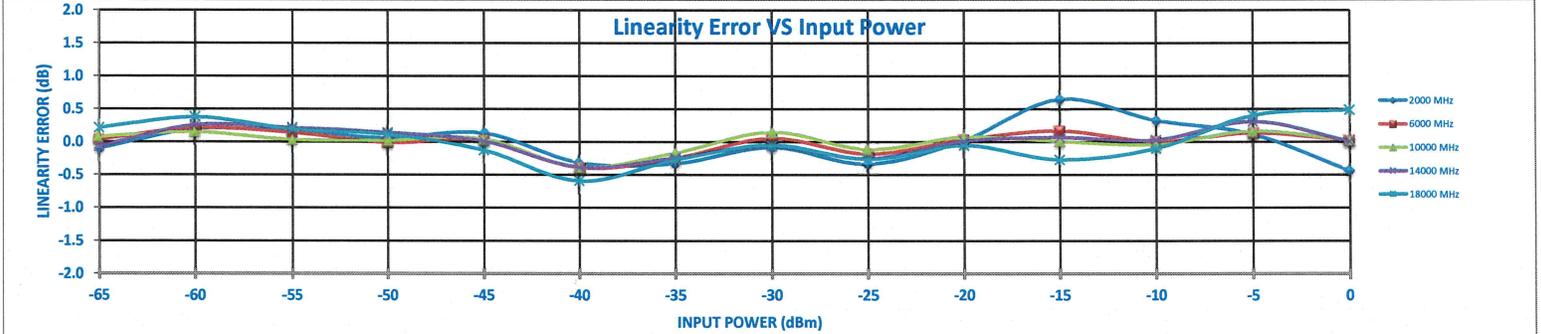
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.39
ACCURACY ERROR (dB)	0.54

18000 MHz	INTERCEPT (mV)	4887
	SLOPE (mV/dB)	70.6

	310	675	1015	1363	1699	2019	2395	2764	3102	3470	3808	4173	4562	4921
15	27	13	8	-9	-42	-20	-4	-19	-4	-19	-8	28	34	
0.21	0.38	0.19	0.11	-0.13	-0.60	-0.28	-0.05	-0.27	-0.06	-0.27	-0.11	0.40	0.48	
-0.29	-0.13	-0.31	-0.38	-0.62	-1.09	-0.77	-0.54	-0.75	-0.54	-0.76	-0.59	-0.08	0.01	

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.60
ACCURACY ERROR (dB)	-1.09

Flatness	+/- dB	0.59	0.67	0.69	0.62	0.66	0.66	0.48	0.48	0.45	0.52	0.93	0.67	0.33	0.25
															0.93





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

LOG TRANSFER WITH FREQUENCY

TESTED BY: Anton L.
 MODEL: ERDLVA-2G18G-65-70MV-70C
 SERIAL NO: PL48059/2444
 DATE: 10/30/2024

Test Temp: -40 °C
 Video Offset: 41 mV

Frequency

2000 MHz	INTERCEPT (mV)	4810
	SLOPE (mV/dB)	68.9

6000 MHz	INTERCEPT (mV)	4821
	SLOPE (mV/dB)	68.9

10000 MHz	INTERCEPT (mV)	4816
	SLOPE (mV/dB)	69.2

14000 MHz	INTERCEPT (mV)	4835
	SLOPE (mV/dB)	68.5

18000 MHz	INTERCEPT (mV)	4841
	SLOPE (mV/dB)	69.3

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
2000 MHz	326	682	1017	1366	1730	2054	2401	2732	3045	3412	3806	4148	4483	4786
6000 MHz	339	690	1030	1371	1729	2061	2414	2752	3068	3425	3791	4135	4491	4825
10000 MHz	314	666	1005	1352	1715	2048	2412	2746	3059	3415	3775	4123	4486	4817
14000 MHz	382	733	1085	1421	1767	2097	2438	2766	3088	3445	3808	4156	4522	4844
18000 MHz	344	699	1037	1373	1719	2050	2425	2764	3079	3431	3780	4135	4523	4875

RF Input Power (dBm)	
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.61
ACCURACY ERROR (dB)	-0.78

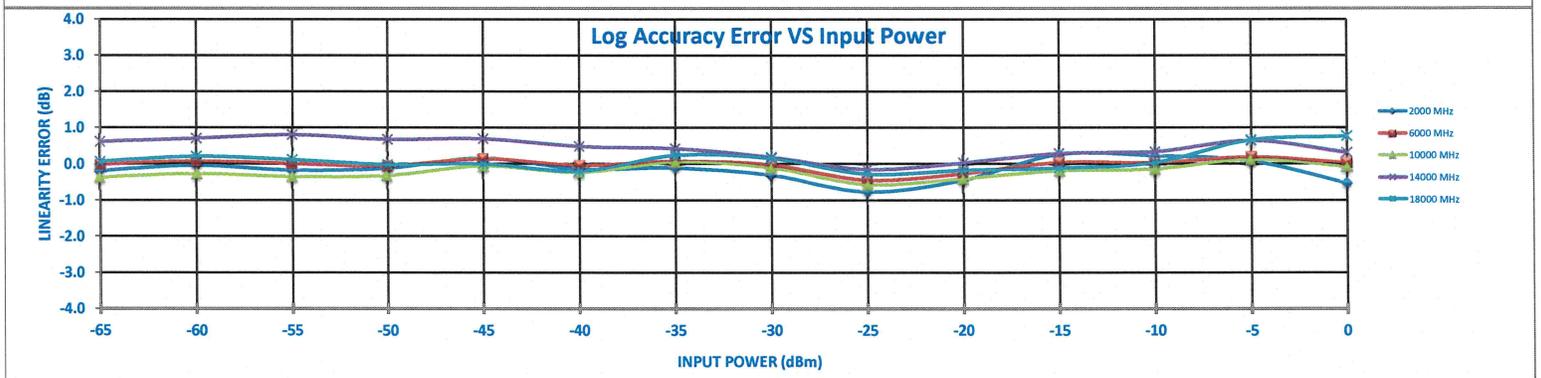
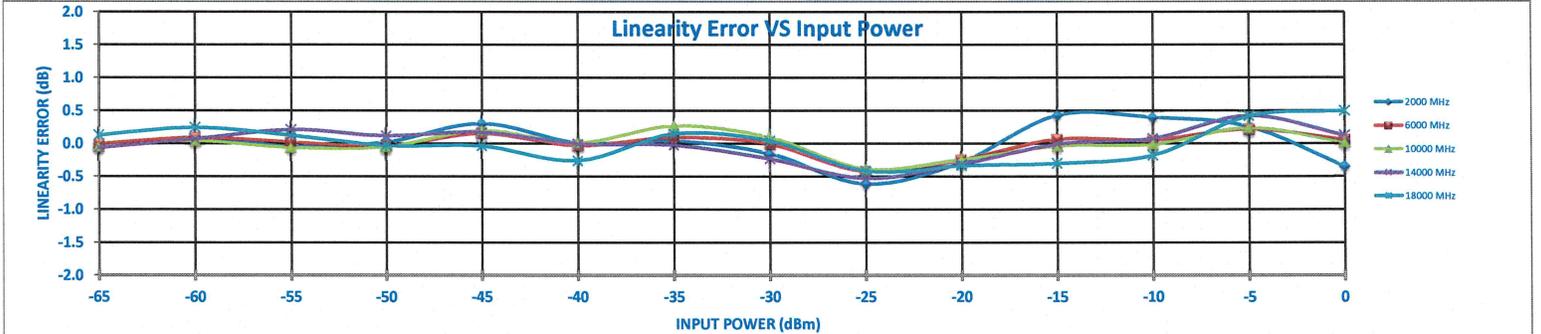
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.42
ACCURACY ERROR (dB)	-0.44

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.39
ACCURACY ERROR (dB)	-0.57

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.53
ACCURACY ERROR (dB)	0.80

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.49
ACCURACY ERROR (dB)	0.76

Flatness	+/- dB	0.49	0.49	0.58	0.50	0.38	0.36	0.27	0.25	0.31	0.24	0.24	0.24	0.29	0.65
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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: PL48059/2444
DATE: 10/30/2024

Test Temp: 70 °C
Video Offset: 21 mV

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)
2000 MHz	4982	71.0

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)
6000 MHz	4966	71.2

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)
10000 MHz	4917	71.2

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)
14000 MHz	4922	69.7

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)
18000 MHz	4876	71.6

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
2000 MHz	344	745	1096	1440	1798	2113	2473	2855	3196	3574	3966	4290	4627	4944
2000 MHz	-25	21	17	6	9	-31	-25	2	-12	11	48	18	0	-38
2000 MHz	-0.36	0.29	0.24	0.09	0.13	-0.43	-0.36	0.03	-0.17	0.16	0.68	0.25	0.00	-0.54
2000 MHz	0.41	1.06	1.01	0.86	0.91	0.35	0.43	0.81	0.62	0.95	1.48	1.05	0.80	0.27
6000 MHz	319	713	1069	1416	1771	2090	2457	2837	3181	3550	3909	4252	4611	4964
6000 MHz	-21	17	18	9	8	-29	-18	6	-6	8	11	-2	1	-2
6000 MHz	-0.29	0.24	0.25	0.12	0.11	-0.41	-0.25	0.09	-0.08	0.11	0.15	-0.03	0.02	-0.02
6000 MHz	0.06	0.61	0.63	0.52	0.53	0.03	0.20	0.56	0.41	0.61	0.68	0.51	0.58	0.55
10000 MHz	269	657	1018	1376	1726	2047	2413	2785	3131	3497	3843	4202	4568	4923
10000 MHz	-22	10	16	16	12	-23	-13	5	-7	5	7	-3	7	6
10000 MHz	-0.30	0.15	0.22	0.25	0.17	-0.32	-0.18	0.04	-0.09	0.05	-0.09	-0.05	0.09	0.08
10000 MHz	-0.65	-0.18	-0.09	-0.04	-0.10	-0.58	-0.42	-0.17	-0.29	-0.13	-0.25	-0.19	-0.03	-0.03
14000 MHz	355	759	1123	1463	1803	2117	2463	2816	3158	3524	3874	4226	4588	4934
14000 MHz	-38	18	34	25	17	-18	-20	-16	-22	-4	-3	1	14	12
14000 MHz	-0.54	0.26	0.48	0.36	0.24	-0.25	-0.29	-0.22	-0.32	-0.06	-0.04	0.01	0.21	0.17
14000 MHz	0.56	1.26	1.39	1.19	0.98	0.41	0.29	0.26	0.09	0.25	0.18	0.15	0.25	0.13
18000 MHz	228	592	960	1322	1644	1973	2334	2716	3079	3447	3783	4158	4536	4905
18000 MHz	7	13	23	27	-9	-38	-35	-11	-6	4	-19	-2	18	29
18000 MHz	0.10	0.18	0.32	0.37	-0.13	-0.53	-0.49	-0.16	-0.09	0.05	-0.26	-0.02	0.26	0.41
18000 MHz	-1.23	-1.09	-0.91	-0.80	-1.26	-1.62	-1.53	-1.15	-1.03	-0.84	-1.10	-0.81	-0.48	-0.28

RF Input Power (dBm)	
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.68
ACCURACY ERROR (dB)	1.48

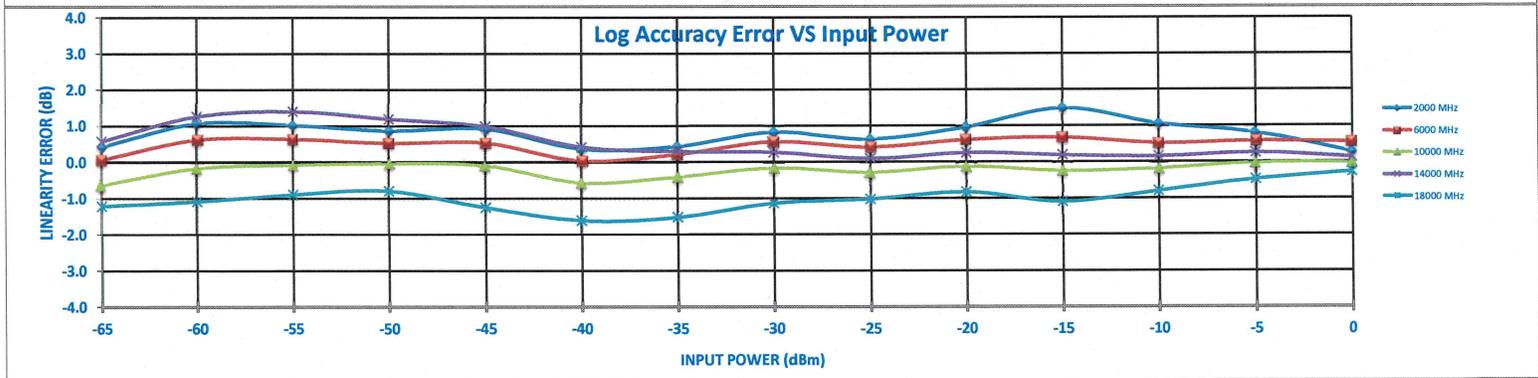
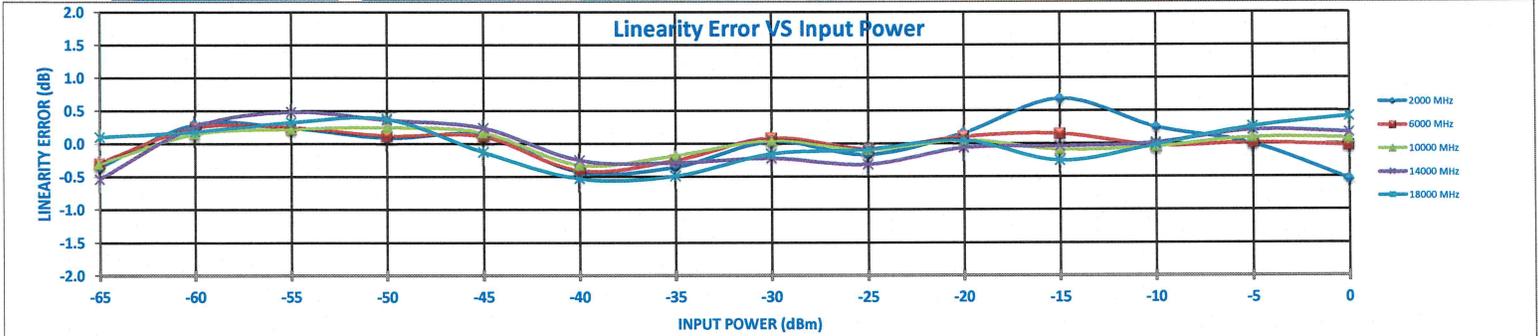
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.41
ACCURACY ERROR (dB)	0.68

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.32
ACCURACY ERROR (dB)	-0.65

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.54
ACCURACY ERROR (dB)	1.39

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.53
ACCURACY ERROR (dB)	-1.62

Flatness	+/- dB	0.90	1.18	1.15	0.99	1.12	1.02	0.98	0.98	0.82	0.90	1.29	0.93	0.64	0.42	1.29
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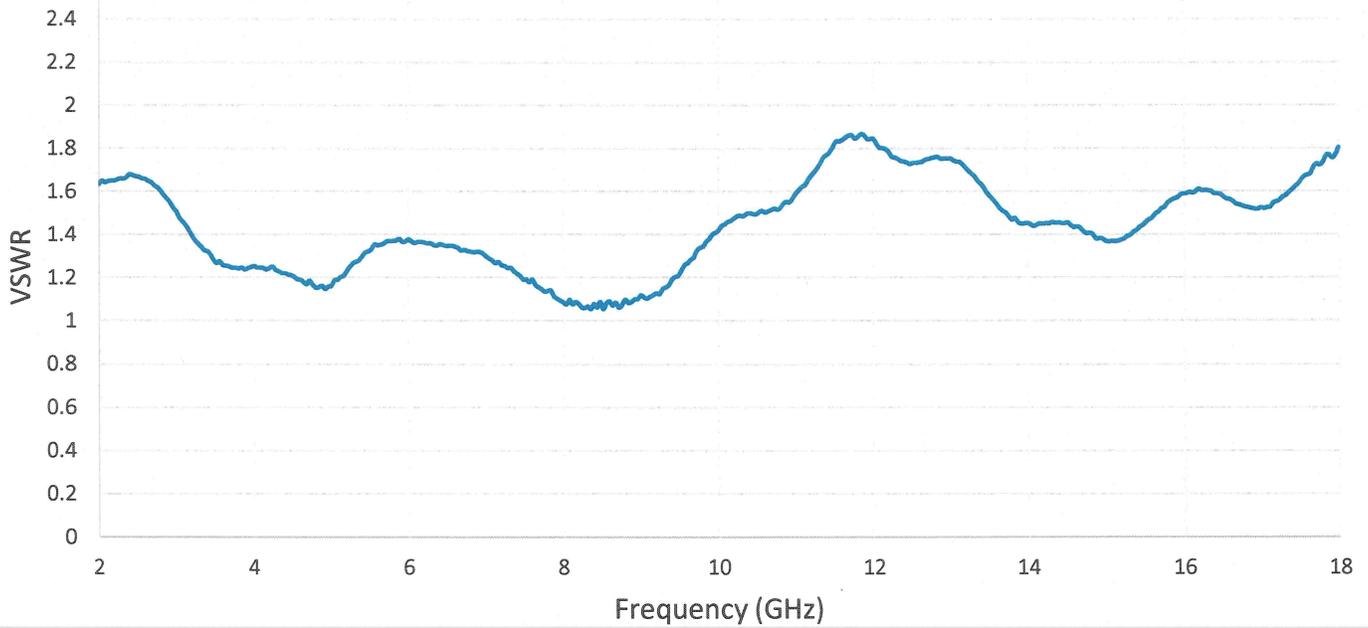




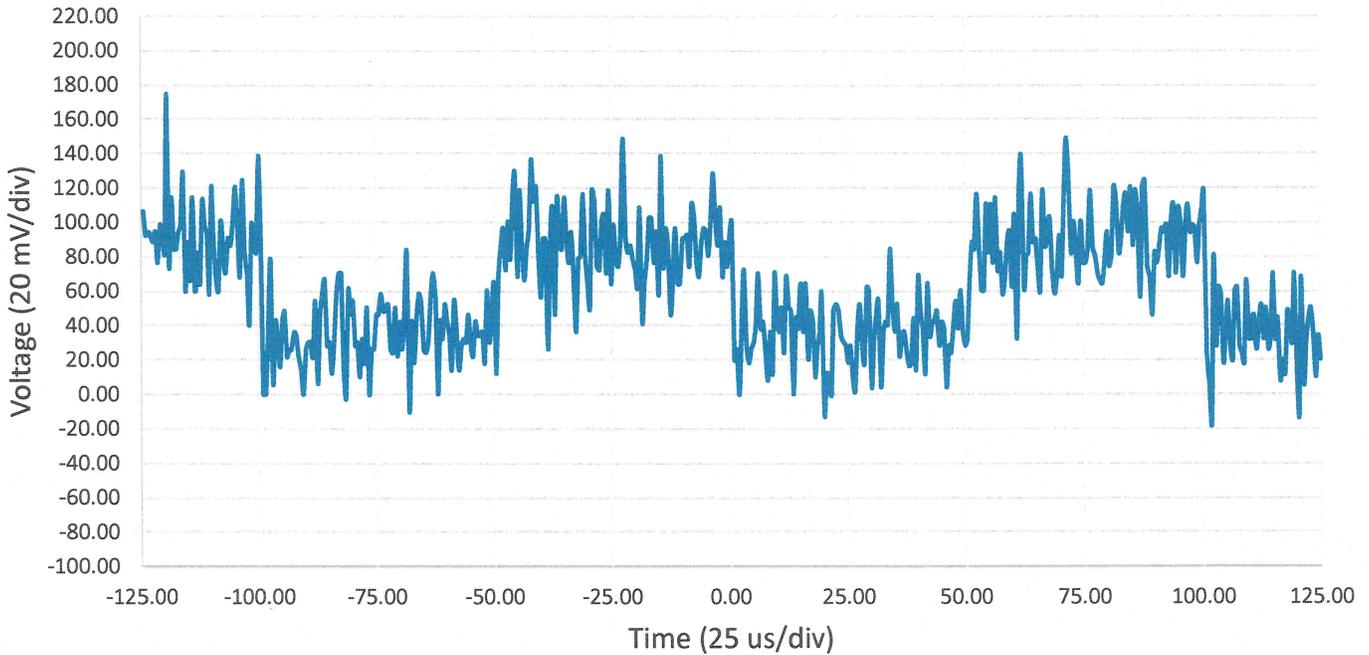
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PL48059/2444

VSWR 1.86:1



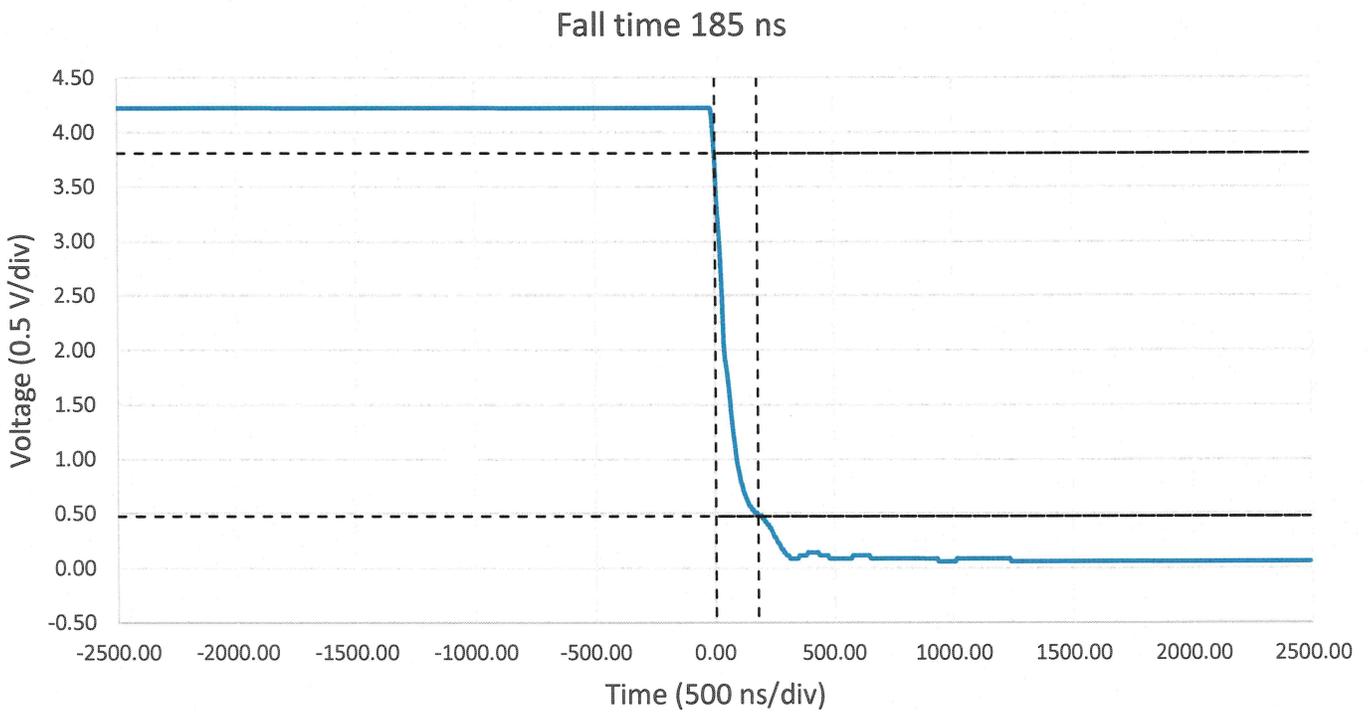
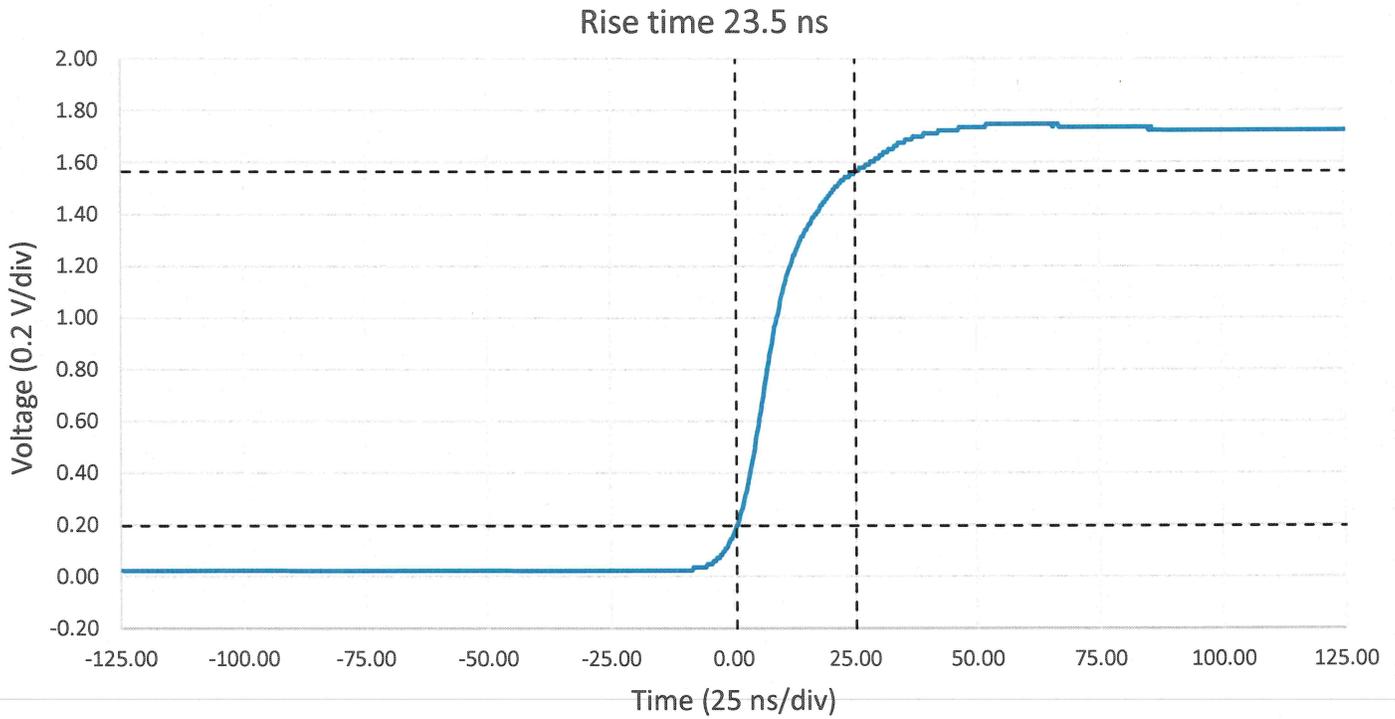
TSS @ -71.7 dBm





**Summary Data
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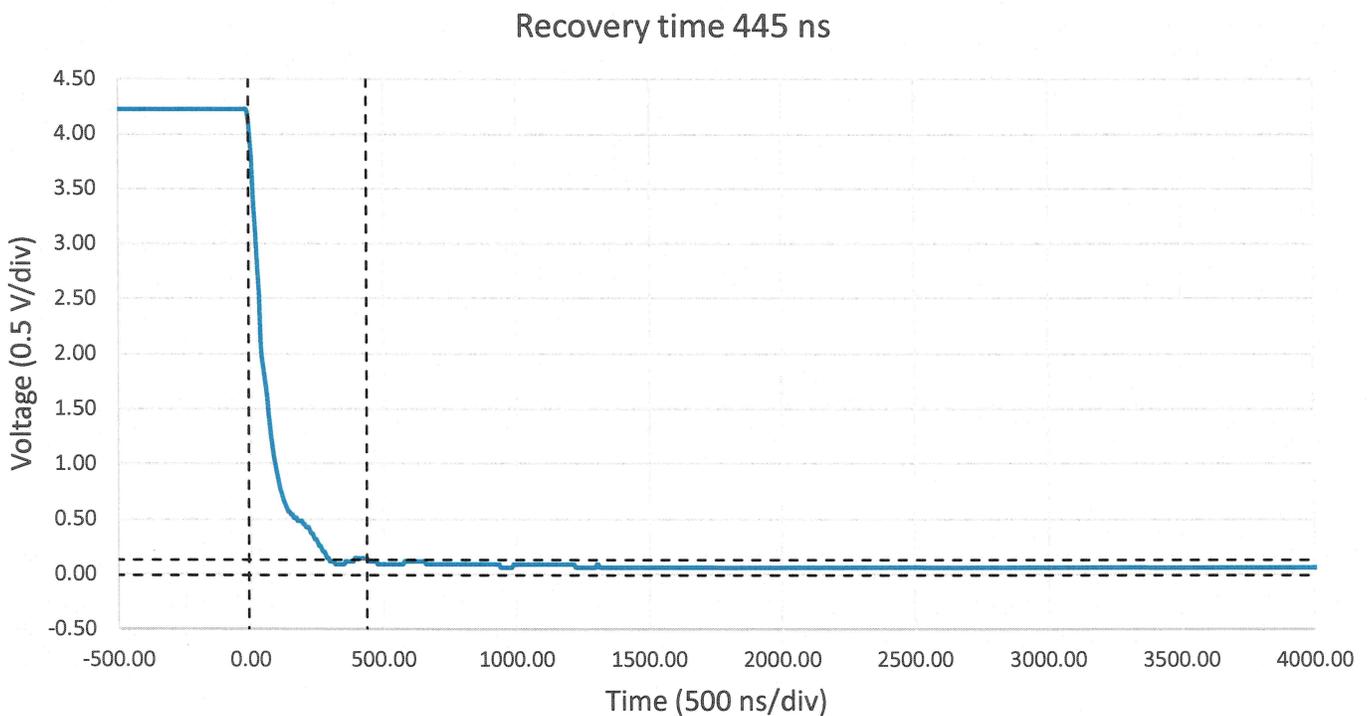
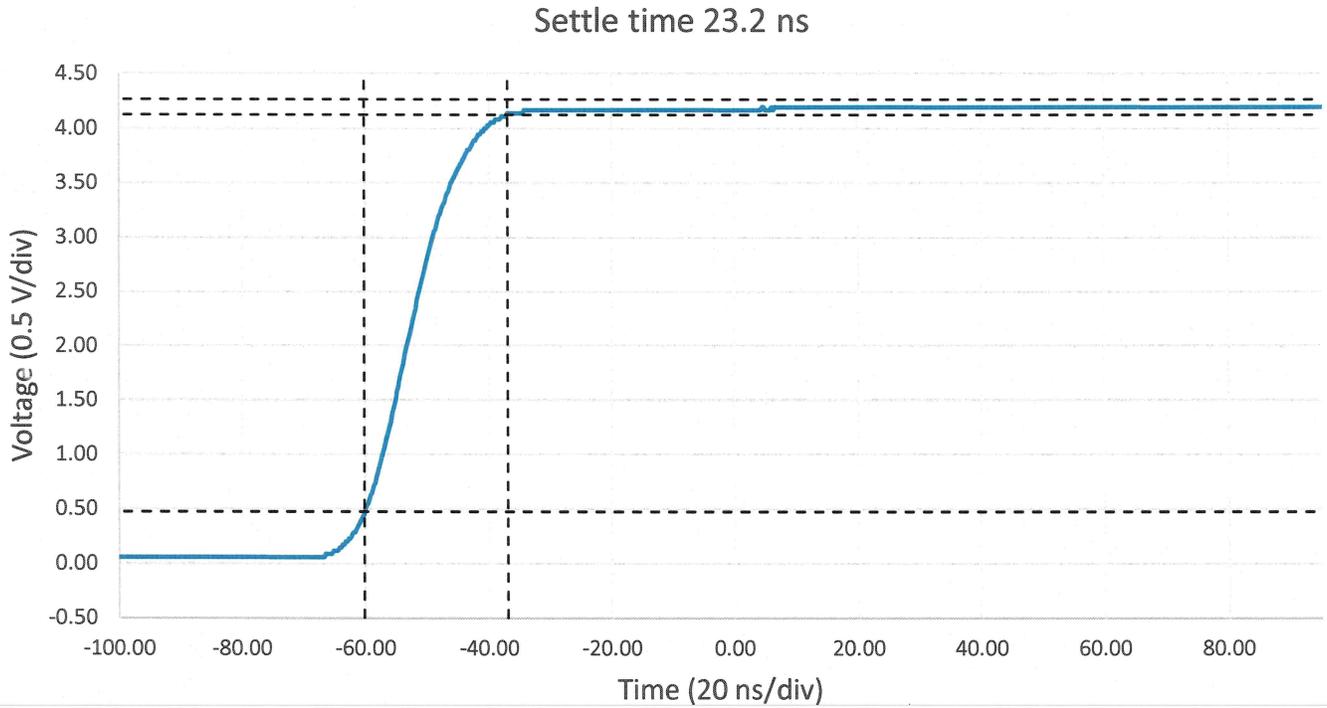
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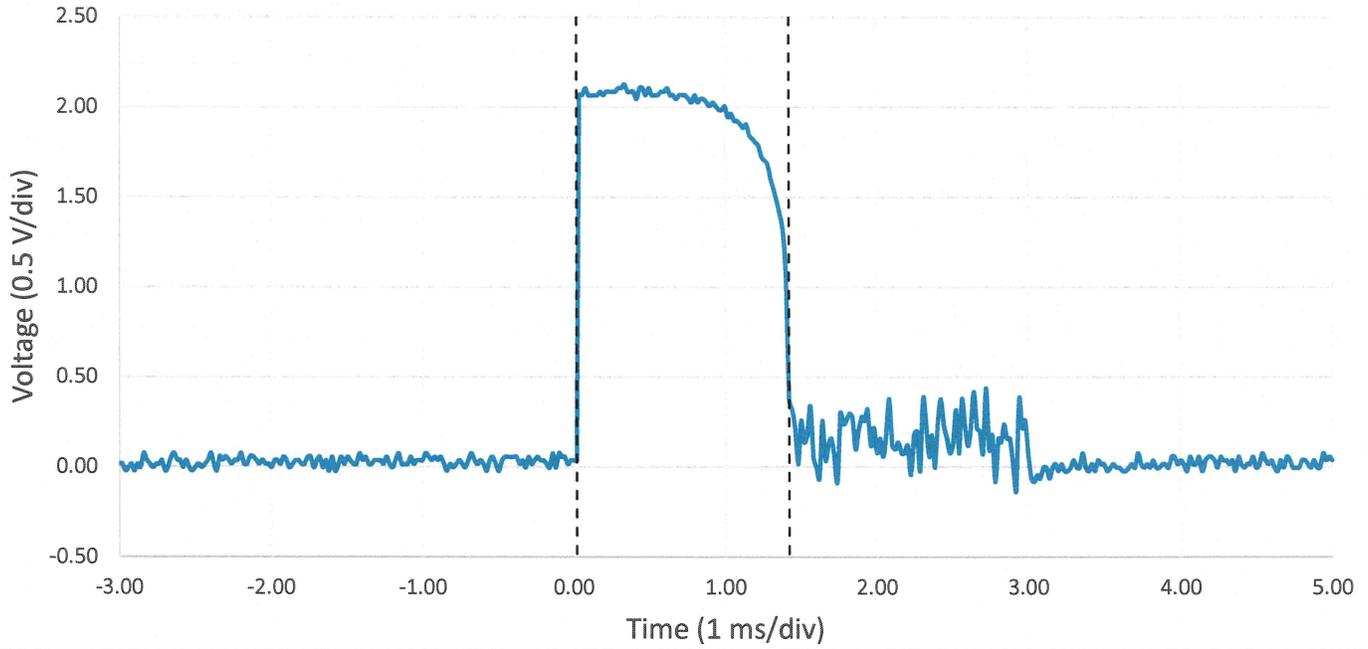




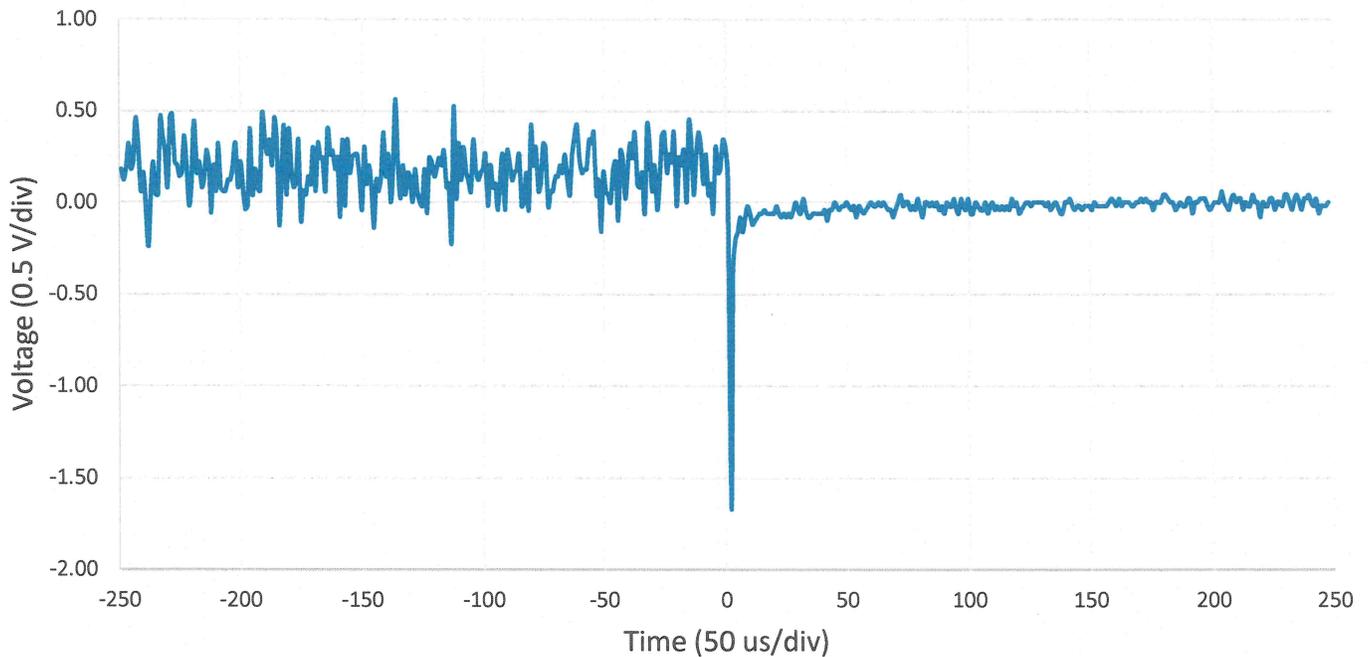
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PL48059/2444

CW Immunity 1.4 ms



CW Recovery Plot





Summary Data
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PL48059/2444

RMS Noise 22 mV

