



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

Customer: _____
 SO No: _____
 Model No: ERDLVA-2G18G-65-70MV-70C
 Serial No: PL51100/2509

Tested By: Anton L.
 Temperature: -40°C TO +70°C
 Date 2/27/2025
 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 QA3
2	VSWR:	2.2:1 MAX @ 50 Ω	1.84 :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	70.5 mV/dB	
			68.7 mV/dB	
7	VIDEO OUT Log Linearity:	±1.0 dB MAX @25C	0.73 dB	
			-0.82 dB	
8	VIDEO OUT Log Accuracy:	±2.3 dB MAX @25C	1.27 dB	
			-1.09 dB	
9	VIDEO OUT Absolute Log Accuracy:	±2.9 dB MAX Over Freq & temp	1.85 dB	
			-1.73 dB	
10	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On) @25C	37 mV	
11	VIDEO OUT Rise Time (10% to 90%):	28 ns MAX	21.8 ns	
12	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	136.9 ns	



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13	VIDEO OUT Settling Time:	50 ns With in ± 70 mV of final value @-10 dBm	30.3 ns	PMI QA3
14	VIDEO OUT Recovery Time:	1 us MAX to within 1 dB of baseline for PW <10us & Power = -10dBm	0.435 us	
15	VIDEO OUT Video Frequency Flatness:	± 2.0 dB MAX @25C	± 0.96 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	1.29 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	122.1 mV	PMI QA3
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. Klamm* Date: 2-28-25



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

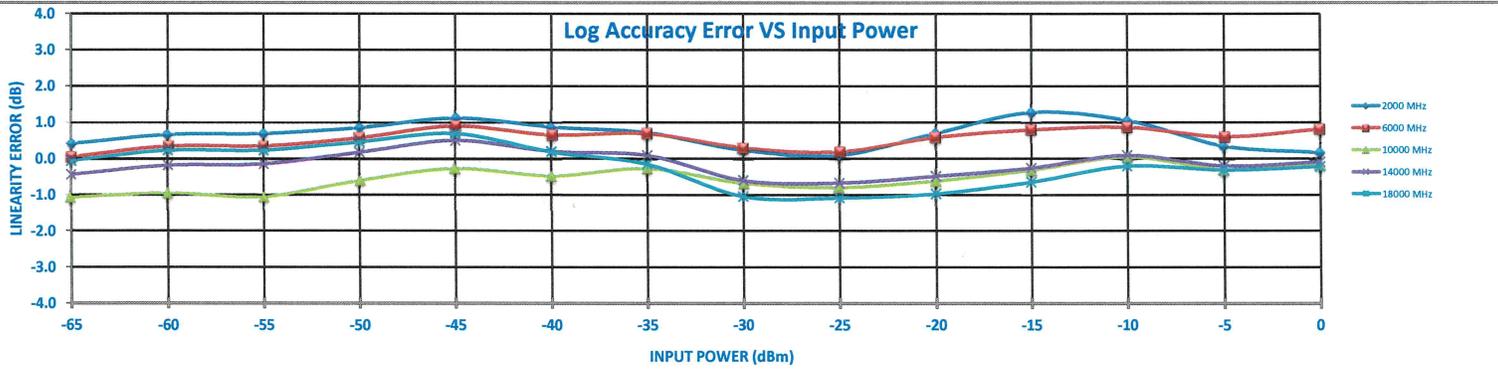
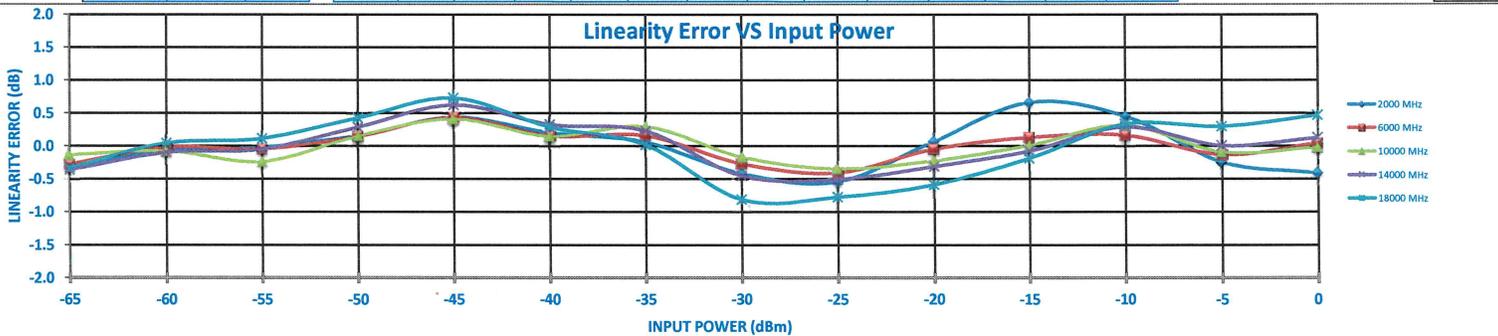
LOG TRANSFER WITH FREQUENCY

TESTED BY: Anton L.
MODEL: ERDLVA-2G18G-65-70MV-70C
SERIAL NO: PL51100/2509
DATE: 2/27/2025

Test Temp: 25 °C
Video Offset: 37 mV

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)
2000 MHz	INTERCEPT (mV)	4919	378	744	1094	1454	1821	2152	2490	2804	3143	3533	3922	4255	4554	4890	Measured Value (mV) Error (mV) LINEARITY ERROR (dB) 0.66 ACCURACY ERROR (dB) 1.27
	SLOPE (mV/dB)	69.5	-22	-4	-2	11	30	14	4	-29	-38	5	46	31	-17	-29	
			-0.32	-0.06	-0.02	0.16	0.44	0.20	0.06	-0.42	-0.55	0.07	0.66	0.45	-0.25	-0.41	
			0.40	0.65	0.68	0.84	1.11	0.86	0.71	0.22	0.09	0.68	1.27	1.04	0.34	0.16	
6000 MHz	INTERCEPT (mV)	4932	353	722	1071	1435	1806	2137	2488	2809	3150	3526	3889	4242	4572	4935	Measured Value (mV) Error (mV) LINEARITY ERROR (dB) 0.43 ACCURACY ERROR (dB) 0.90
	SLOPE (mV/dB)	70.2	-20	-1	-3	10	30	11	11	-19	-29	-3	9	11	-10	3	
			-0.28	-0.02	-0.04	0.14	0.43	0.15	0.16	-0.27	-0.41	-0.05	0.13	0.16	-0.14	0.04	
			0.04	0.34	0.35	0.57	0.90	0.65	0.68	0.29	0.19	0.58	0.79	0.86	0.59	0.80	
10000 MHz	INTERCEPT (mV)	4869	275	632	973	1353	1724	2058	2421	2741	3081	3442	3811	4185	4509	4867	Measured Value (mV) Error (mV) LINEARITY ERROR (dB) 0.41 ACCURACY ERROR (dB) -1.08
	SLOPE (mV/dB)	70.5	-10	5	-17	11	29	10	21	-12	-24	-18	0	22	7	3	
			-0.14	-0.07	-0.24	0.15	0.41	0.15	0.29	-0.17	-0.35	-0.23	0.00	0.31	-0.10	-0.02	
			-1.08	-0.95	-1.06	-0.60	-0.28	-0.49	-0.28	-0.68	-0.80	-0.62	-0.33	0.04	-0.31	-0.17	
14000 MHz	INTERCEPT (mV)	4863	319	685	1036	1407	1778	2105	2446	2746	3090	3451	3815	4188	4516	4872	Measured Value (mV) Error (mV) LINEARITY ERROR (dB) 0.62 ACCURACY ERROR (dB) -0.68
	SLOPE (mV/dB)	69.5	-25	-7	-3	20	43	23	16	-32	-35	-22	-6	20	0	9	
			-0.36	-0.10	-0.05	0.29	0.62	0.32	0.23	-0.46	-0.51	-0.32	-0.08	0.28	0.00	0.12	
			-0.44	-0.19	-0.15	0.17	0.49	0.19	0.08	-0.61	-0.68	-0.49	-0.27	0.08	-0.21	-0.10	
18000 MHz	INTERCEPT (mV)	4831	345	714	1062	1427	1791	2104	2429	2715	3061	3417	3788	4167	4508	4863	Measured Value (mV) Error (mV) LINEARITY ERROR (dB) -0.82 ACCURACY ERROR (dB) -1.09
	SLOPE (mV/dB)	68.7	-23	3	8	29	50	20	1	-56	-53	-41	-13	23	20	32	
			-0.33	0.05	0.11	0.43	0.73	0.29	0.02	-0.82	-0.78	-0.59	-0.19	0.33	0.29	0.46	
			-0.07	0.22	0.22	0.46	0.68	0.17	-0.16	-1.06	-1.09	-0.98	-0.66	-0.22	-0.32	-0.23	

Flatness	+/- dB	0.74	0.80	0.87	0.72	0.70	0.67	0.50	0.67	0.64	0.83	0.96	0.63	0.46	0.52	0.96
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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: PL51100/2509
DATE: 2/27/2025

Test Temp: -40 °C
Video Offset: 33 mV

Frequency

2000 MHz	INTERCEPT (mV)	4922
	SLOPE (mV/dB)	70.5

6000 MHz	INTERCEPT (mV)	4947
	SLOPE (mV/dB)	70.8

10000 MHz	INTERCEPT (mV)	4903
	SLOPE (mV/dB)	71.3

14000 MHz	INTERCEPT (mV)	4908
	SLOPE (mV/dB)	70.6

18000 MHz	INTERCEPT (mV)	4916
	SLOPE (mV/dB)	69.5

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
347	694	1034	1395	1767	2107	2447	2770	3124	3518	3919	4257	4563	4889	
8	2	-10	-2	18	5	-8	-37	-36	6	54	40	-7	-33	
0.11	0.03	-0.15	-0.03	0.25	0.07	-0.11	-0.53	-0.50	0.08	0.77	0.56	-0.10	-0.47	
0.09	0.01	-0.18	-0.06	0.21	0.03	-0.15	-0.57	-0.56	0.03	0.71	0.50	-0.17	-0.55	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
351	698	1043	1404	1780	2120	2463	2796	3149	3534	3907	4255	4591	4942	
8	0	-9	-2	20	6	-5	-26	-27	3	22	16	-2	-5	
0.11	0.01	-0.12	-0.03	0.28	0.08	-0.07	-0.37	-0.39	0.05	0.32	0.23	-0.03	-0.07	
0.14	0.06	-0.05	0.07	0.40	0.21	0.07	-0.21	-0.20	0.25	0.54	0.47	0.23	0.21	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
285	623	956	1329	1711	2049	2414	2742	3097	3474	3851	4216	4543	4894	
19	1	-23	-7	18	0	8	-21	-23	2	18	25	4	8	
0.27	0.01	-0.33	-0.10	0.26	-0.01	0.11	-0.29	-0.32	-0.03	0.25	0.37	-0.05	-0.13	
-0.79	-1.00	-1.28	-1.00	-0.58	-0.79	-0.62	-0.97	-0.94	-0.60	-0.26	-0.08	-0.45	-0.47	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
322	672	1011	1377	1753	2090	2430	2753	3112	3490	3861	4227	4567	4897	
7	3	-11	2	25	8	-5	-35	-29	-5	13	26	13	-11	
0.09	0.05	-0.16	0.03	0.35	0.12	-0.07	-0.50	-0.42	-0.07	0.19	0.37	0.18	-0.15	
-0.27	-0.31	-0.50	-0.32	0.01	-0.21	-0.39	-0.82	-0.73	-0.37	-0.11	0.07	-0.11	-0.43	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
399	746	1103	1460	1824	2157	2461	2775	3126	3505	3878	4242	4596	4933	
0	0	9	19	35	21	-23	-56	-53	-21	4	21	27	17	
0.00	-0.01	0.13	0.27	0.51	0.30	-0.33	-0.81	-0.76	-0.30	0.06	0.30	0.40	0.24	
0.82	0.74	0.80	0.86	1.02	0.74	0.05	-0.50	-0.53	-0.16	0.13	0.29	0.30	0.08	

RF Input Power (dBm)	
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.77
ACCURACY ERROR (dB)	0.71

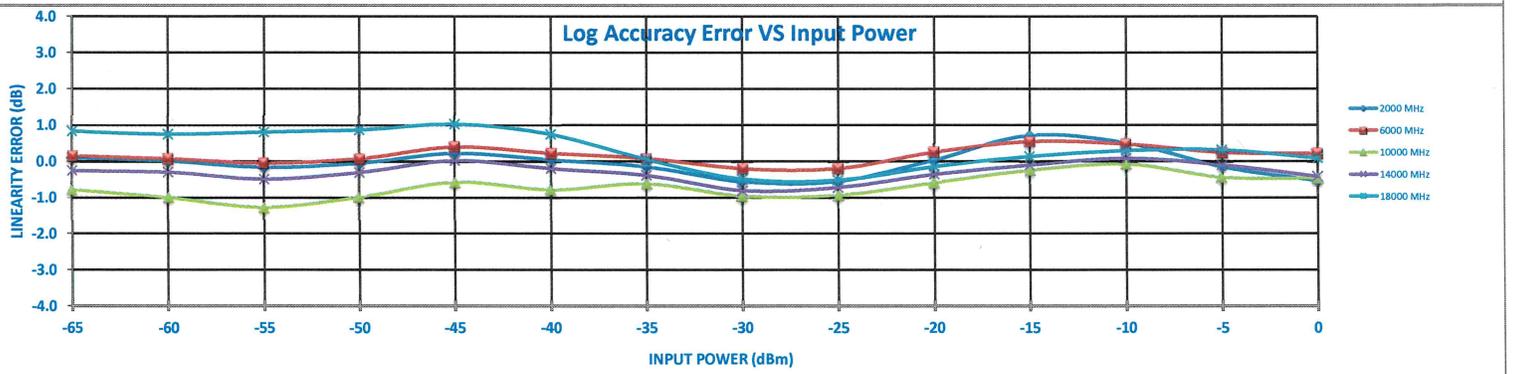
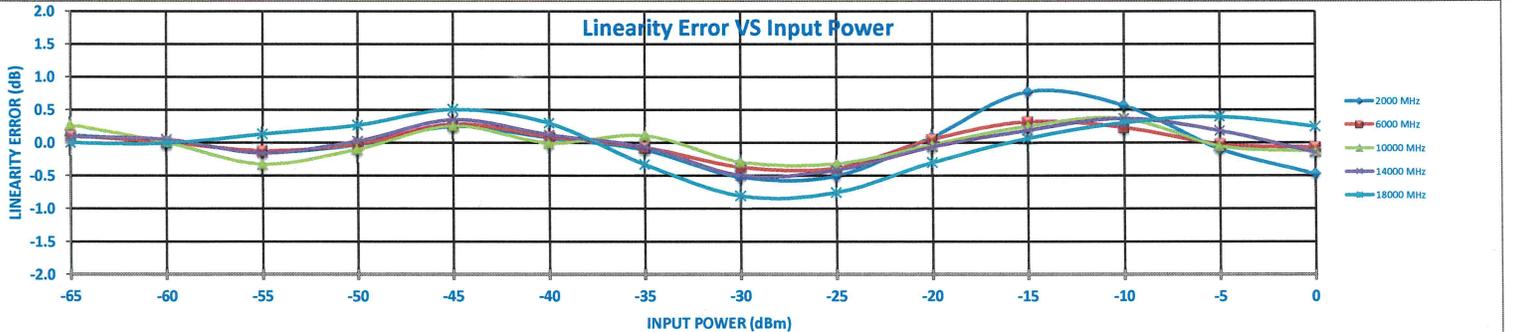
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.39
ACCURACY ERROR (dB)	0.54

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.37
ACCURACY ERROR (dB)	-1.28

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.50
ACCURACY ERROR (dB)	-0.82

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.81
ACCURACY ERROR (dB)	1.02

Flatness	+/- dB	0.81	0.87	1.04	0.93	0.80	0.77	0.35	0.38	0.37	0.43	0.48	0.29	0.38	0.38
															1.04





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

LOG TRANSFER WITH FREQUENCY

TESTED BY: Anton L.
MODEL: ERDLVA-2G18G-65-70MV-70C
SERIAL NO: PL51100/2509
DATE: 2/27/2025

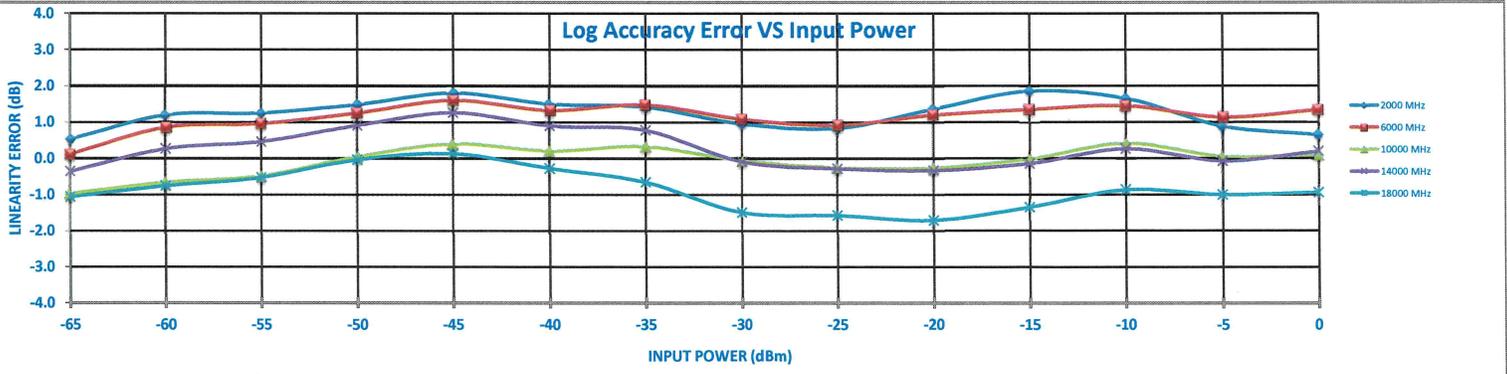
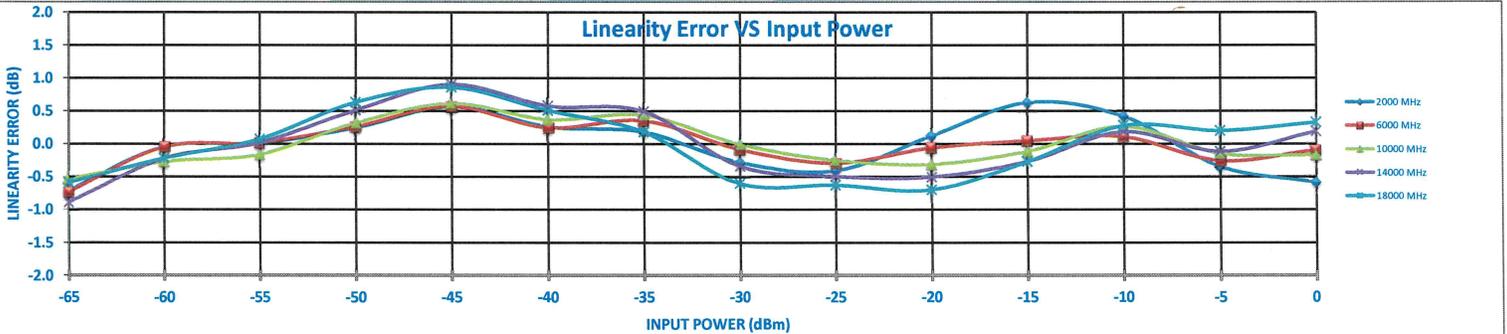
Test Temp: 70 °C
Video Offset: 39 mV

Frequency

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
2000 MHz	4951	69.7	371	766	1118	1483	1854	2181	2524	2840	3180	3565	3949	4283	4578	4910
			-50	-3	0	17	39	18	12	-20	-29	8	43	29	-24	-41
			-0.71	-0.05	0.00	0.24	0.56	0.26	0.18	-0.29	-0.41	0.11	0.62	0.42	-0.35	-0.59
			0.52	1.18	1.23	1.47	1.79	1.49	1.41	0.94	0.82	1.34	1.85	1.65	0.88	0.64
6000 MHz	4965	70.3	342	742	1098	1467	1840	2169	2528	2849	3186	3554	3913	4269	4595	4958
			-52	-3	1	18	40	17	25	-6	-21	-4	3	7	-18	-7
			-0.73	-0.05	0.02	0.26	0.57	0.24	0.35	-0.09	-0.29	-0.06	0.04	0.10	-0.26	-0.10
			0.10	0.84	0.95	1.24	1.59	1.31	1.47	1.07	0.91	1.19	1.34	1.45	1.12	1.33
10000 MHz	4883	70.4	266	637	997	1383	1756	2091	2448	2769	3104	3452	3818	4197	4520	4871
			-38	-19	-11	22	43	28	31	-1	-18	-22	-8	18	-11	-12
			-0.54	-0.27	-0.16	0.32	0.61	0.37	0.43	-0.01	-0.25	-0.31	-0.12	0.26	-0.15	-0.17
			-0.99	-0.67	-0.50	0.04	0.39	0.20	0.32	-0.08	-0.27	-0.28	-0.03	0.41	0.05	0.08
14000 MHz	4865	69.1	309	701	1063	1443	1816	2139	2479	2767	3102	3447	3809	4186	4511	4878
			-62	-15	1	35	62	40	34	-24	-34	-35	-19	12	-8	13
			-0.89	-0.22	0.01	0.51	0.90	0.57	0.49	-0.34	-0.50	-0.51	-0.27	0.18	-0.12	0.19
			-0.37	0.25	0.45	0.90	1.25	0.88	0.76	-0.11	-0.30	-0.35	-0.15	0.26	-0.08	0.18
18000 MHz	4777	68.9	260	630	994	1377	1737	2057	2379	2669	3012	3351	3725	4107	4446	4799
			-41	-15	5	43	59	35	12	-42	-43	-49	-19	19	14	22
			-0.59	-0.22	0.07	0.63	0.86	0.50	0.18	-0.61	-0.63	-0.71	-0.27	0.27	0.20	0.32
			-1.08	-0.77	-0.54	-0.05	0.12	-0.29	-0.67	-1.51	-1.59	-1.73	-1.36	-0.88	-1.01	-0.95

RF Input Power (dBm)	
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.71
ACCURACY ERROR (dB)	1.85
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.73
ACCURACY ERROR (dB)	1.59
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.61
ACCURACY ERROR (dB)	-0.99
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.90
ACCURACY ERROR (dB)	1.25
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.86
ACCURACY ERROR (dB)	-1.73

Flatness	+/- dB
0.80	1.61

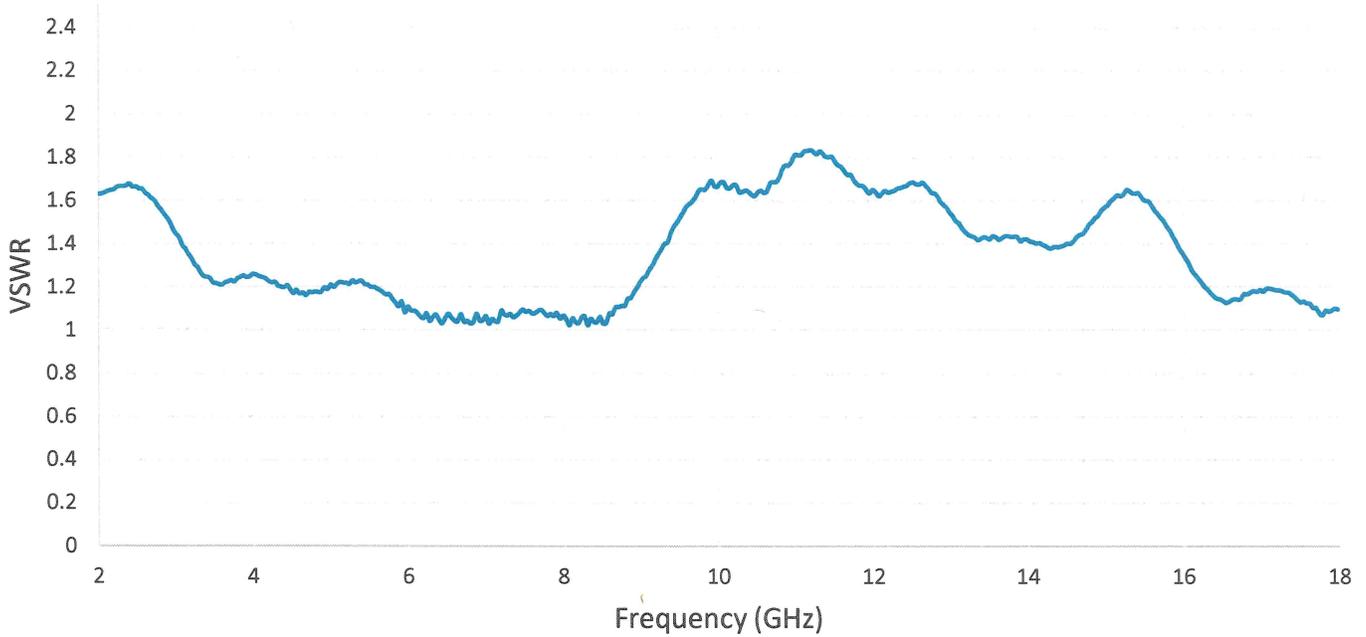




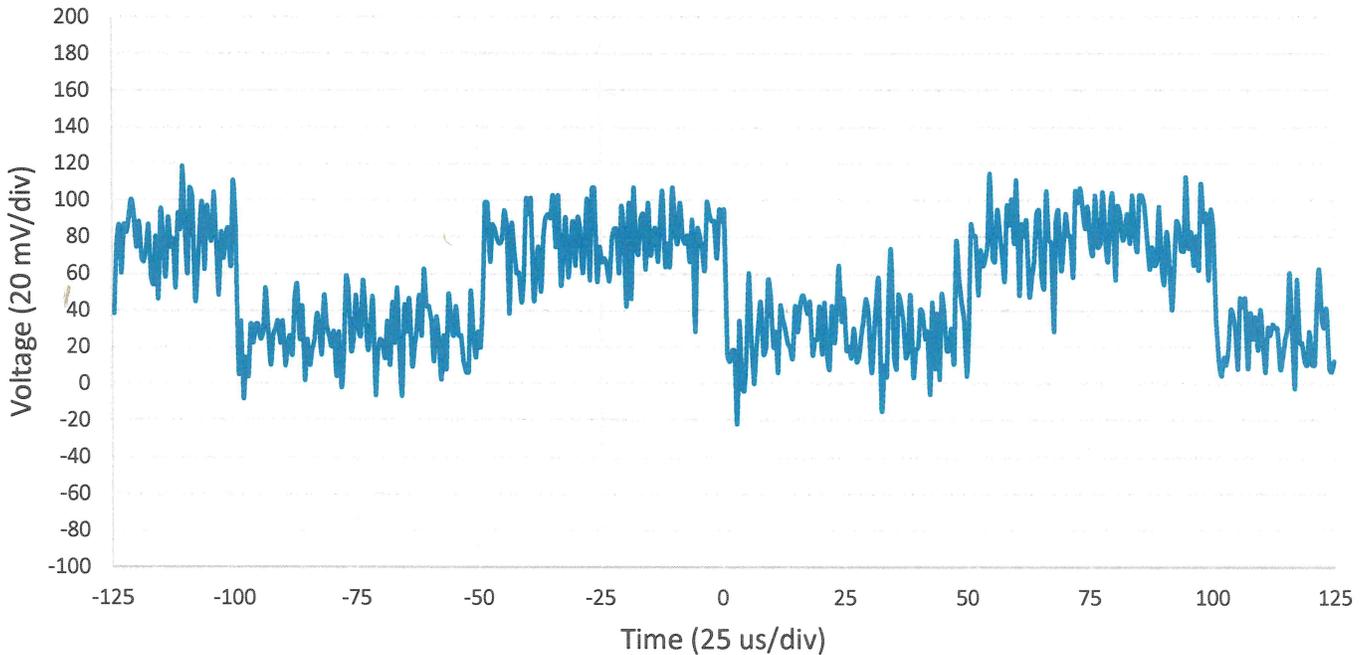
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PL51100/2509

VSWR 1.84:1



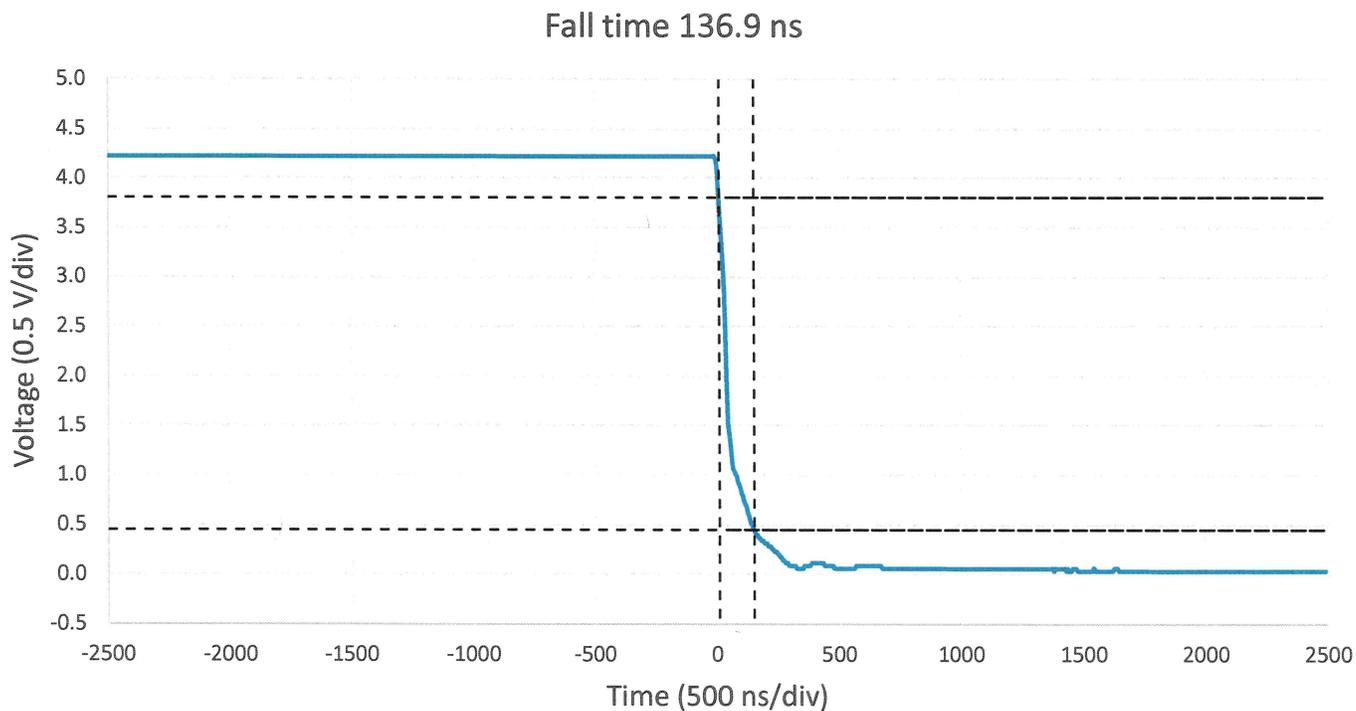
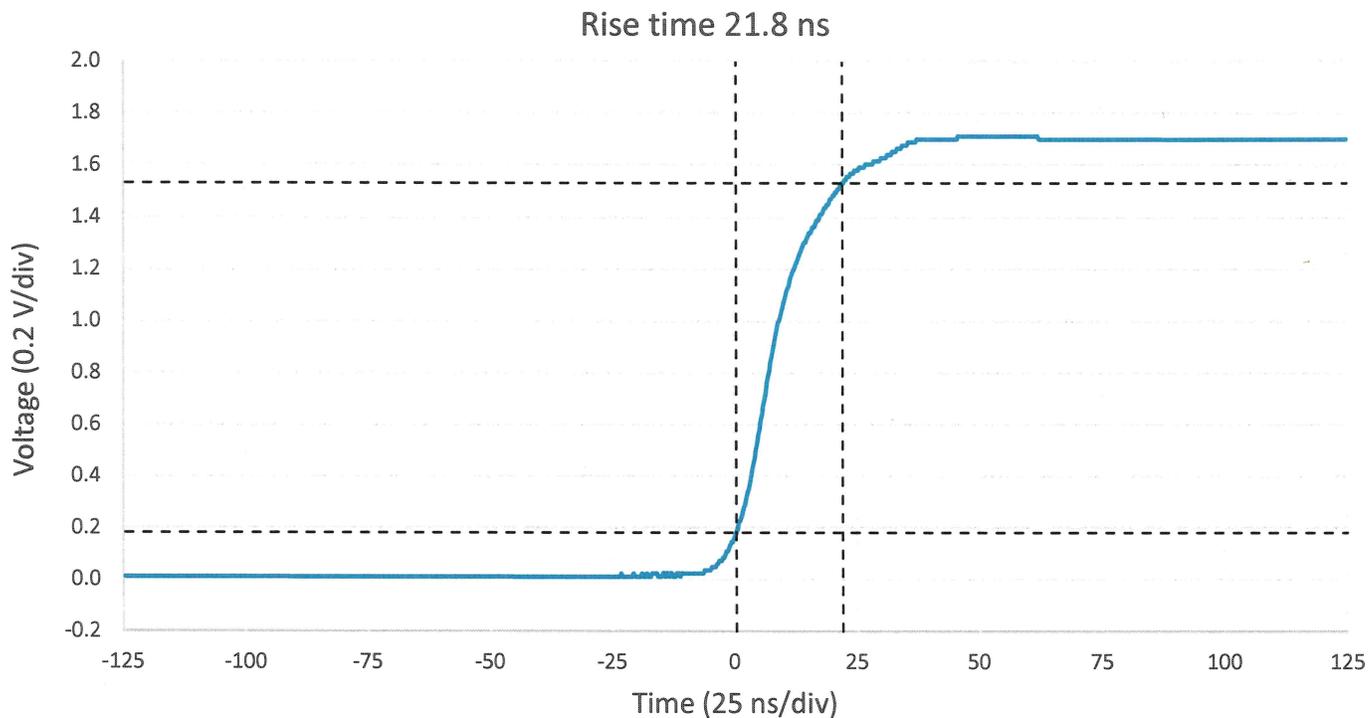
TSS @ -71.7 dBm





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PL51100/2509

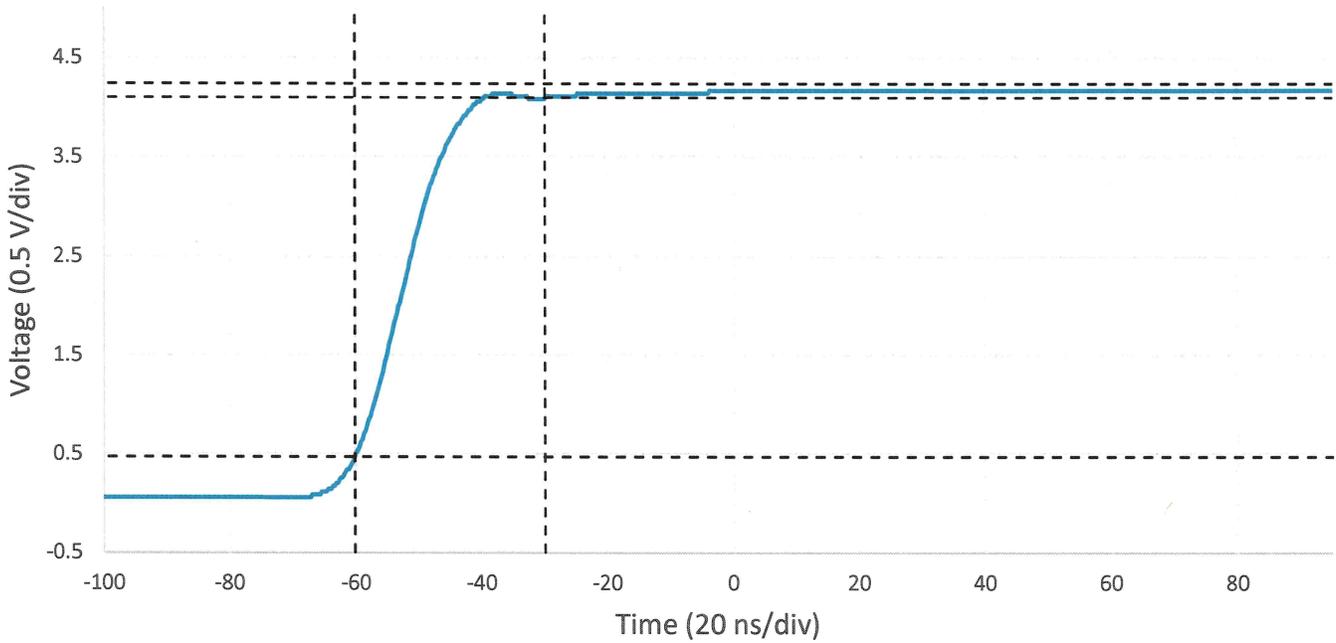




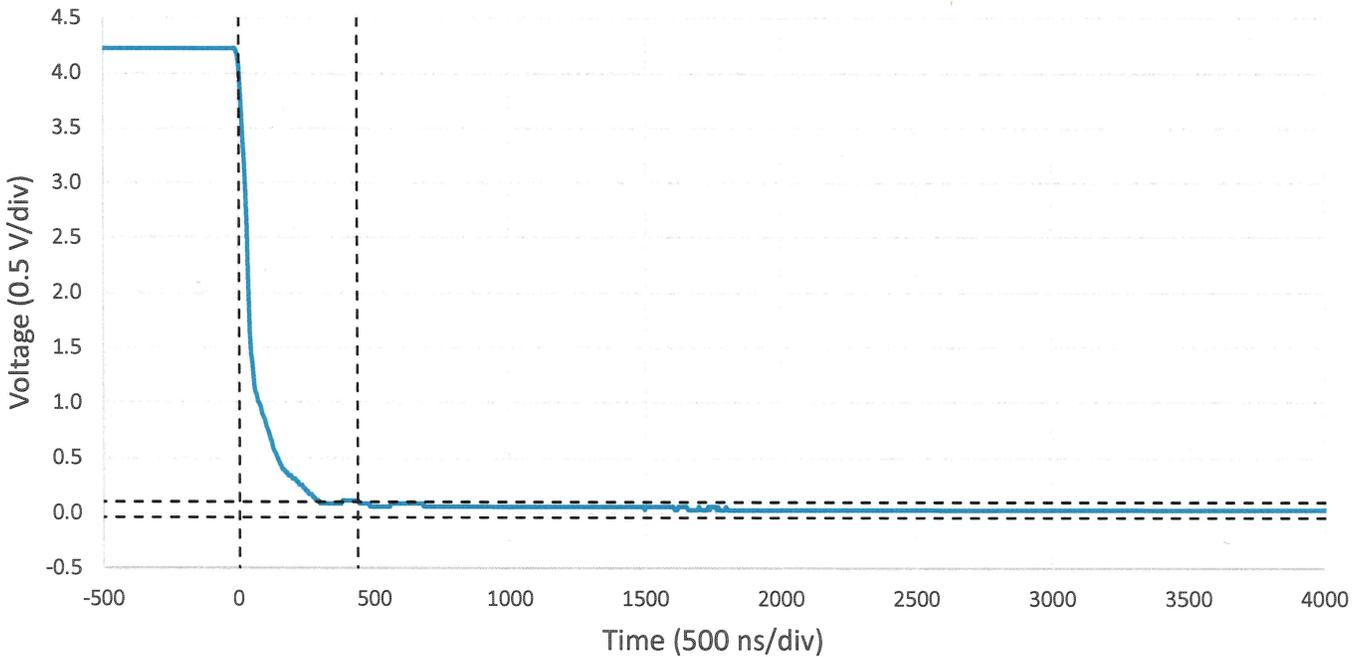
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PL51100/2509

Settle time 30.3 ns



Recovery time 435 ns

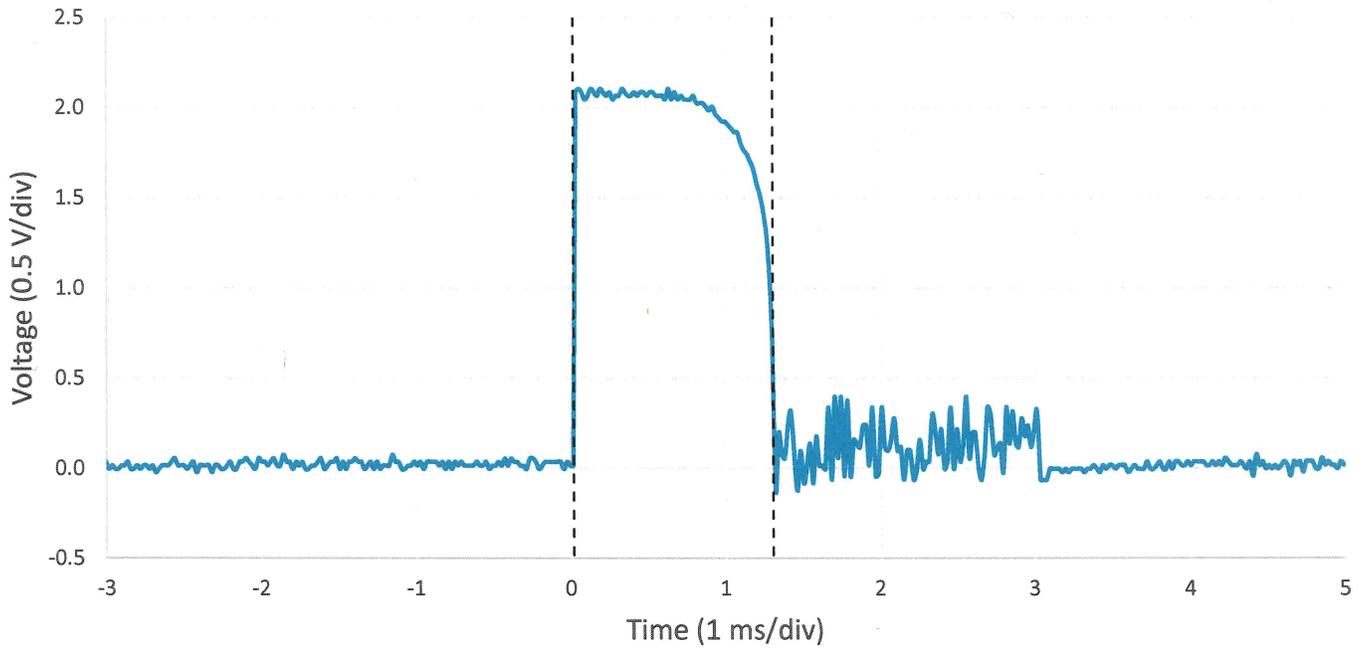




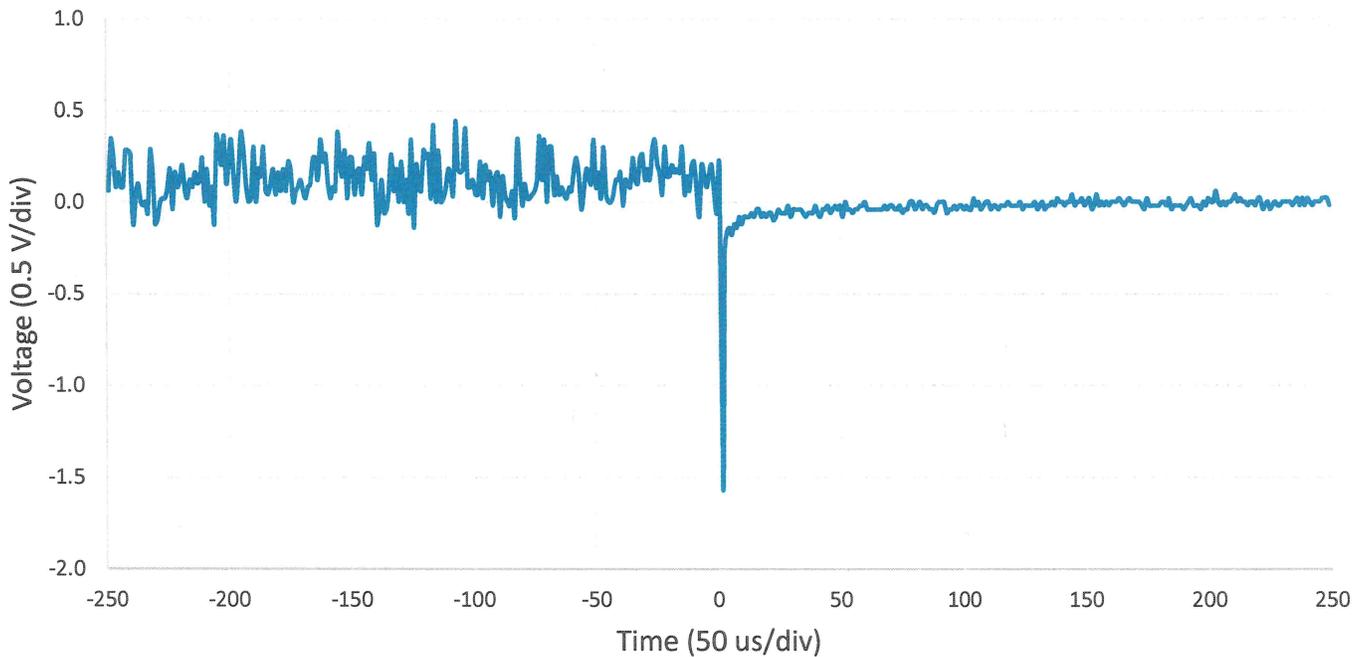
**Summary Data
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ERDLVA-2G18G-65-70MV-70C**

PL51100/2509

CW Immunity 1.29 ms



CW Recovery Plot





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

PL51100/2509

RMS Noise 18.5 mV

