

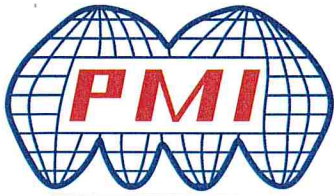


**Summary Data
For
ERDLVA-218-CW-75MV**

Customer: _____
 SO No: _____
 Model No: ERDLVA-218-CW-75MV-93
 Serial No: PL38408/2246

Tested By: Jim Hopson
 Temperature: -25C, 25C, 85C
 Date 11/14/2022
 Drawing No: 27642440 Rev: A1

TEST ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range:	2 to 18 GHz	2 to 18 GHz	FM QAS
2	VSWR:	2.5:1 MAX @ -20 dBm	1.32:1 MAX	
3	Input Power:	23 dBm Max.	Pass	
4	VIDEO OUT TSS:	-42 dBm MAX	-43dBm	
5	VIDEO OUT Dynamic Range:	-40 to +20 dBm	-40 to +20 dBm	
6	VIDEO OUT Log Slope Fixed:	75 ± 10mV/dB	72.6-77.5mV/dB	
7	VIDEO OUT Log Linearity:	±1.0 dB MAX @25C ±1.5 dB MAX @ Over Temperature	See attached Graphs	
8	VIDEO OUT DC Offset:	0 to 125 mV @25C	15mV	
9	VIDEO OUT Rise Time (10% to 90%):	25 ns MAX	15.0ns	
10	VIDEO OUT Settling Time:	±0.5dB within 25ns from 90%	<0.5dB	
11	VIDEO OUT Recovery Time:	500ns MAX	340ns	
12	VIDEO OUT Video Frequency Flatness:	3.0 dB p-p MAX @ -20dBm	2.80dB p-p MAX @ -20dBm	



**Summary Data
For
ERDLVA-218-CW-75MV**

13	VIDEO OUT CW Immunity:	CW Immune Power -50 to -10 dBm	Pass	PMI QA3 }
		CW Attack Time 1500us	1240us	
		CW Release Time 250us	30us	
17	Pulse droop	1dB Max for 250us pulses	<1dB	
18	VIDEO OUT Pulse Response, input Signal:	100 ns to 300 us	100 ns to 300 us	
19	VIDEO LOAD Impedance:	93 ±1 Ω	93Ω	
21	VIDEO OUT Noise Level (RMS):	102 mV max	35.8mV	
22	VIDEO OUT Propagation Delay:	35 ns MAX from RF 10% to 10% video (excluding cable)	17ns	
23	Power Supply	+12 V @ 250 mA MAX -12 V @ 250 mA MAX	+12 V @ 220 mA -12 V @ 70 mA	

QA/QC Approval: *K. Matsumoto*

Date: 11-16-22

LOG TRANSFER WITH FREQUENCY
 MODEL: ERDLVA-218-CW-75MV-93
 TESTED BY: J.Merriner
 DATE: 11-10-22
 SERIAL NO: PL 38408
 Test Temp: -25C



PLANAR MONOLITHICS INDUSTRIES
 4921 Robert J. Mathews Parkway, Suite 1
 El Dorado Hills, CA 95762
 Phone: 916-542-1401 Fax: 301-662-1731
 Email: sales@pmi-rf.com | www.pmi-

RF Input Power (dBm)

-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
-----	-----	-----	-----	-----	-----	-----	----	---	---	----	----	----

2 GHz	INTERCEPT (mV)	3249
	SLOPE (mV/dB)	78.7

150	477	849	1238	1637	2088	2527	2908	3250	3613	4038	4411	4817
49	-18	-39	-44	-38	20	65	53	1	-29	3	-18	-5
0.62	-0.23	-0.50	-0.55	-0.48	0.25	0.83	0.67	0.02	-0.37	0.03	-0.23	-0.07

4.67 GHz	INTERCEPT (mV)	3261
	SLOPE (mV/dB)	77.2

186	545	910	1294	1709	2128	2544	2912	3259	3625	4043	4411	4779
15	-12	-33	-35	-7	26	56	38	-2	-22	10	-8	-27
0.20	-0.15	-0.43	-0.46	-0.09	0.34	0.72	0.49	-0.02	-0.28	0.13	-0.11	-0.34

7.33 GHz	INTERCEPT (mV)	3346
	SLOPE (mV/dB)	77.0

270	657	1021	1394	1825	2221	2615	2959	3330	3692	4110	4502	4904
2	4	-17	-29	18	29	38	-3	-16	-39	-6	1	18
0.02	0.05	-0.22	-0.37	0.23	0.37	0.49	-0.03	-0.21	-0.51	-0.08	0.02	0.24

10 GHz	INTERCEPT (mV)	3271
	SLOPE (mV/dB)	76.6

214	588	951	1331	1754	2151	2536	2902	3248	3630	4050	4418	4795
6	-3	-23	-26	14	29	31	14	-23	-24	14	-1	-7
0.07	-0.04	-0.30	-0.34	0.19	0.37	0.40	0.18	-0.30	-0.31	0.18	-0.02	-0.09

12.67 GHz	INTERCEPT (mV)	3270
	SLOPE (mV/dB)	75.9

230	602	964	1356	1784	2174	2545	2903	3248	3613	4033	4408	4784
-4	-12	-29	-17	32	42	34	12	-22	-36	4	0	-4
-0.06	-0.16	-0.39	-0.22	0.42	0.56	0.45	0.16	-0.29	-0.48	0.05	0.00	-0.05

15.33 GHz	INTERCEPT (mV)	3293
	SLOPE (mV/dB)	75.7

257	640	1004	1389	1819	2200	2553	2905	3256	3631	4066	4438	4811
-9	-4	-19	-12	40	42	17	-9	-37	-40	16	10	5
-0.12	-0.05	-0.24	-0.16	0.52	0.56	0.22	-0.13	-0.49	-0.53	0.22	0.13	0.06

18 GHz	INTERCEPT (mV)	3331
	SLOPE (mV/dB)	77.0

249	630	993	1380	1812	2211	2607	2953	3317	3687	4122	4486	4846
-3	-7	-28	-26	21	35	46	7	-14	-29	21	1	-24
-0.03	-0.08	-0.37	-0.34	0.27	0.45	0.60	0.09	-0.18	-0.37	0.28	0.01	-0.32

Flatness P-P

1.6	2.4	2.2	2.0	2.4	1.8	1.2	0.8	1.0	1.0	1.2	1.2	1.6
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Slope Avg(mv/dB)	76.9
------------------	------

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)

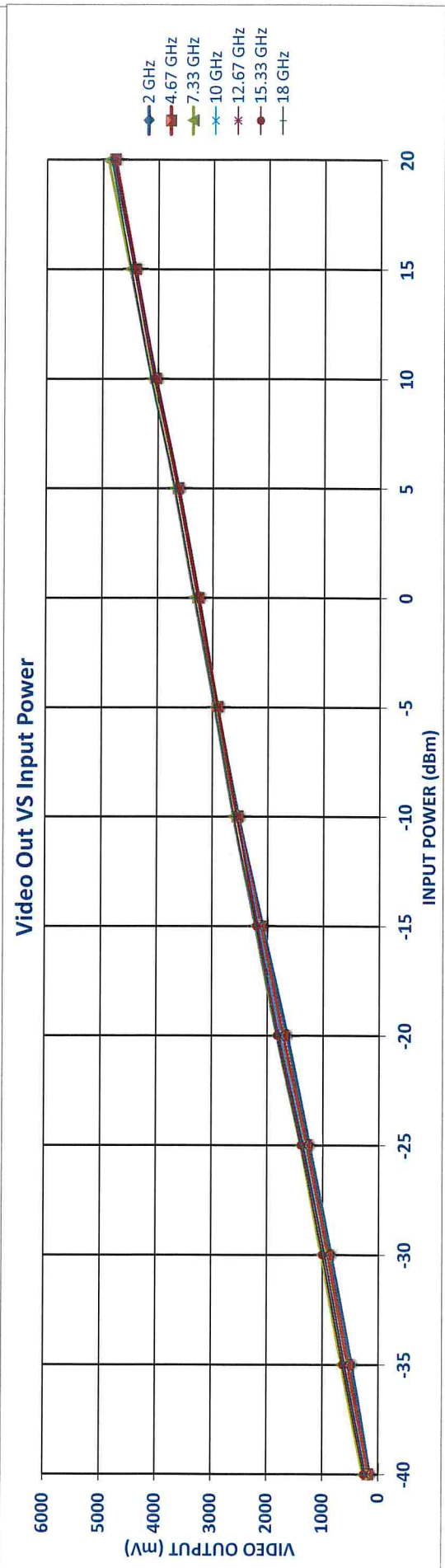
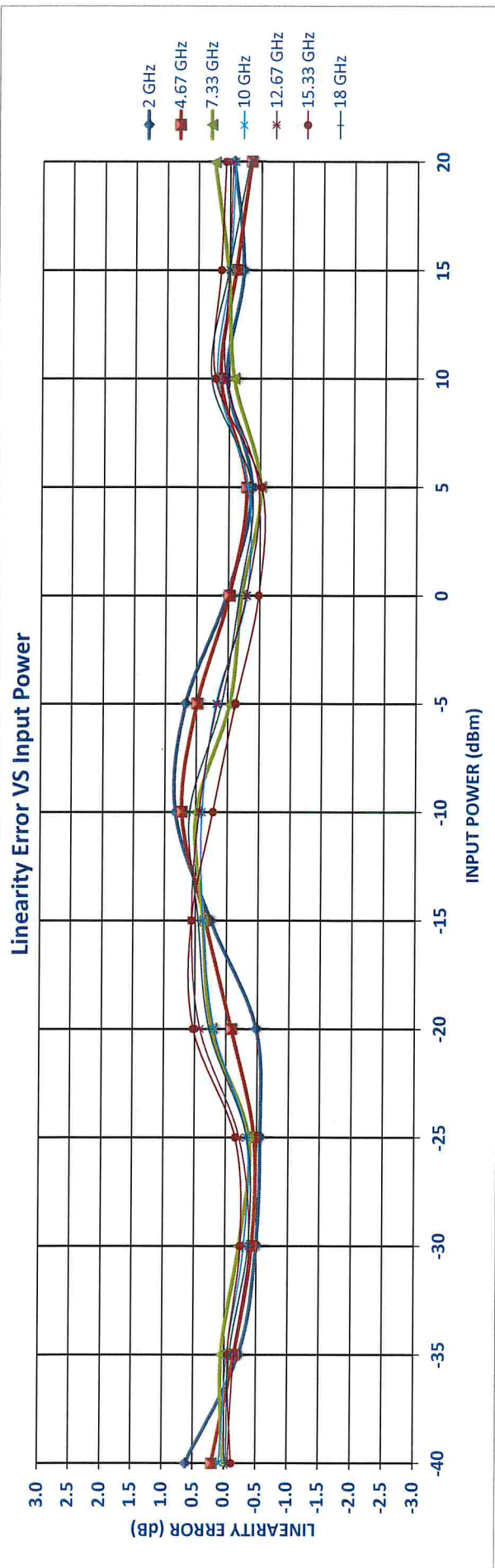
Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)

Measured Value (mV)
Error (mV)
LINEARITY ERROR (dB)

LOG TRANSFER WITH FREQUENCY
 MODEL: ERDLVA-218-CW-75MV-93
 SERIAL NO: PL 38408
 Test Temp: -25C



LOG TRANSFER WITH FREQUENCY
 MODEL: ERDLVA-218-CW-75MV-93
 TESTED BY: J.Merriner
 DATE: 11-10-22
 SERIAL NO: PL 38408
 Test Temp: +85C



PLANAR MONOLITHICS INDUSTRIES
 4921 Robert J. Mathews Parkway, Suite 1
 El Dorado Hills, CA 95762
 Phone: 916-542-1401 Fax: 301-662-1731
 Email: sales@pmi-rf.com | www.pmi-

RF Input Power (dBm)

-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
-----	-----	-----	-----	-----	-----	-----	----	---	---	----	----	----

2 GHz	INTERCEPT (mV)	3164
	SLOPE (mV/dB)	73.6

196	549	944	1321	1707	2067	2493	2872	3197	3522	3881	4212	4611
-26	-41	-13	-4	14	6	64	76	33	-10	-19	-56	-24
-0.35	-0.55	-0.18	-0.06	0.19	0.08	0.88	1.03	0.45	-0.14	-0.26	-0.76	-0.33

4.67 GHz	INTERCEPT (mV)	3181
	SLOPE (mV/dB)	71.9

247	648	1022	1393	1782	2111	2506	2871	3198	3527	3900	4231	4577
-59	-18	-3	9	38	8	43	49	17	-14	0	-28	-42
-0.83	-0.25	-0.04	0.12	0.53	0.11	0.60	0.68	0.23	-0.19	0.00	-0.39	-0.58

7.33 GHz	INTERCEPT (mV)	3246
	SLOPE (mV/dB)	72.0

305	727	1095	1460	1846	2171	2559	2912	3250	3571	3951	4309	4684
-62	0	8	13	40	5	33	26	4	-35	-14	-16	-1
-0.86	0.00	0.11	0.19	0.55	0.07	0.46	0.36	0.06	-0.48	-0.20	-0.23	-0.02

10 GHz	INTERCEPT (mV)	3152
	SLOPE (mV/dB)	72.3

215	595	981	1356	1742	2074	2451	2838	3162	3506	3878	4213	4566
-44	-25	-1	12	36	7	22	47	10	-8	2	-25	-33
-0.60	-0.35	-0.01	0.17	0.50	0.09	0.30	0.65	0.13	-0.11	0.03	-0.34	-0.46

12.67 GHz	INTERCEPT (mV)	3174
	SLOPE (mV/dB)	71.6

242	646	1023	1408	1798	2122	2487	2857	3184	3511	3882	4220	4576
-69	-23	-4	23	56	22	29	41	10	-21	-7	-27	-29
-0.97	-0.32	-0.05	0.33	0.78	0.30	0.40	0.57	0.14	-0.29	-0.10	-0.38	-0.41

15.33 GHz	INTERCEPT (mV)	3214
	SLOPE (mV/dB)	68.8

379	805	1172	1546	1907	2205	2501	2859	3189	3525	3904	4241	4603
-83	-1	22	52	69	23	-25	-11	-25	-33	2	-5	13
-1.20	-0.01	0.32	0.76	1.00	0.34	-0.36	-0.16	-0.36	-0.48	0.03	-0.07	0.19

18 GHz	INTERCEPT (mV)	3243
	SLOPE (mV/dB)	71.6

300	722	1090	1466	1855	2183	2577	2928	3268	3599	3966	4284	4613
-79	-15	-5	13	44	14	50	43	25	-2	7	-33	-62
-1.10	-0.21	-0.07	0.18	0.62	0.20	0.70	0.60	0.35	-0.03	0.10	-0.46	-0.87

Flatness P-P

Slope Avg(mv/dB)	71.7
------------------	------

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	

Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	



PLANAR MONOLITHICS INDUSTRIES
 4921 Robert J. Mathews Parkway, Suite 1
 El Dorado Hills, CA 95762
 Phone: 916-542-1401 Fax: 301-662-1731
 Email: sales@pmi-rf.com | www.pmi-

LOG TRANSFER WITH FREQUENCY
 MODEL: ERDLVA-218-CW-75MV-93
 TESTED BY: J.Merriner
 DATE: 11-10-22
 SERIAL NO: PL 38408
 Test Temp: +25C

RF Input Power (dBm)

-40	-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
-----	-----	-----	-----	-----	-----	-----	----	---	---	----	----	----

Measured Value (mV)	201	541	912	1291	1687	2069	2517	2893	3230	3566	3971	4319	4705
Error (mV)	18	-21	-28	-28	-10	-7	63	61	19	-23	3	-27	-20
LINEARITY ERROR (dB)	0.24	-0.27	-0.37	-0.36	-0.13	-0.09	0.83	0.80	0.25	-0.31	0.04	-0.36	-0.26

Measured Value (mV)	246	614	974	1348	1751	2129	2528	2893	3234	3572	3968	4310	4665
Error (mV)	-12	-15	-25	-21	12	20	49	43	14	-18	8	-20	-35
LINEARITY ERROR (dB)	-0.17	-0.20	-0.33	-0.28	0.16	0.27	0.66	0.59	0.19	-0.24	0.11	-0.27	-0.48

Measured Value (mV)	314	706	1066	1432	1837	2204	2586	2937	3292	3622	4022	4391	4776
Error (mV)	-22	0	-9	-12	23	21	33	15	0	-39	-8	-9	7
LINEARITY ERROR (dB)	-0.30	0.01	-0.12	-0.17	0.31	0.28	0.45	0.20	0.01	-0.53	-0.11	-0.12	0.09

Measured Value (mV)	259	639	998	1370	1775	2139	2516	2881	3223	3574	3971	4314	4677
Error (mV)	-19	-7	-16	-13	24	20	29	25	-1	-18	11	-15	-20
LINEARITY ERROR (dB)	-0.25	-0.10	-0.22	-0.17	0.33	0.27	0.39	0.34	-0.01	-0.25	0.14	-0.20	-0.27

Measured Value (mV)	285	669	1028	1410	1815	2171	2523	2880	3219	3554	3953	4300	4664
Error (mV)	-34	-13	-18	1	43	36	25	19	-5	-33	3	-13	-12
LINEARITY ERROR (dB)	-0.47	-0.19	-0.24	0.02	0.60	0.50	0.35	0.26	-0.07	-0.45	0.04	-0.18	-0.17

Measured Value (mV)	298	688	1048	1426	1831	2186	2529	2884	3228	3573	3980	4325	4689
Error (mV)	-34	-8	-11	3	44	35	15	6	-14	-32	11	-8	-7
LINEARITY ERROR (dB)	-0.47	-0.11	-0.16	0.04	0.61	0.49	0.20	0.08	-0.19	-0.44	0.15	-0.11	-0.10

Measured Value (mV)	297	683	1042	1421	1829	2200	2589	2940	3294	3640	4038	4372	4712
Error (mV)	-29	-12	-23	-13	25	27	46	28	12	-11	17	-18	-48
LINEARITY ERROR (dB)	-0.39	-0.17	-0.31	-0.18	0.34	0.36	0.62	0.37	0.16	-0.15	0.23	-0.25	-0.65

Measured Value (mV)	1.6	2.2	2.0	2.0	2.0	1.8	1.0	0.8	1.0	1.2	1.2	1.2	1.6
---------------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Measured Value (mV)	324	324	324	324	324	324	324	324	324	324	324	324	324
Error (mV)	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7	73.7
LINEARITY ERROR (dB)	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6	72.6

Measured Value (mV)	324	324	324	324	324	324	324	324	324	324	324	324	324
Error (mV)	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
LINEARITY ERROR (dB)	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7

Measured Value (mV)	324	324	324	324	324	324	324	324	324	324	324	324	324
Error (mV)	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
LINEARITY ERROR (dB)	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7

Measured Value (mV)	324	324	324	324	324	324	324	324	324	324	324	324	324
Error (mV)	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7
LINEARITY ERROR (dB)	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7	72.7

Measured Value (mV)	324	324	324	324	324	324	324	324	324	324	324	324	324
Error (mV)	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
LINEARITY ERROR (dB)	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9

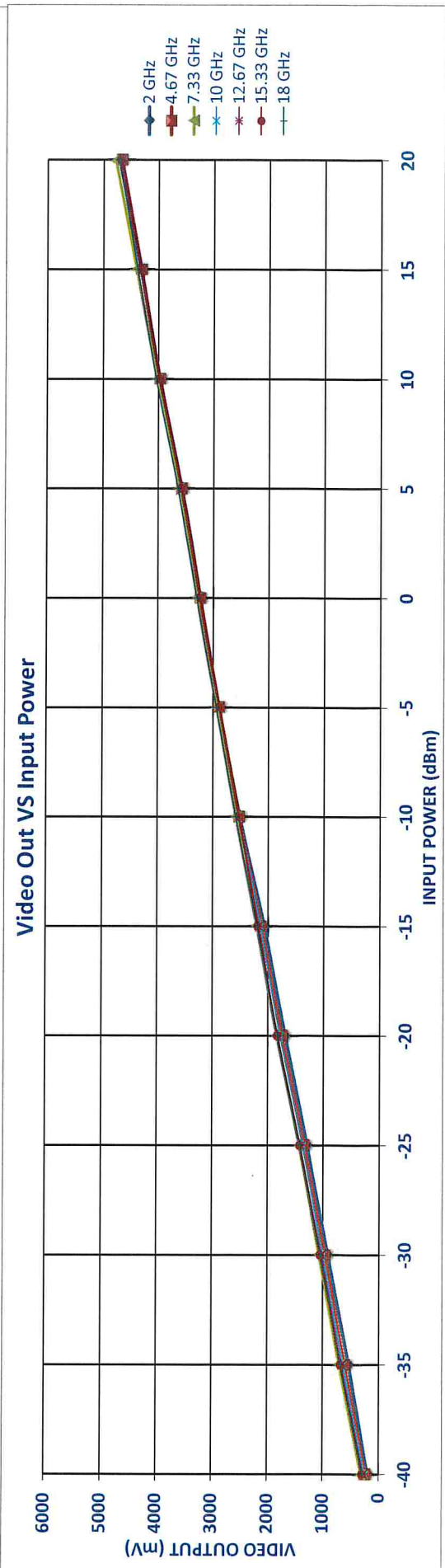
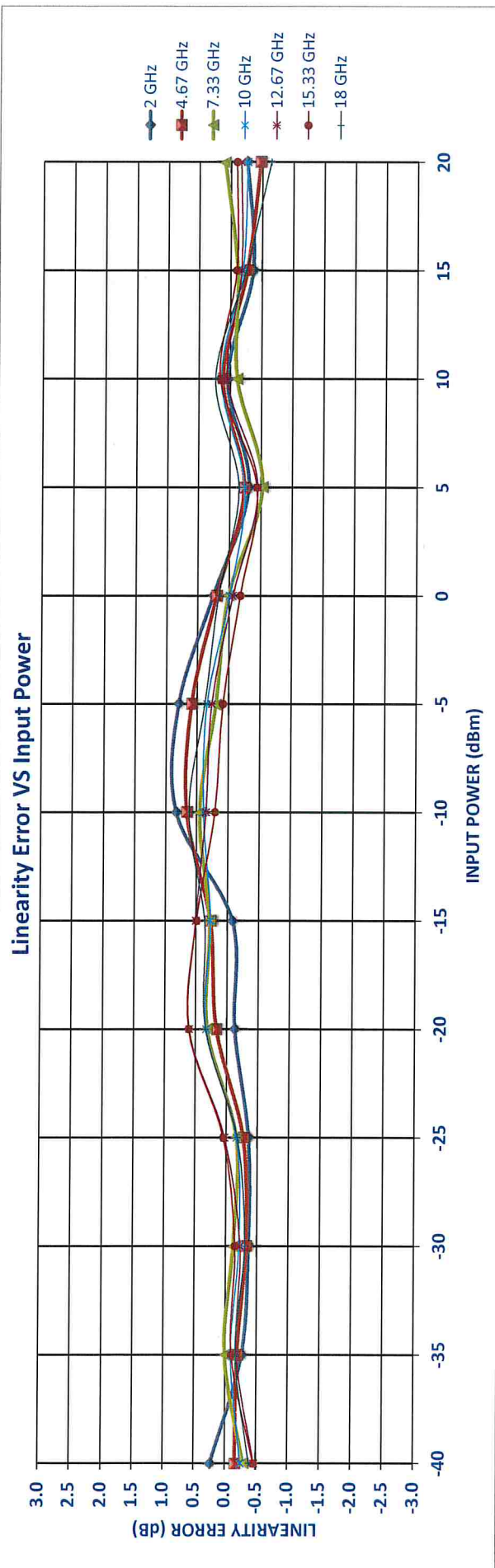
Measured Value (mV)	324	324	324	324	324	324	324	324	324	324	324	324	324
Error (mV)	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9
LINEARITY ERROR (dB)	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9	73.9

Flatness P-P

Flatness P-P	73.8
--------------	------

Slope Avg(mv/dB)	73.8
------------------	------

LOG TRANSFER WITH FREQUENCY
MODEL: ERDLVA-218-CW-75MV-93
SERIAL NO: PL 38408
Test Temp: +25C



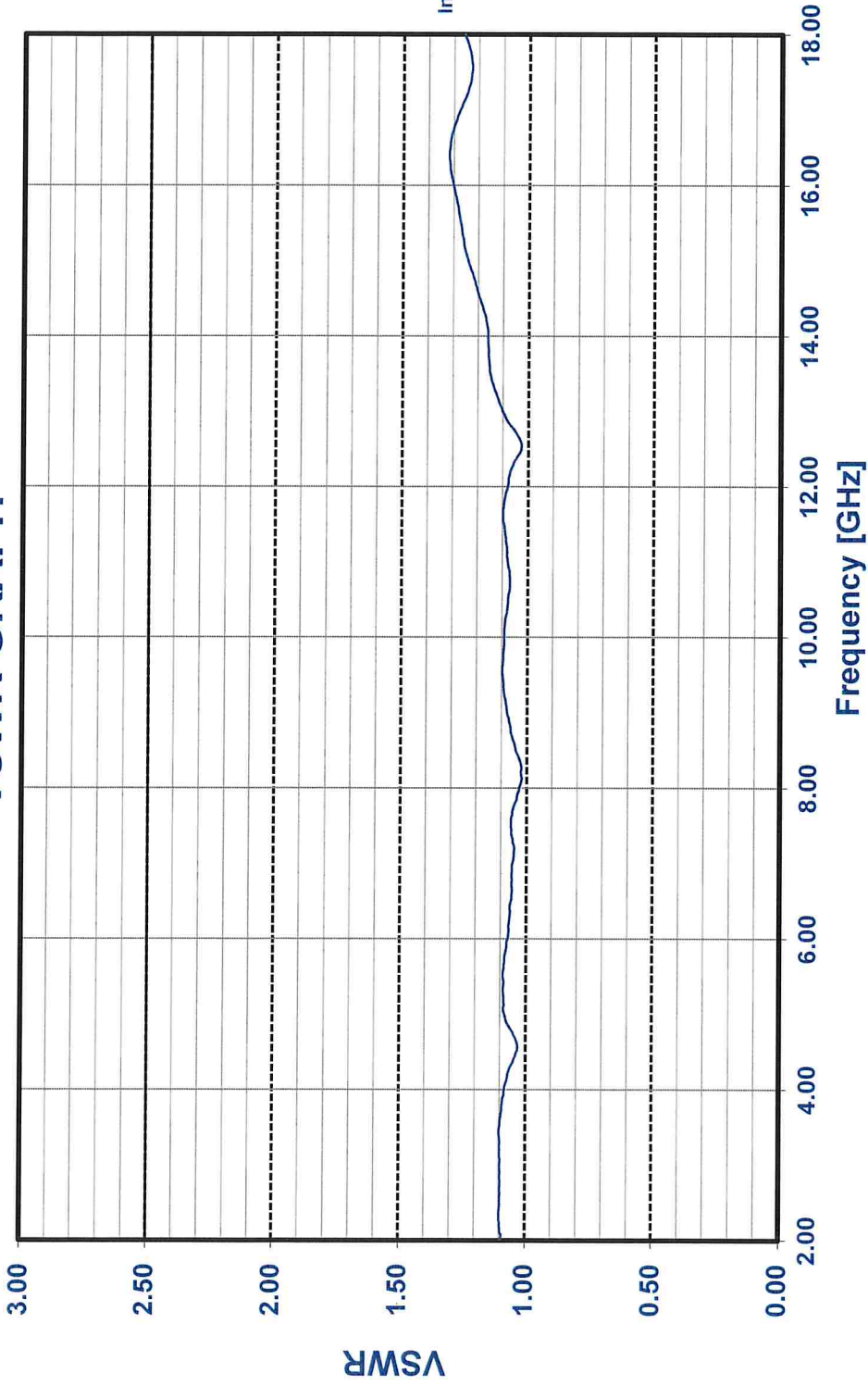
Model Number: ERDLVA-2G18G-CW-75MV-93

Serial Number: PL38408

Date: 11/14/2022

Temperature: +25C

VSWR GRAPH



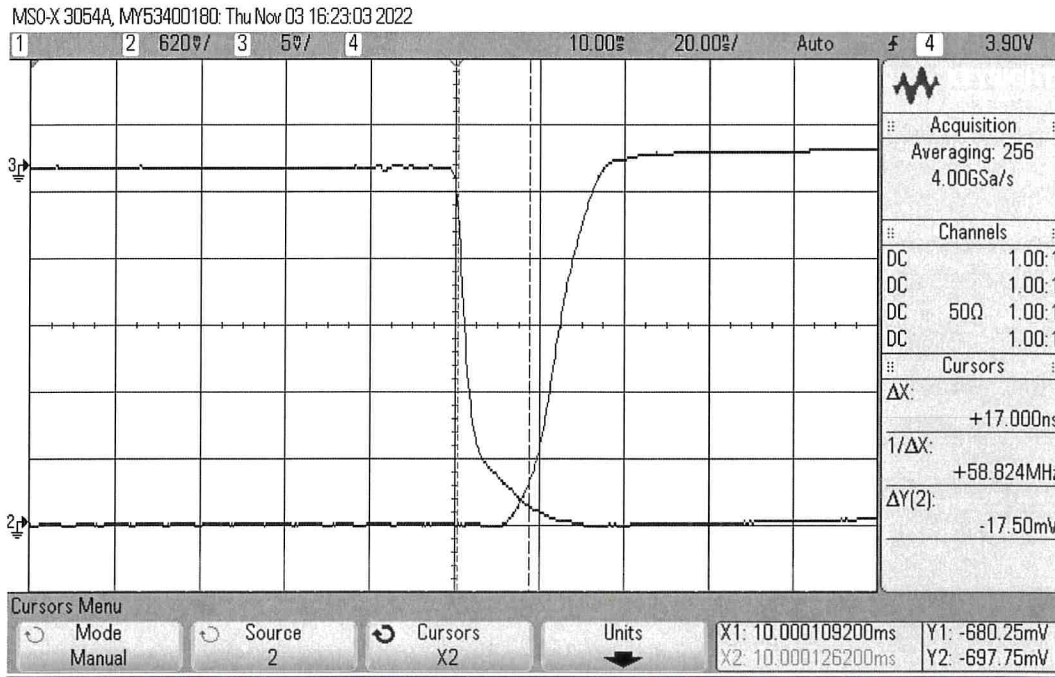
Input VSWR 1.32:1 Max



**SUMMARY TEST DATA
ON
ERDLVA-218-CW-75MV-93**

PL38408/2246

DELAY



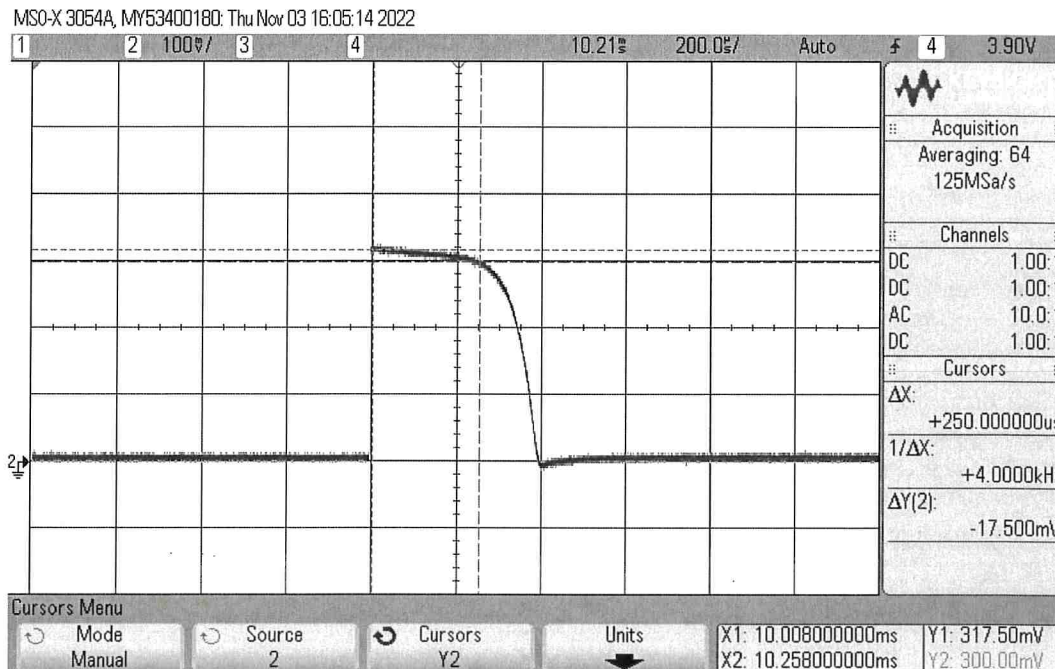
4921 Robert J. Mathews Pkwy Suite 1, El Dorado Hills, CA 95762 USA Phone: (916)542-1401 Fax: (916)265-2597
Email: sales@pmi-rf.com



**SUMMARY TEST DATA
ON
ERDLVA-218-CW-75MV-93**

PL38408/2246

DROOP



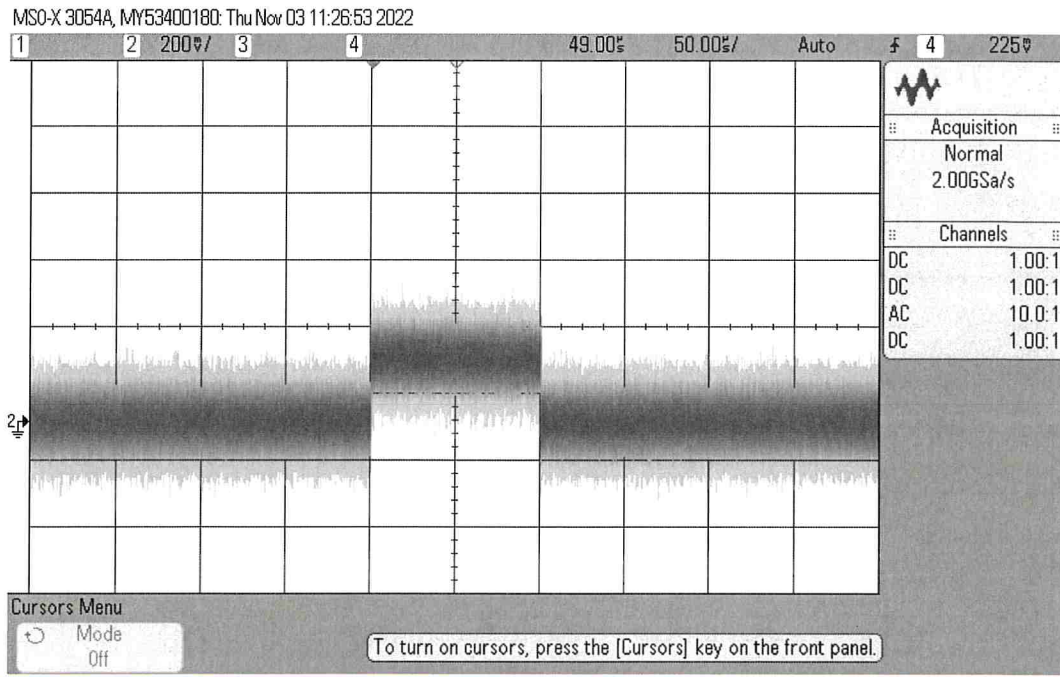
4921 Robert J. Mathews Pkwy Suite 1, El Dorado Hills, CA 95762 USA Phone: (916)542-1401 Fax: (916)265-2597
Email: sales@pmi-rf.com



**SUMMARY TEST DATA
ON
ERDLVA-218-CW-75MV-93**

PL38408/2246

TSS



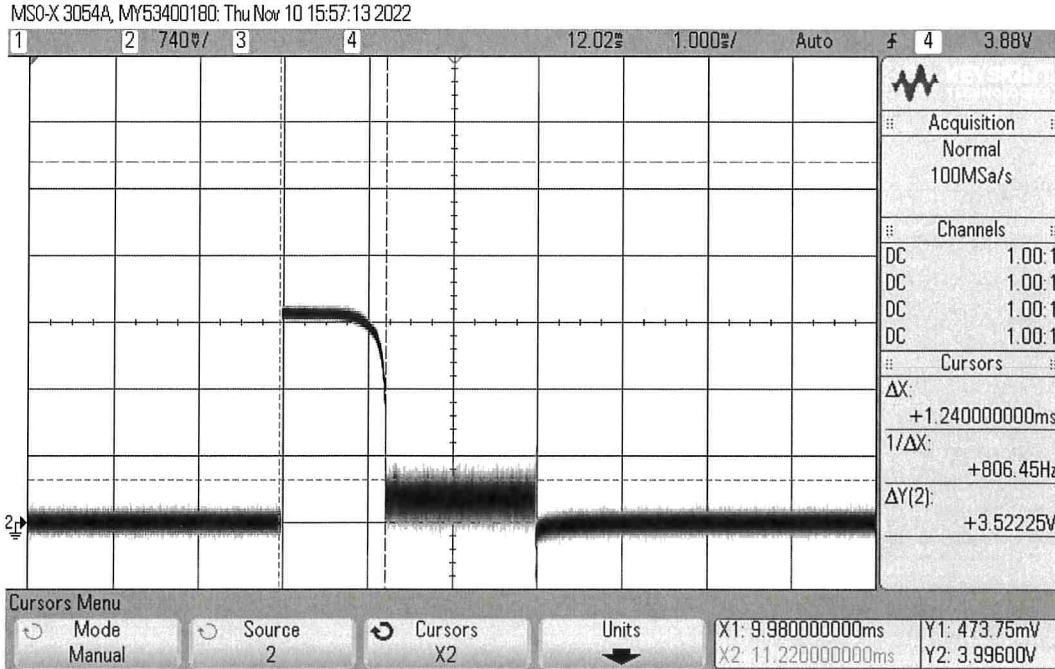
4921 Robert J. Mathews Pkwy Suite 1, El Dorado Hills, CA 95762 USA Phone: (916)542-1401 Fax: (916)265-2597
Email: sales@pmi-rf.com



**SUMMARY TEST DATA
ON
ERDLVA-218-CW-75MV-93**

PL38408/2246

CW ATTACK



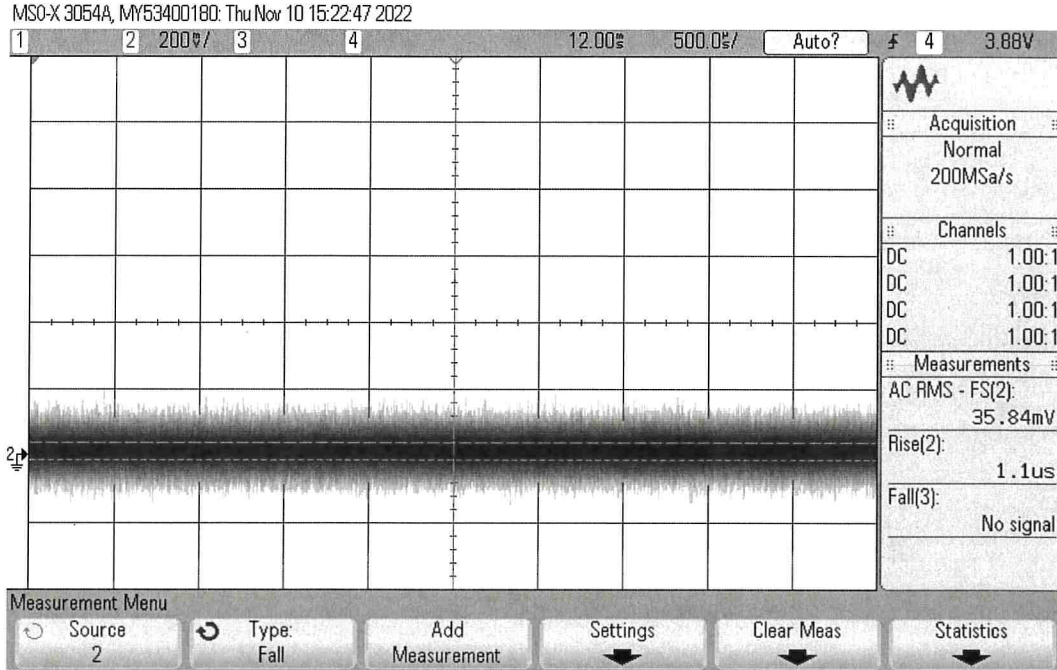
4921 Robert J. Mathews Pkwy Suite 1, El Dorado Hills, CA 95762 USA Phone: (916)542-1401 Fax: (916)265-2597
Email: sales@pmi-rf.com



**SUMMARY TEST DATA
ON
ERDLVA-218-CW-75MV-93**

PL38408/2246

RMS NOISE



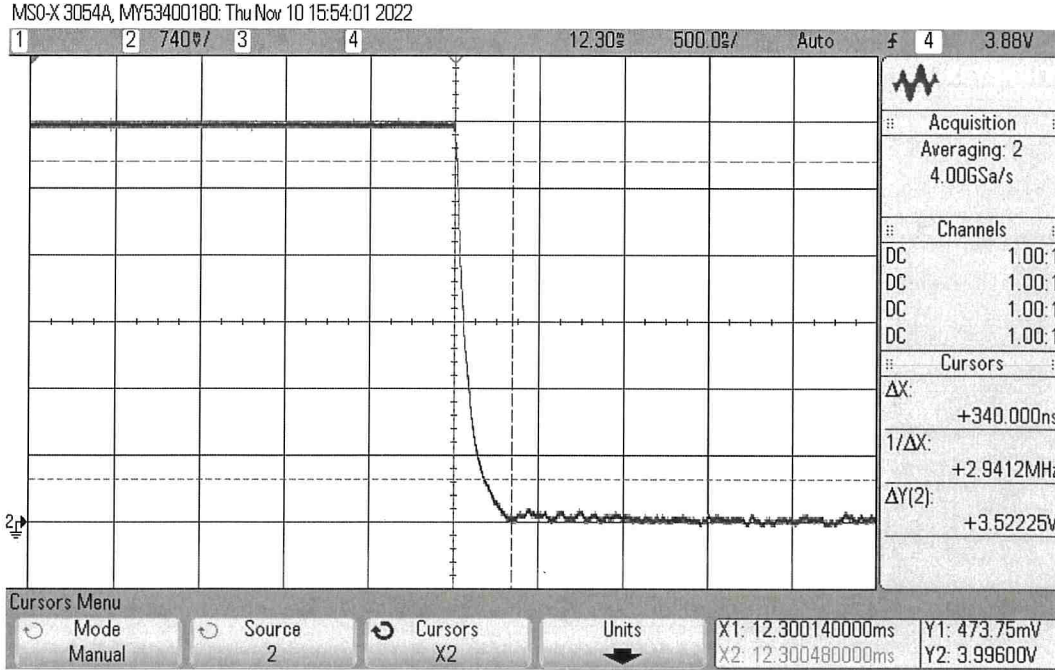
4921 Robert J. Mathews Pkwy Suite 1, El Dorado Hills, CA 95762 USA Phone: (916)542-1401 Fax: (916)265-2597
Email: sales@pmi-rf.com



**SUMMARY TEST DATA
ON
ERDLVA-218-CW-75MV-93**

PL38408/2246

CW RECOVERY



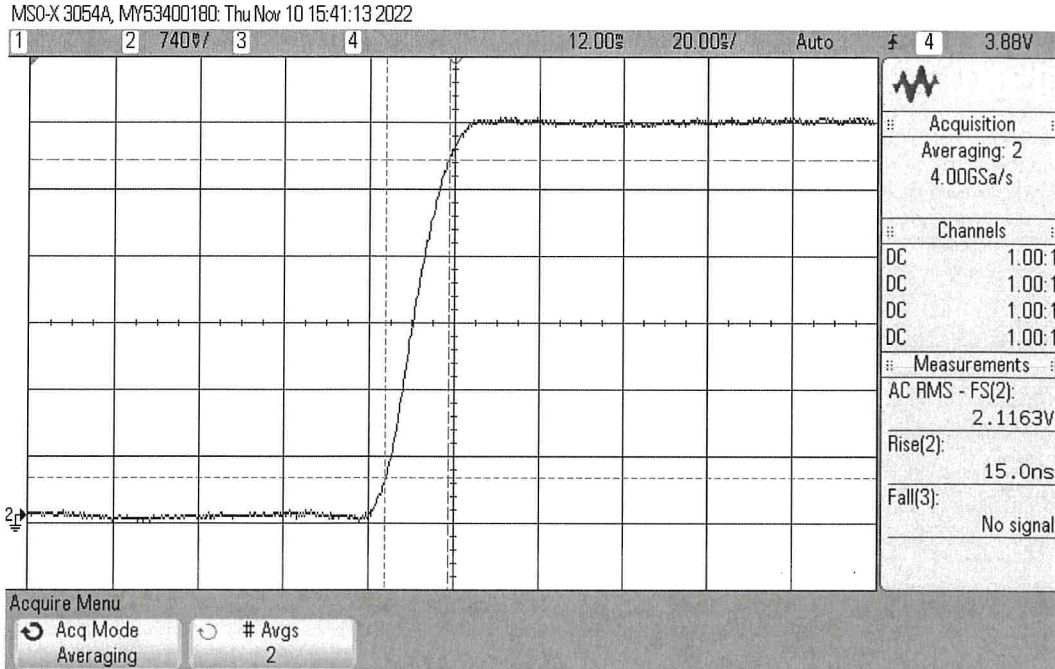
4921 Robert J. Mathews Pkwy Suite 1, El Dorado Hills, CA 95762 USA Phone: (916)542-1401 Fax: (916)265-2597
Email: sales@pmi-rf.com



**SUMMARY TEST DATA
ON
ERDLVA-218-CW-75MV-93**

PL38408/2246

RISE TIME



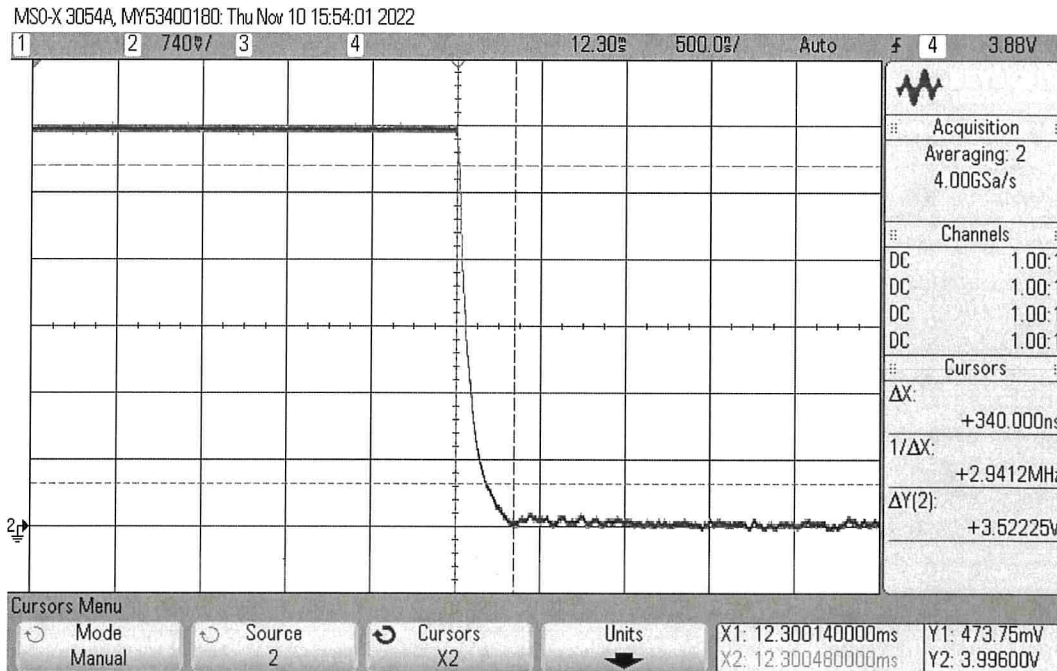
4921 Robert J. Mathews Pkwy Suite 1, El Dorado Hills, CA 95762 USA Phone: (916)542-1401 Fax: (916)265-2597
Email: sales@pmi-rf.com



**SUMMARY TEST DATA
ON
ERDLVA-218-CW-75MV-93**

PL38408/2246

RECOVERY TIME



4921 Robert J. Mathews Pkwy Suite 1, El Dorado Hills, CA 95762 USA Phone: (916)542-1401 Fax: (916)265-2597
Email: sales@pmi-rf.com