



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

Customer: \_\_\_\_\_  
 SO No: \_\_\_\_\_  
 Model No: ERDLVA-2G18G-65-70MV-70C  
 Serial No: PL51098/2509

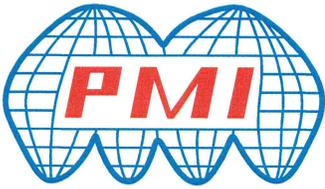
Tested By: Anton L.  
 Temperature: -40°C TO +70°C  
 Date 2/27/2025  
 Drawing No: 27642020      Rev: A1

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	1.78 :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	- 72.1 dBm	
5	VIDEO OUT Dynamic Range:	-65 to 0 dBm	-65 to 0 dBm	
6	VIDEO OUT Log Slope Fixed:	70 ± 3mV/dB	70.8 mV/dB 68.3 mV/dB	
7	VIDEO OUT Log Linearity:	±1.0 dB MAX @25C	0.58 dB -0.46 dB	
8	VIDEO OUT Log Accuracy:	±2.3 dB MAX @25C	1.19 dB -0.96 dB	
9	VIDEO OUT Absolute Log Accuracy:	±2.9 dB MAX Over Freq & temp	1.36 dB -1.03 dB	
10	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On) @25C	28 mV	
11	VIDEO OUT Rise Time (10% to 90%):	28 ns MAX	21.5 ns	
12	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	143.8 ns	



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

13	VIDEO OUT Settling Time:	50 ns With in $\pm 70$ mV of final value @-10 dBm	32.7 ns	PMI QA3
14	VIDEO OUT Recovery Time:	1 us MAX to within 1 dB of baseline for PW <10us & Power = -10dBm	0.85 us	
15	VIDEO OUT Video Frequency Flatness:	$\pm 2.0$ dB MAX @25C	$\pm 0.92$ 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, $\leq 4$ ms	1.62 ms	
		CW Recovery Time at CW = -40 dBm, $\leq 20$ 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 $\Omega$	
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	



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

22	VIDEO OUT Noise Level (Vp-p):	160 mV max	120.6 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. Kaur*

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: PL51098/2509  
 DATE: 2/27/2025

Test Temp: 25 °C  
 Video Offset: 28 mV

Frequency		
2000 MHz	INTERCEPT (mV)	4935
	SLOPE (mV/dB)	69.5

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
392	772	1113	1461	1824	2138	2494	2865	3199	3566	3933	4245	4557	4909
-26	7	0	1	16	-17	-9	15	1	21	40	5	-31	-26
-0.37	0.10	0.01	0.01	0.24	-0.25	-0.12	0.22	0.02	0.30	0.58	0.07	-0.44	-0.37
0.49	0.93	0.81	0.80	0.99	0.49	0.59	0.90	0.68	0.94	1.19	0.66	0.13	0.17

RF Input Power (dBm)	
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.58
ACCURACY ERROR (dB)	1.19

6000 MHz	INTERCEPT (mV)	4957
	SLOPE (mV/dB)	70.3

369	748	1092	1442	1804	2124	2492	2879	3211	3566	3910	4239	4586	4954
-20	8	1	-1	10	-21	-5	31	11	15	8	-15	-19	-3
-0.28	0.11	0.01	-0.01	0.14	-0.31	-0.07	0.44	0.16	0.21	0.11	-0.21	-0.27	-0.04
0.16	0.58	0.51	0.52	0.71	0.29	0.56	1.10	0.86	0.94	0.87	0.58	0.55	0.82

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.44
ACCURACY ERROR (dB)	1.10

10000 MHz	INTERCEPT (mV)	4910
	SLOPE (mV/dB)	70.8

291	662	1004	1375	1747	2065	2431	2822	3161	3511	3853	4195	4525	4899
-29	-2	-14	3	21	-14	-2	35	20	17	5	-7	-31	-11
-0.28	-0.03	-0.20	0.04	0.30	-0.20	-0.03	0.50	0.29	0.23	0.07	-0.10	-0.43	-0.15
-0.96	-0.65	-0.75	-0.44	-0.11	-0.56	-0.31	0.28	0.14	0.15	0.05	-0.05	-0.33	0.03

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.50
ACCURACY ERROR (dB)	-0.96

14000 MHz	INTERCEPT (mV)	4909
	SLOPE (mV/dB)	70.3

326	694	1038	1393	1755	2077	2445	2837	3174	3523	3868	4205	4526	4894
-15	1	-6	-2	8	-21	-5	36	22	19	13	-2	-32	-15
-0.22	0.02	-0.09	-0.03	0.12	-0.30	-0.07	0.51	0.31	0.27	0.18	-0.02	-0.46	-0.22
-0.46	-0.19	-0.26	-0.18	0.01	-0.38	-0.11	0.50	0.33	0.32	0.26	0.09	-0.31	-0.04

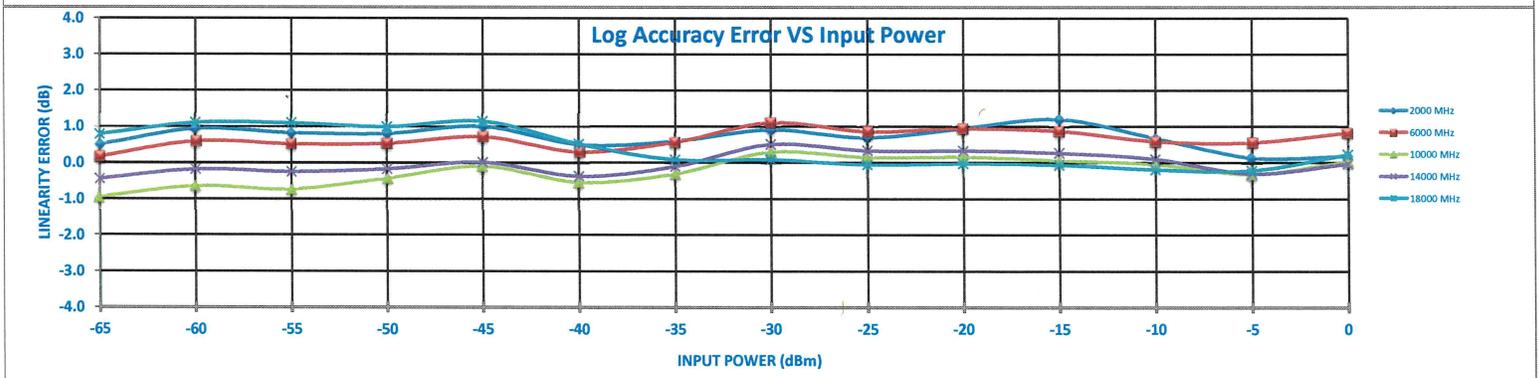
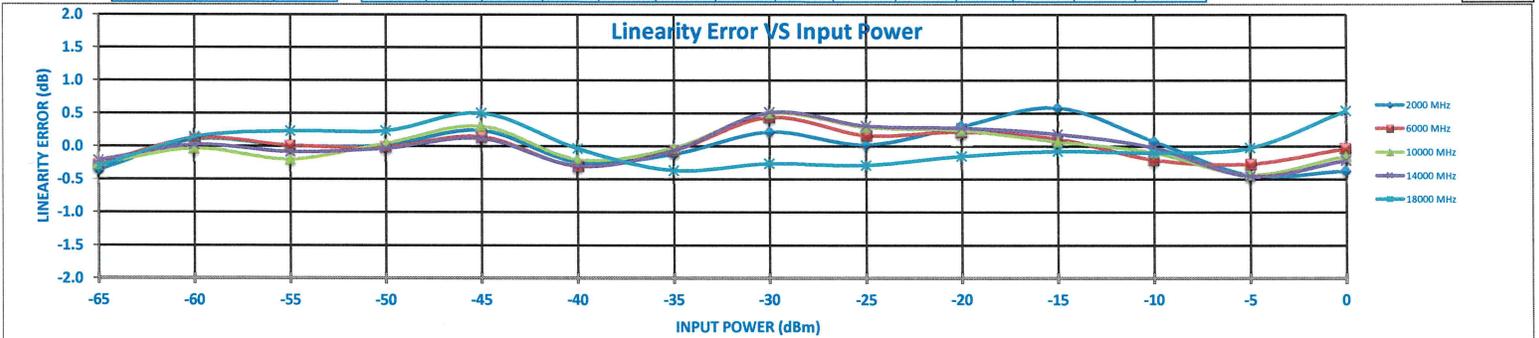
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.51
ACCURACY ERROR (dB)	0.50

18000 MHz	INTERCEPT (mV)	4876
	SLOPE (mV/dB)	68.3

412	784	1132	1474	1834	2139	2458	2807	3147	3498	3845	4185	4532	4912
-21	9	16	16	34	-3	-25	-18	-20	-11	-5	-7	-2	36
-0.31	0.14	0.23	0.23	0.50	-0.04	-0.37	-0.26	-0.29	-0.15	-0.08	-0.10	-0.03	0.53
0.77	1.10	1.08	0.98	1.14	0.50	0.07	0.07	-0.06	-0.03	-0.07	-0.20	-0.23	0.21

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.53
ACCURACY ERROR (dB)	1.14

Flatness	+/- dB	0.87	0.87	0.92	0.71	0.62	0.53	0.45	0.52	0.46	0.49	0.63	0.43	0.44	0.43
															0.92





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

## LOG TRANSFER WITH FREQUENCY

TESTED BY: Anton L.  
 MODEL: ERDLVA-2G18G-65-70MV-70C  
 SERIAL NO: PL51098/2509  
 DATE: 2/27/2025

Test Temp: -40 °C  
 Video Offset: 25 mV

### Frequency

2000 MHz	INTERCEPT (mV)	4958
	SLOPE (mV/dB)	70.6

6000 MHz	INTERCEPT (mV)	5001
	SLOPE (mV/dB)	71.4

10000 MHz	INTERCEPT (mV)	4980
	SLOPE (mV/dB)	72.2

14000 MHz	INTERCEPT (mV)	4994
	SLOPE (mV/dB)	71.9

18000 MHz	INTERCEPT (mV)	4995
	SLOPE (mV/dB)	70.7

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
361	729	1066	1421	1791	2114	2472	2857	3197	3568	3945	4256	4575	4933	
-7	8	-8	-7	10	-20	-15	17	4	22	46	4	-30	-25	
-0.10	0.11	-0.12	-0.09	0.15	-0.28	-0.21	0.24	0.06	0.31	0.65	0.06	-0.42	-0.35	
0.23	0.39	0.11	0.08	0.27	-0.21	-0.19	0.20	-0.03	0.16	0.44	-0.20	-0.73	-0.71	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
357	723	1064	1419	1792	2118	2489	2890	3229	3591	3947	4267	4622	5001	
-1	8	-8	-10	6	-25	-12	32	14	19	18	-19	-22	0	
-0.01	0.12	-0.11	-0.14	0.08	-0.36	-0.16	0.45	0.20	0.26	0.25	-0.27	-0.30	0.00	
0.18	0.30	0.08	0.06	0.28	-0.15	0.05	0.66	0.41	0.49	0.47	-0.04	-0.07	0.24	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
283	645	985	1356	1740	2069	2447	2858	3200	3562	3919	4244	4584	4963	
-5	-1	-2	-2	11	-2	-5	45	26	25	32	-14	-15	-17	
-0.02	-0.01	-0.30	-0.17	0.15	-0.30	-0.07	0.62	0.36	0.37	0.31	-0.19	-0.49	-0.24	
-0.86	-0.79	-1.03	-0.83	-0.45	-0.84	-0.54	0.22	0.01	0.08	0.08	-0.37	-0.60	-0.29	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
322	687	1026	1383	1754	2087	2467	2884	3225	3586	3944	4268	4606	4964	
1	7	-14	-16	-5	-31	-11	47	28	30	29	-7	-28	-30	
0.02	0.09	-0.19	-0.23	-0.07	-0.43	-0.15	0.65	0.40	0.42	0.40	-0.10	-0.39	-0.41	
-0.31	-0.20	-0.45	-0.45	-0.25	-0.59	-0.26	0.58	0.36	0.42	0.43	-0.03	-0.29	-0.28	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
399	760	1111	1456	1828	2152	2496	2889	3224	3584	3945	4272	4636	5011	
0	7	4	-4	14	-15	-25	15	-4	3	10	-16	-6	16	
-0.01	0.10	0.06	-0.06	0.20	-0.21	-0.35	0.21	-0.05	0.04	0.15	-0.23	-0.08	0.22	
0.76	0.82	0.74	0.57	0.79	0.32	0.14	0.65	0.34	0.39	0.44	0.03	0.13	0.38	

RF Input Power (dBm)	
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.65
ACCURACY ERROR (dB)	-0.73

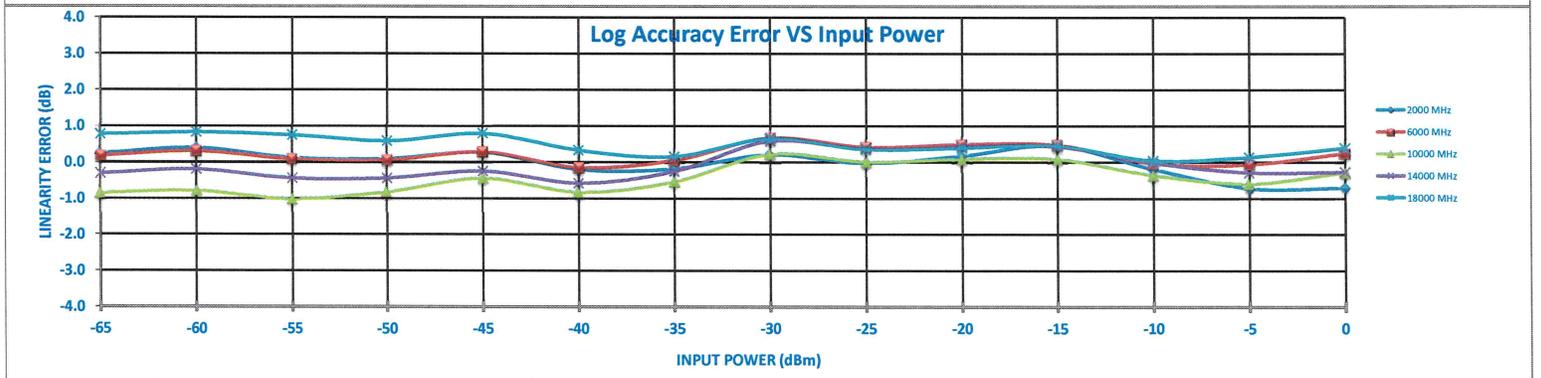
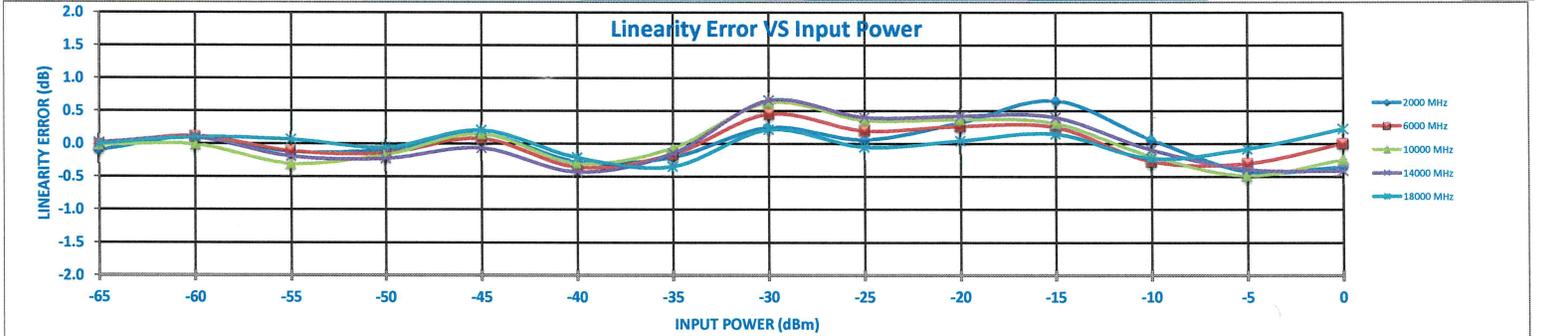
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.45
ACCURACY ERROR (dB)	0.66

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.62
ACCURACY ERROR (dB)	-1.03

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.65
ACCURACY ERROR (dB)	-0.59

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.35
ACCURACY ERROR (dB)	0.82

Flatness	+/- dB	0.81	0.81	0.88	0.70	0.62	0.58	0.34	0.23	0.22	0.20	0.20	0.20	0.43	0.55
															0.88





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

## LOG TRANSFER WITH FREQUENCY

TESTED BY: Anton L.  
 MODEL: ERDLVA-2G18G-65-70MV-70C  
 SERIAL NO: PL51098/2509  
 DATE: 2/27/2025

Test Temp: 70 °C  
 Video Offset: 26 mV

Frequency

2000 MHz	INTERCEPT (mV)	4846
	SLOPE (mV/dB)	69.1

6000 MHz	INTERCEPT (mV)	4857
	SLOPE (mV/dB)	69.6

10000 MHz	INTERCEPT (mV)	4799
	SLOPE (mV/dB)	70.0

14000 MHz	INTERCEPT (mV)	4794
	SLOPE (mV/dB)	69.1

18000 MHz	INTERCEPT (mV)	4746
	SLOPE (mV/dB)	67.9

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
334	709	1046	1394	1751	2064	2418	2788	3130	3484	3847	4170	4471	4813	
-23	7	-1	1	13	-19	-11	14	11	19	37	15	-30	-33	
-0.33	0.10	-0.02	0.02	0.19	-0.28	-0.15	0.20	0.15	0.28	0.54	0.21	-0.43	-0.48	
0.56	0.98	0.85	0.89	1.05	0.58	0.70	1.05	0.99	1.11	1.36	1.03	0.38	0.33	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
311	686	1022	1375	1731	2053	2418	2800	3134	3478	3816	4157	4487	4844	
-20	7	-5	0	8	-19	-2	32	18	14	4	-3	-21	-13	
-0.28	0.10	-0.07	0.00	0.11	-0.27	-0.02	0.46	0.26	0.20	0.05	-0.05	-0.31	-0.18	
0.23	0.65	0.51	0.61	0.76	0.42	0.70	1.22	1.05	1.02	0.91	0.84	0.62	0.78	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
241	595	931	1307	1667	1991	2347	2731	3076	3407	3745	4102	4425	4787	
-10	8	-20	5	16	9	-9	21	26	7	-5	3	-23	12	
-0.15	-0.09	-0.28	0.09	0.23	-0.13	-0.05	0.44	0.37	0.10	-0.06	0.04	-0.35	-0.17	
-0.79	-0.67	-0.81	-0.37	-0.16	-0.48	-0.33	0.22	0.21	0.00	-0.11	0.05	-0.28	-0.05	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
279	646	986	1339	1697	2018	2370	2743	3084	3419	3758	4107	4419	4787	
-20	1	-5	3	15	-10	-4	24	19	8	1	5	-29	-7	
-0.29	0.01	-0.07	0.04	0.21	-0.14	-0.05	0.34	0.27	0.12	0.02	0.07	-0.42	-0.10	
-0.24	0.07	-0.01	0.09	0.27	-0.09	0.00	0.40	0.33	0.17	0.07	0.12	-0.37	-0.05	

	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
312	677	1017	1366	1724	2027	2348	2685	3034	3374	3716	4068	4404	4778	
-18	8	8	17	35	-1	-20	-23	-13	-13	-11	1	-2	32	
-0.26	0.11	0.12	0.25	0.52	-0.02	-0.29	-0.33	-0.20	-0.19	-0.16	0.02	-0.03	0.47	
0.24	0.52	0.44	0.48	0.66	0.04	-0.32	-0.44	-0.40	-0.48	-0.53	-0.44	-0.58	-0.18	

RF Input Power (dBm)	
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.54
ACCURACY ERROR (dB)	1.36

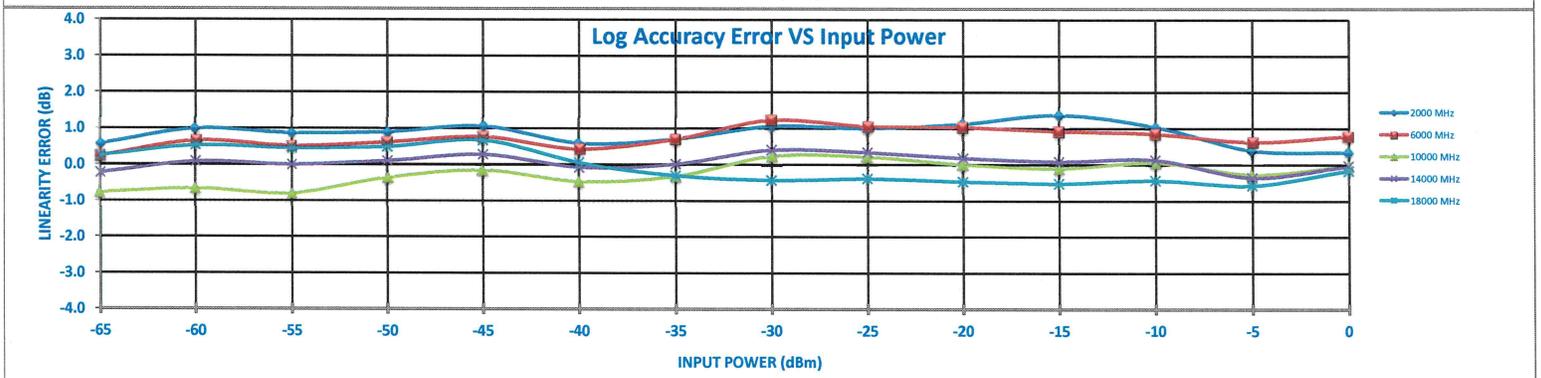
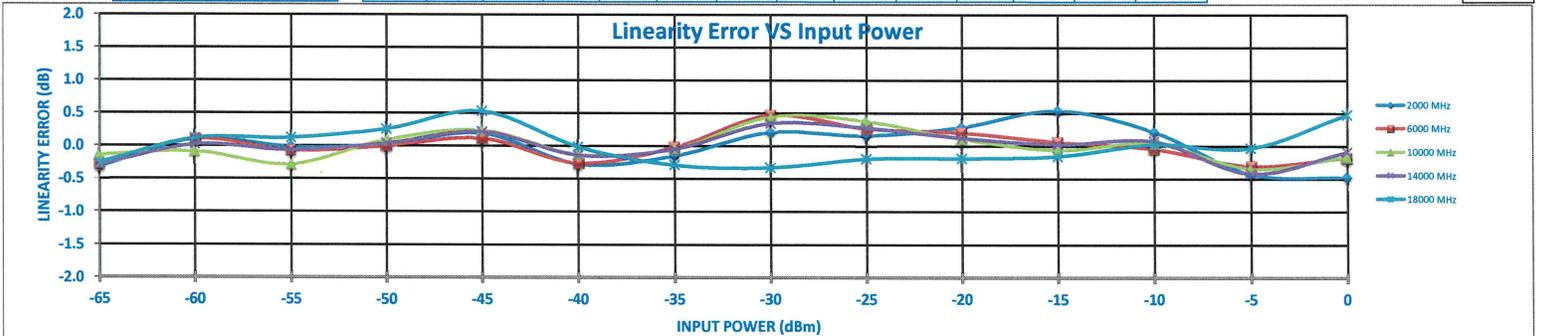
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.46
ACCURACY ERROR (dB)	1.22

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.44
ACCURACY ERROR (dB)	-0.81

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	-0.42
ACCURACY ERROR (dB)	0.40

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	0.52
ACCURACY ERROR (dB)	0.66

Flatness	+/- dB	0.67	0.82	0.83	0.63	0.61	0.53	0.51	0.83	0.72	0.80	0.95	0.74	0.60	0.48
															0.95

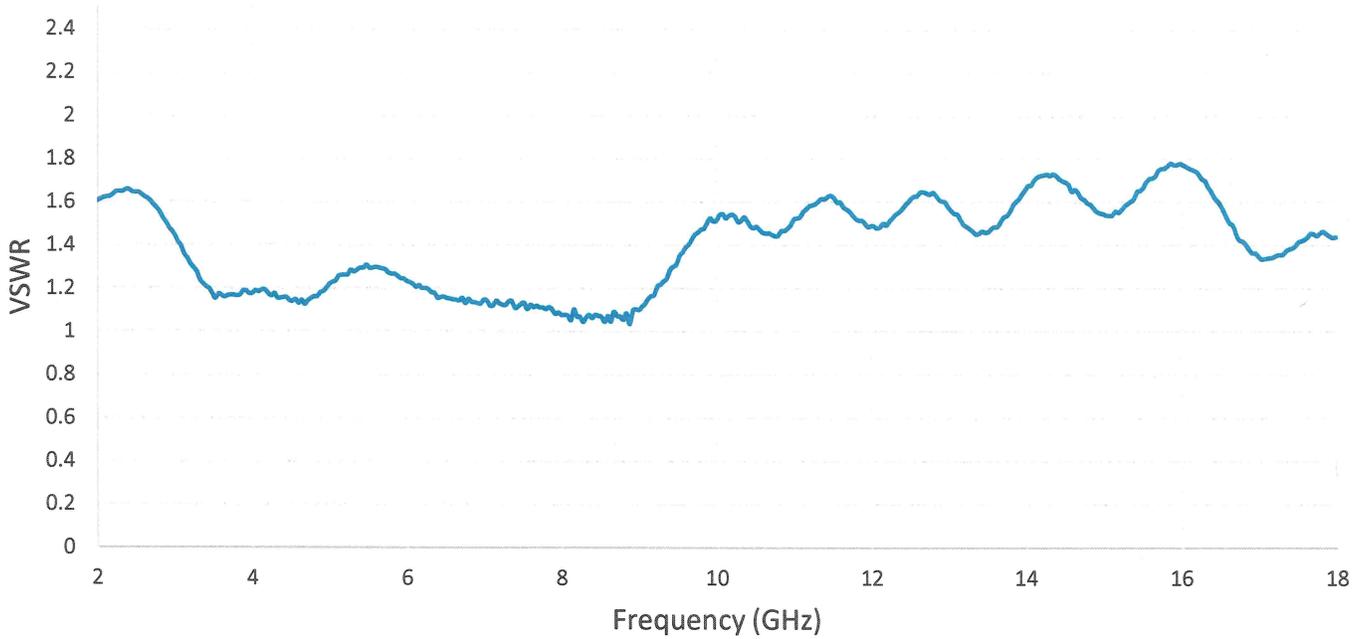




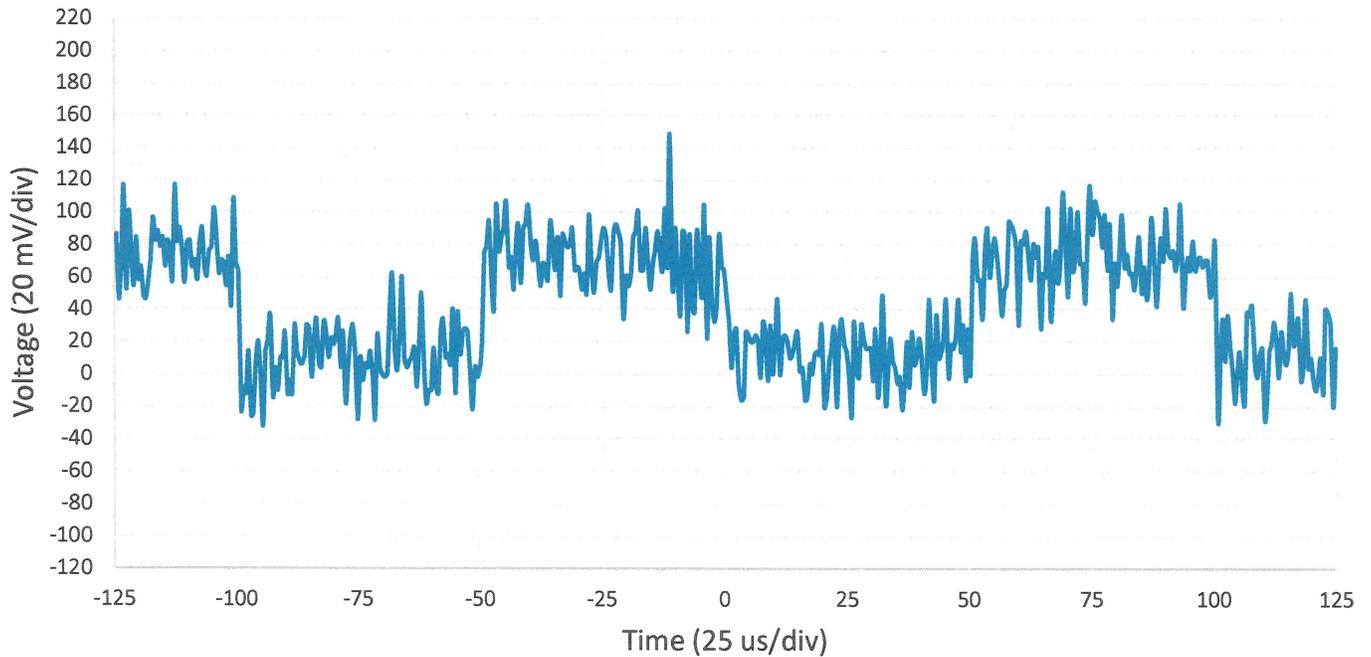
**Summary Data  
For  
ERDLVA-2G18G-65-70MV-70C**

PL51098/2509

VSWR 1.78:1



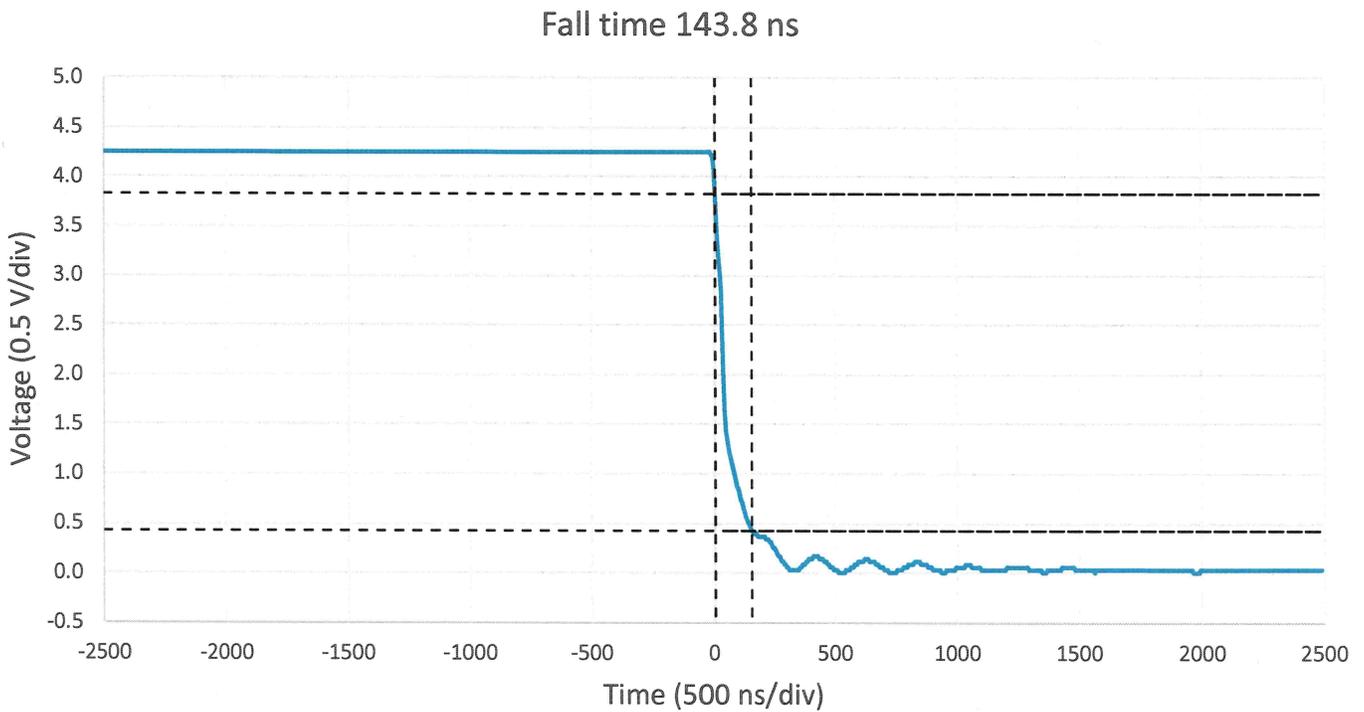
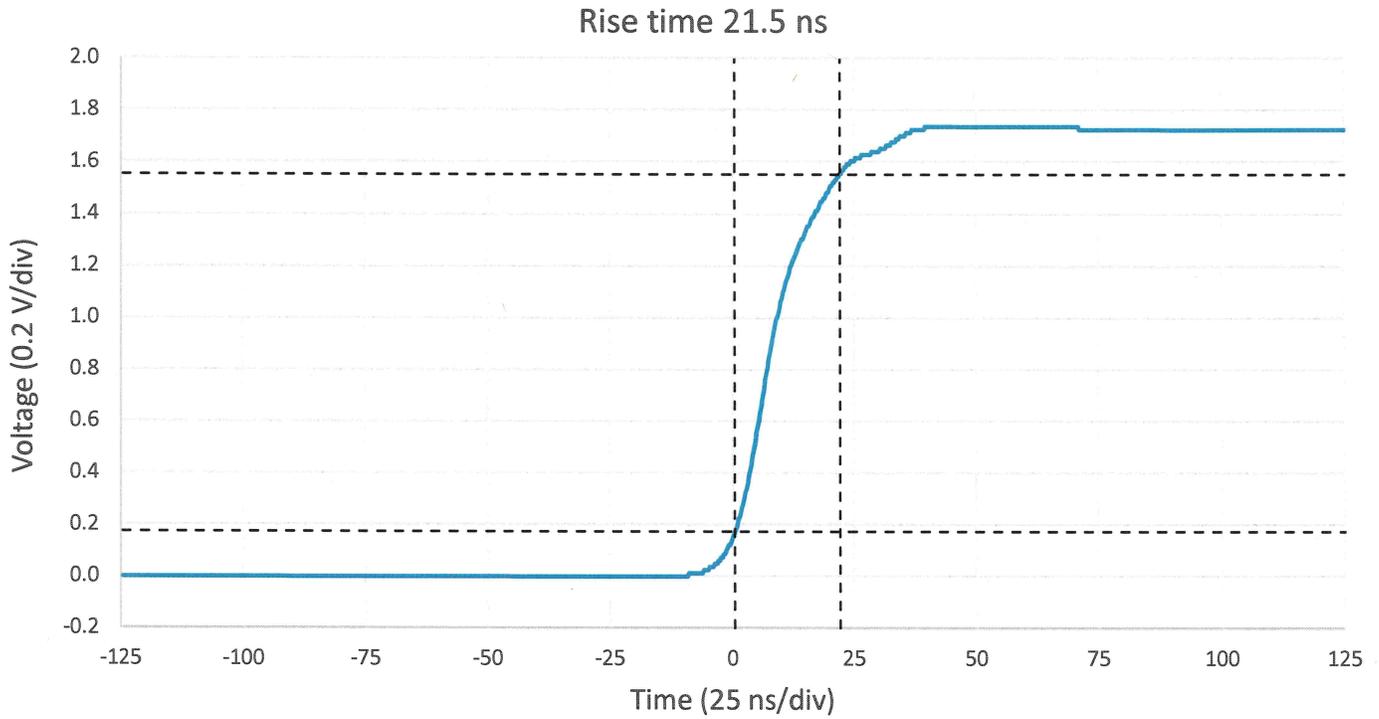
TSS @ -72.1 dBm





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

PL51098/2509

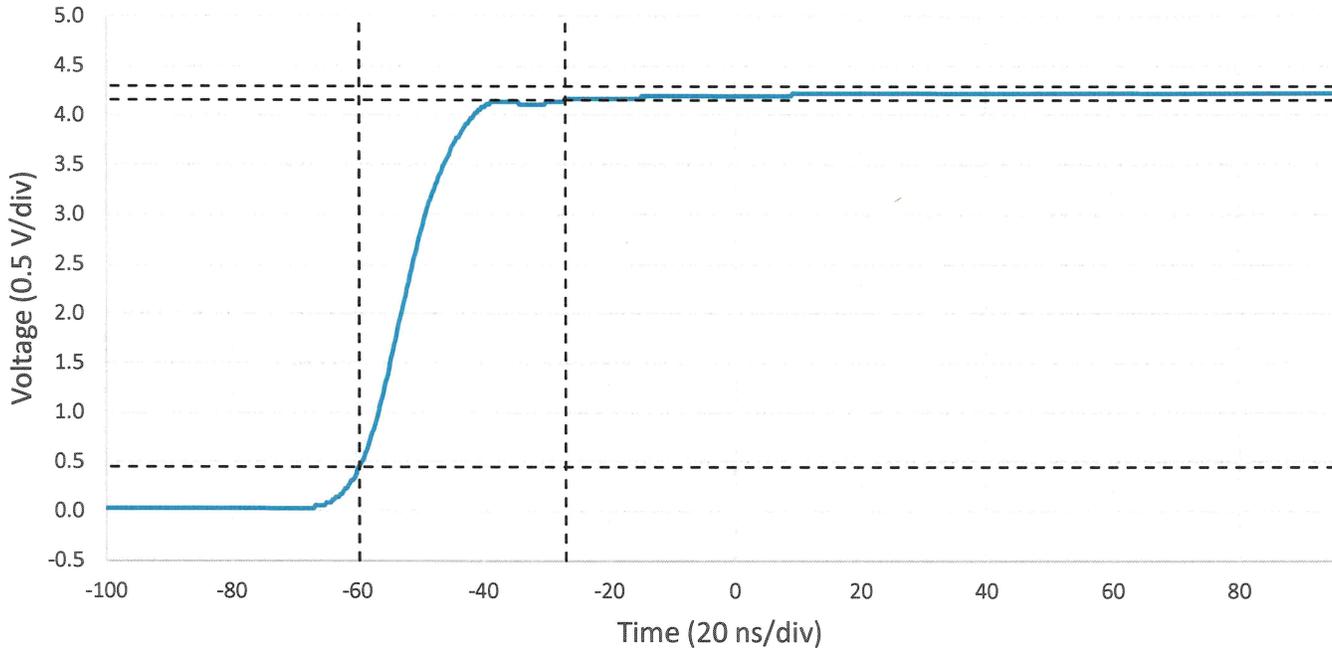




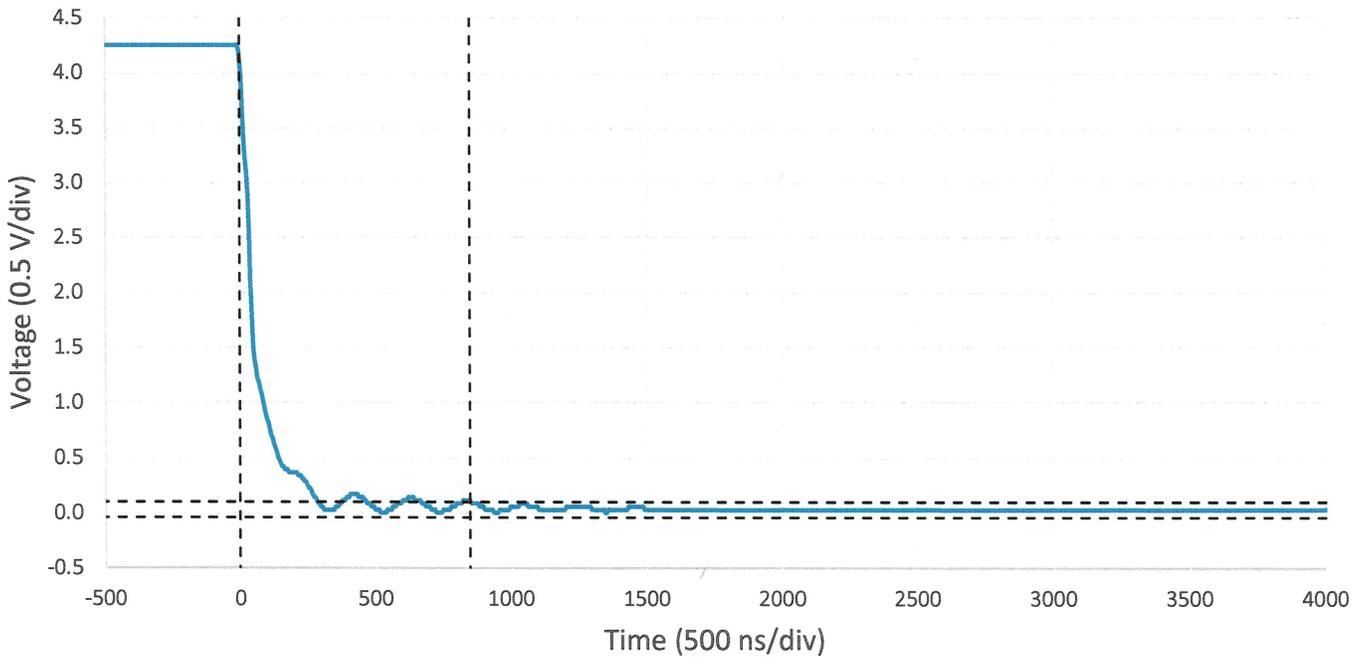
**Summary Data**  
**For**  
**ERDLVA-2G18G-65-70MV-70C**

PL51098/2509

Settle time 32.7 ns



Recovery time 850 ns

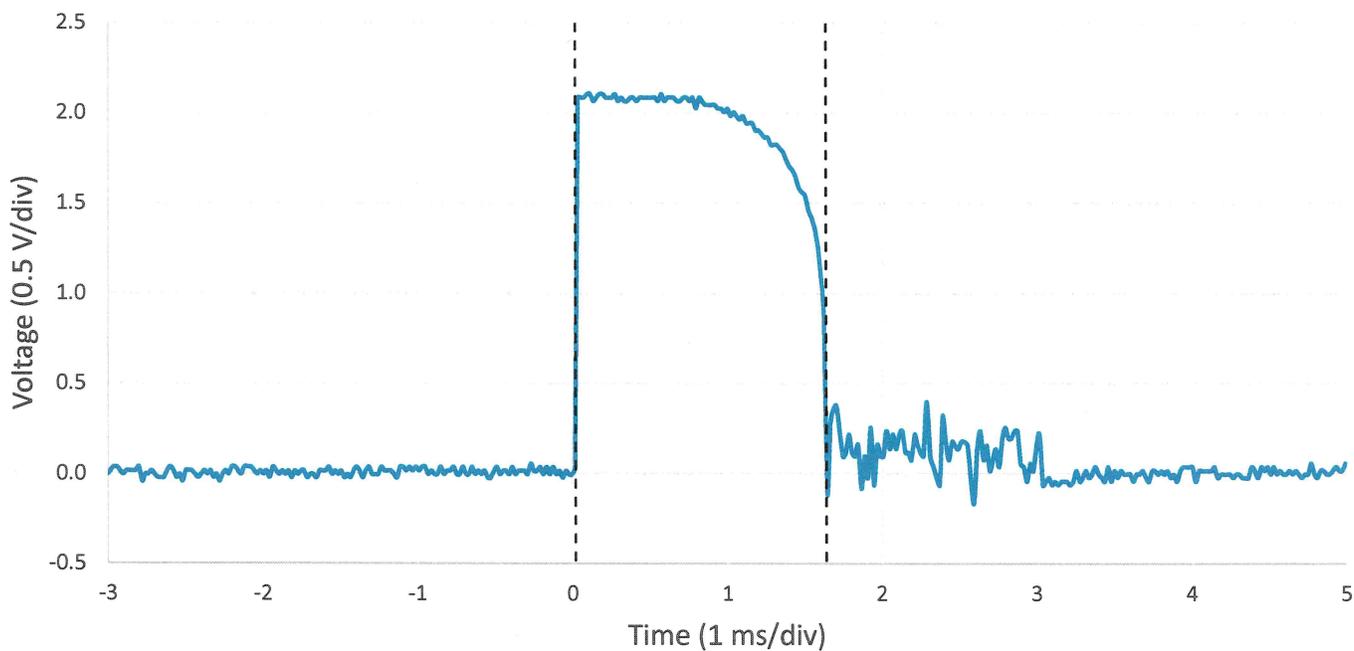




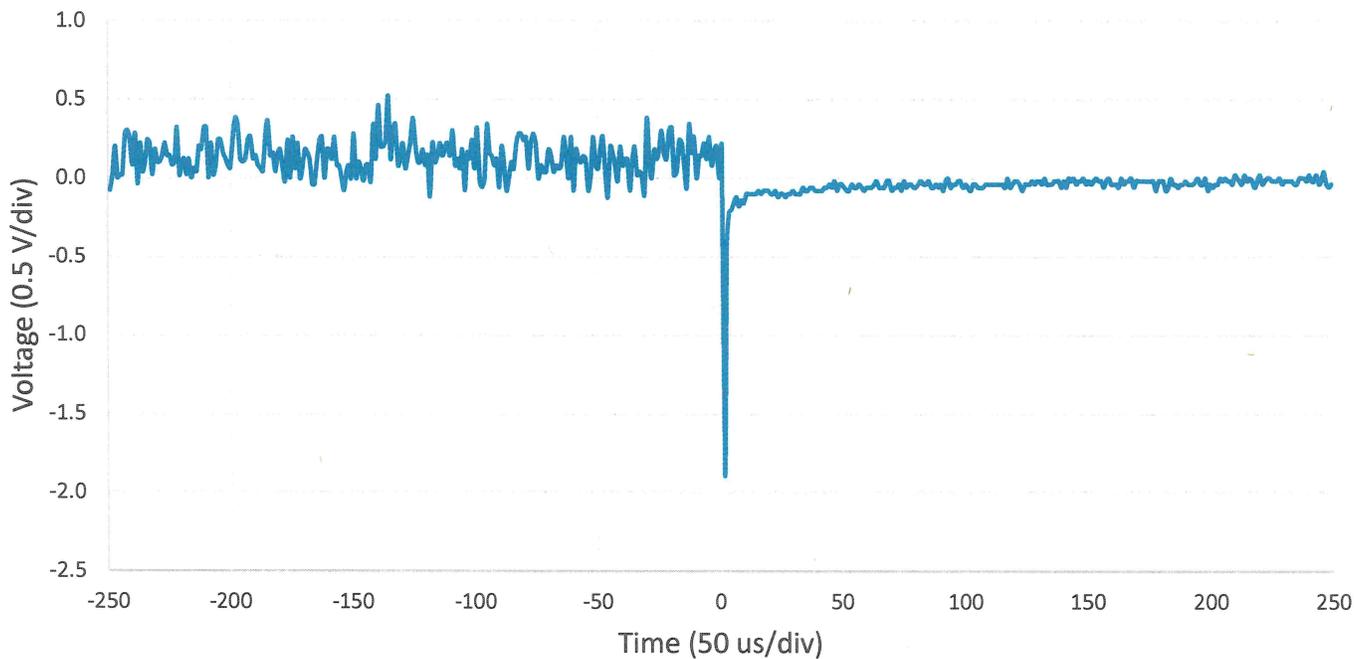
**Summary Data**  
**For**  
**ERDLVA-2G18G-65-70MV-70C**

PL51098/2509

CW Immunity 1.62 ms



CW Recovery Plot





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

PL51098/2509

RMS Noise 18.3 mV

