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

Customer: [redacted]
SO No: [redacted]
Model No: ERDLVA-2G18G-65-70MV-70C
Serial No: PL49659/2448

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**	PMI QA3
2	VSWR:	2.2:1 MAX @ 50 Ω	**1.65 :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	**70.9 mV/dB** **69.9 mV/dB**	
7	VIDEO OUT Log Linearity:	±1.0 dB MAX @25C	**0.56 dB** **-0.64 dB**	
8	VIDEO OUT Log Accuracy:	±2.3 dB MAX @25C	**0.98 dB** **-1.17 dB**	
9	VIDEO OUT Absolute Log Accuracy:	±2.9 dB MAX Over Freq & temp	**1.08 dB** **-1.17 dB**	
10	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On) @25C	**18 mV**	
11	VIDEO OUT Rise Time (10% to 90%):	28 ns MAX	**22.5 ns**	
12	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	**188.8 ns**	

7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
Website: www.pmi-rf.com Email: sales@pmi-rf.com

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

13	VIDEO OUT Settling Time:	50 ns With in ±70 mV of final value @-10 dBm	**23.8 ns**	PMI QA3
14	VIDEO OUT Recovery Time:	1 us MAX to within 1 dB of baseline for PW <10us & Power = -10dBm	**0.425 us**	
15	VIDEO OUT Video Frequency Flatness:	±2.0 dB MAX @25C	**± 0.87 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	**1.39 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	**75Ω**	
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	**144.1 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. Klaus Date: 11-25-24

7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
Website: www.pmi-rf.com Email: sales@pmi-rf.com

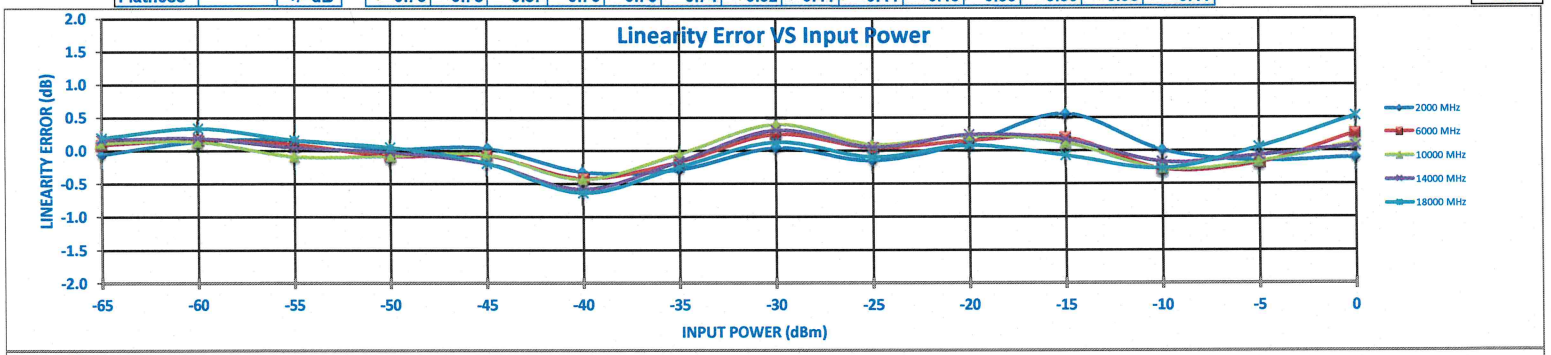
Summary Data
For
ERDLVA-2G18G-65-70MV-70C

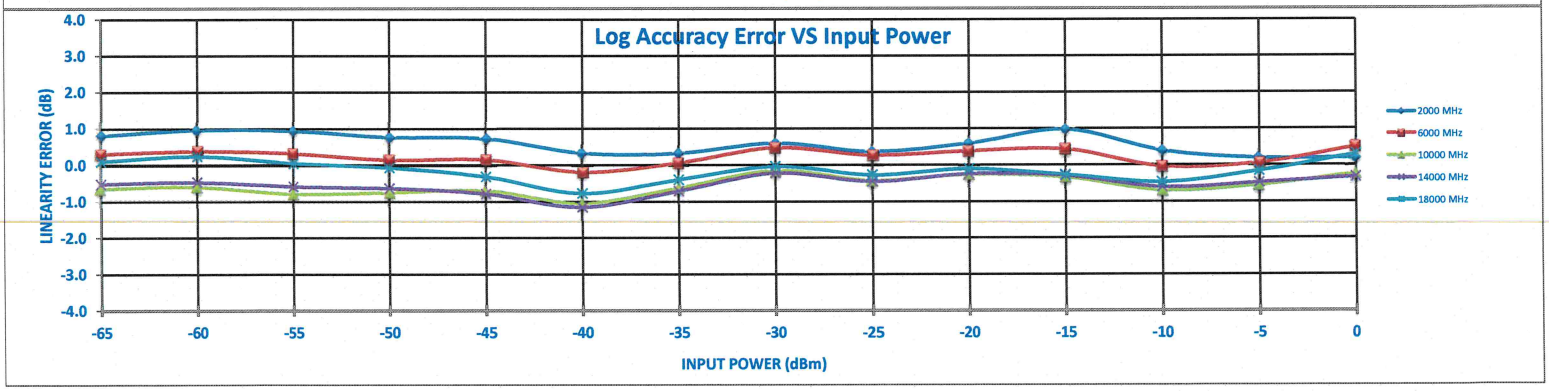
LOG TRANSFER WITH FREQUENCY

TESTED BY: Anton L.
MODEL: ERDLVA-2G18G-65-70MV-70C
SERIAL NO: PL49659/2448
DATE: 11/25/2024

Test Temp: 25 °C
Video Offset: 18 mV

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)	
2000 MHz	INTERCEPT (mV)	4920	375	738	1089	1429	1779	2103	2455	2827	3163	3531	3911	4222	4560	4913	Measured Value (mV)	
	SLOPE (mV/dB)	69.9	-4	9	11	2	3	-23	-20	3	-11	8	39	1	-11	-7	Error (mV)	
			-0.06	0.13	0.16	0.03	0.04	-0.33	-0.29	0.04	-0.15	0.12	0.56	0.01	-0.15	-0.10	LINEARITY ERROR (dB)	0.56
			0.80	0.95	0.93	0.76	0.73	0.32	0.32	0.60	0.36	0.58	0.98	0.39	0.19	0.19	ACCURACY ERROR (dB)	0.98
6000 MHz	INTERCEPT (mV)	4916	339	697	1045	1385	1738	2066	2436	2818	3156	3516	3872	4191	4550	4934	Measured Value (mV)	
	SLOPE (mV/dB)	70.5	6	11	7	-6	-5	-30	-12	17	3	10	14	-20	-13	18	Error (mV)	
			0.08	0.16	0.10	-0.08	-0.07	-0.42	-0.17	0.24	0.04	0.15	0.20	-0.28	-0.19	0.26	LINEARITY ERROR (dB)	-0.42
			0.29	0.37	0.31	0.13	0.14	-0.20	0.05	0.47	0.26	0.37	0.42	-0.05	0.04	0.49	ACCURACY ERROR (dB)	0.49
10000 MHz	INTERCEPT (mV)	4874	272	628	967	1322	1678	2006	2388	2774	3107	3471	3818	4145	4507	4882	Measured Value (mV)	
	SLOPE (mV/dB)	70.9	8	9	-6	-6	-5	-31	-4	28	6	16	8	-19	-12	8	Error (mV)	
			0.11	0.13	-0.09	-0.08	-0.06	-0.44	-0.05	0.39	0.09	0.22	0.11	-0.27	-0.17	0.12	LINEARITY ERROR (dB)	-0.44
			-0.66	-0.61	-0.80	-0.76	-0.71	-1.05	-0.63	-0.16	-0.43	-0.27	-0.34	-0.70	-0.57	-0.25	ACCURACY ERROR (dB)	-1.05
14000 MHz	INTERCEPT (mV)	4871	281	637	981	1330	1672	1998	2382	2769	3105	3472	3821	4151	4512	4876	Measured Value (mV)	
	SLOPE (mV/dB)	70.8	11	13	3	-2	-14	-42	-12	22	4	17	12	-12	-5	5	Error (mV)	
			0.16	0.18	0.04	-0.02	-0.19	-0.59	-0.16	0.30	0.05	0.24	0.17	-0.17	-0.07	0.07	LINEARITY ERROR (dB)	-0.59
			-0.53	-0.48	-0.60	-0.65	-0.79	-1.17	-0.72	-0.23	-0.46	-0.25	-0.30	-0.62	-0.50	-0.33	ACCURACY ERROR (dB)	-1.17
18000 MHz	INTERCEPT (mV)	4883	325	687	1026	1370	1705	2025	2404	2782	3118	3482	3823	4161	4535	4920	Measured Value (mV)	
	SLOPE (mV/dB)	70.3	13	24	11	3	-13	-45	-18	9	-7	6	-5	-19	4	37	Error (mV)	
			0.19	0.34	0.16	0.05	-0.19	-0.64	-0.25	0.13	-0.10	0.08	-0.07	-0.27	0.05	0.53	LINEARITY ERROR (dB)	-0.64
			0.09	0.23	0.04	-0.08	-0.32	-0.78	-0.41	-0.04	-0.28	-0.11	-0.27	-0.48	-0.17	0.29	ACCURACY ERROR (dB)	-0.78
	Flatness	+/- dB	0.73	0.78	0.87	0.76	0.76	0.74	0.52	0.41	0.41	0.43	0.66	0.55	0.38	0.41		0.87





7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
Website: www.pmi-rf.com Email: sales@pmi-rf.com

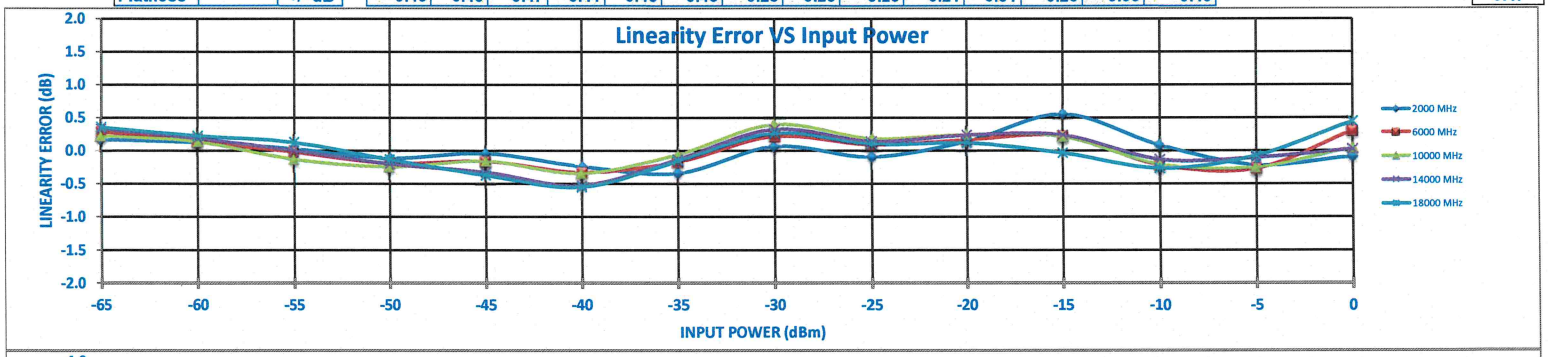
Summary Data
For
ERDLVA-2G18G-65-70MV-70C

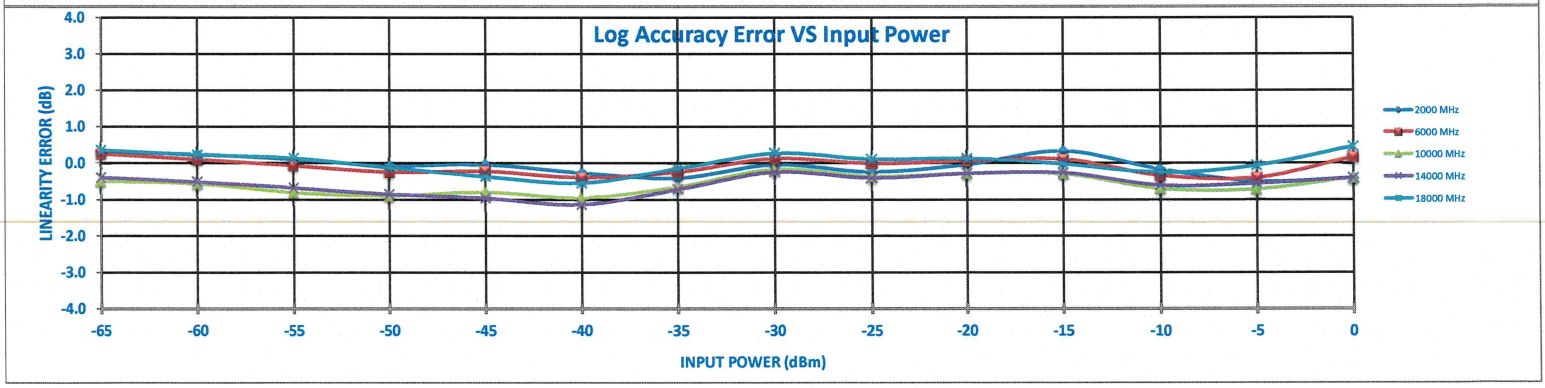
LOG TRANSFER WITH FREQUENCY

TESTED BY: Anton L.
MODEL: ERDLVA-2G18G-65-70MV-70C
SERIAL NO: PL49659/2448
DATE: 11/25/2024

Test Temp: -40 °C
Video Offset: -67 mV

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)	
2000 MHz	INTERCEPT (mV)	4788	264	610	952	1291	1645	1980	2322	2699	3037	3402	3780	4096	4424	4782	Measured Value (mV)	
	SLOPE (mV/dB)	69.8	11	9	2	-8	-3	-17	-24	4	-7	10	39	6	-15	-6	Error (mV)	
			0.16	0.12	0.02	-0.12	-0.04	-0.24	-0.34	0.06	-0.09	0.14	0.55	0.08	-0.22	-0.09	LINEARITY ERROR (dB)	0.55
			0.31	0.23	0.10	-0.08	-0.05	-0.28	-0.41	-0.05	-0.24	-0.05	0.33	-0.18	-0.51	-0.42	ACCURACY ERROR (dB)	-0.51
6000 MHz	INTERCEPT (mV)	4801	260	600	940	1279	1632	1971	2333	2711	3053	3409	3764	4084	4431	4822	Measured Value (mV)	
	SLOPE (mV/dB)	70.2	20	9	-2	-14	-11	-23	-12	15	6	11	15	-16	-19	21	Error (mV)	
			0.29	0.13	-0.02	-0.19	-0.16	-0.33	-0.17	0.21	0.09	0.16	0.22	-0.22	-0.28	0.29	LINEARITY ERROR (dB)	-0.33
			0.25	0.09	-0.08	-0.25	-0.23	-0.41	-0.26	0.12	-0.01	0.05	0.10	-0.35	-0.41	0.15	ACCURACY ERROR (dB)	-0.41
10000 MHz	INTERCEPT (mV)	4780	207	554	888	1233	1592	1932	2305	2690	3028	3385	3736	4059	4409	4783	Measured Value (mV)	
	SLOPE (mV/dB)	70.6	15	9	-10	-17	-11	-24	-4	28	13	17	15	-15	-18	3	Error (mV)	
			0.22	0.13	-0.13	-0.25	-0.16	-0.35	-0.06	0.39	0.18	0.24	0.21	-0.21	-0.25	0.04	LINEARITY ERROR (dB)	0.39
			-0.50	-0.57	-0.82	-0.91	-0.80	-0.96	-0.66	-0.18	-0.37	-0.29	-0.30	-0.70	-0.72	-0.40	ACCURACY ERROR (dB)	-0.96
14000 MHz	INTERCEPT (mV)	4781	214	557	897	1236	1580	1919	2300	2685	3025	3385	3738	4065	4420	4782	Measured Value (mV)	
	SLOPE (mV/dB)	70.6	23	13	0	-14	-23	-37	-9	23	10	16	16	-10	-8	1	Error (mV)	
			0.32	0.18	0.00	-0.20	-0.33	-0.53	-0.13	0.32	0.13	0.23	0.23	-0.14	-0.11	0.02	LINEARITY ERROR (dB)	-0.53
			-0.40	-0.52	-0.69	-0.86	-0.97	-1.15	-0.73	-0.25	-0.41	-0.29	-0.27	-0.62	-0.57	-0.42	ACCURACY ERROR (dB)	-1.15
18000 MHz	INTERCEPT (mV)	4812	267	609	954	1287	1622	1961	2340	2721	3061	3414	3755	4090	4455	4843	Measured Value (mV)	
	SLOPE (mV/dB)	70.3	25	15	9	-10	-26	-39	-11	18	7	8	-2	-19	-5	31	Error (mV)	
			0.35	0.22	0.12	-0.14	-0.37	-0.55	-0.16	0.26	0.09	0.12	-0.03	-0.27	-0.08	0.44	LINEARITY ERROR (dB)	-0.55
			0.35	0.22	0.12	-0.14	-0.37	-0.55	-0.16	0.26	0.10	0.12	-0.03	-0.26	-0.07	0.45	ACCURACY ERROR (dB)	-0.55
	Flatness	+/- dB	0.43	0.40	0.47	0.41	0.46	0.43	0.28	0.26	0.26	0.21	0.31	0.26	0.33	0.43		0.47





7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
Website: www.pmi-rf.com Email: sales@pmi-rf.com

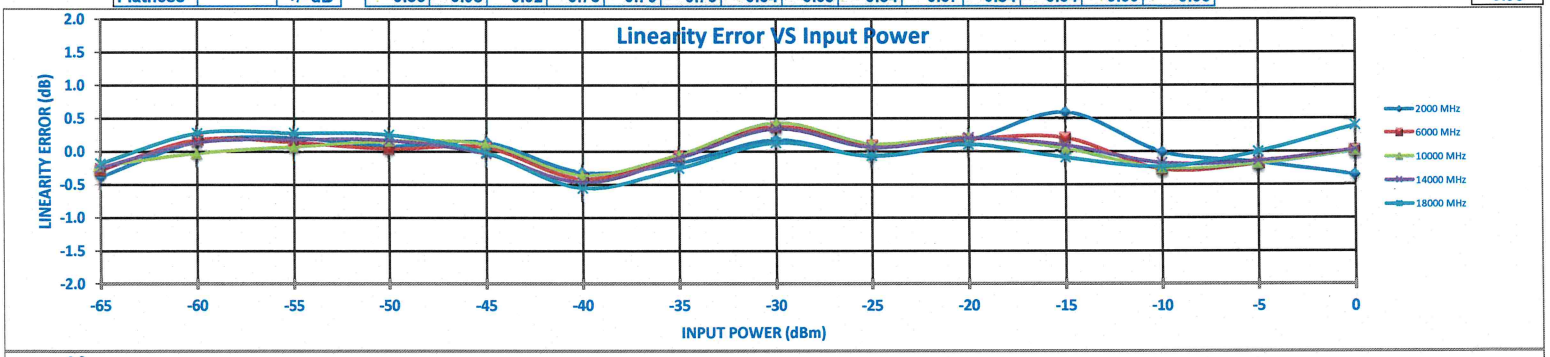
Summary Data
For
ERDLVA-2G18G-65-70MV-70C

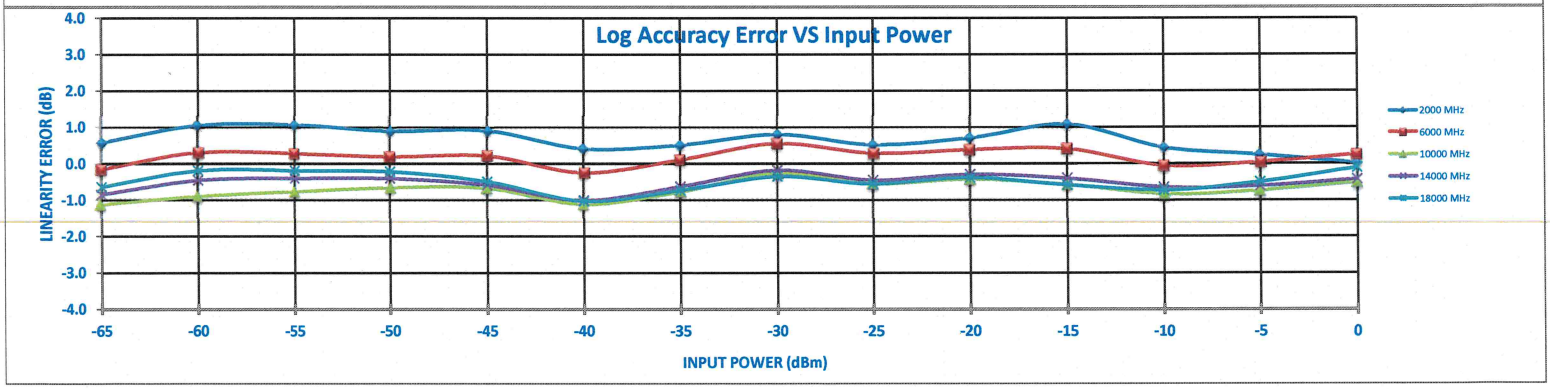
LOG TRANSFER WITH FREQUENCY

TESTED BY: Anton L.
MODEL: ERDLVA-2G18G-65-70MV-70C
SERIAL NO: PL49659/2448
DATE: 11/25/2024

Test Temp: 70 °C
Video Offset: 6 mV

Frequency			-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	RF Input Power (dBm)	
2000 MHz	INTERCEPT (mV)	4930	355	742	1096	1437	1791	2109	2469	2843	3176	3542	3922	4230	4569	4906	Measured Value (mV)	
	SLOPE (mV/dB)	70.0	-27	10	14	5	9	-22	-12	12	-5	11	41	-1	-12	-24	Error (mV)	
			-0.39	0.14	0.20	0.08	0.14	-0.32	-0.18	0.17	-0.07	0.16	0.59	-0.01	-0.16	-0.35	LINEARITY ERROR (dB)	0.59
			0.57	1.05	1.06	0.89	0.90	0.40	0.50	0.80	0.51	0.70	1.08	0.44	0.24	0.01	ACCURACY ERROR (dB)	1.08
6000 MHz	INTERCEPT (mV)	4921	303	689	1040	1387	1742	2062	2440	2825	3159	3519	3874	4194	4554	4922	Measured Value (mV)	
	SLOPE (mV/dB)	70.7	-20	12	9	3	4	-30	-5	26	6	13	14	-20	-13	1	Error (mV)	
			-0.29	0.17	0.13	0.04	0.06	-0.42	-0.08	0.37	0.09	0.18	0.20	-0.28	-0.19	0.01	LINEARITY ERROR (dB)	-0.42
			-0.17	0.30	0.27	0.18	0.21	-0.26	0.09	0.54	0.27	0.37	0.40	-0.07	0.03	0.24	ACCURACY ERROR (dB)	0.54
10000 MHz	INTERCEPT (mV)	4868	235	604	966	1327	1679	2001	2378	2767	3100	3462	3805	4139	4499	4868	Measured Value (mV)	
	SLOPE (mV/dB)	71.0	-16	-2	5	11	8	-26	-4	30	8	15	3	-18	-13	0	Error (mV)	
			-0.23	-0.03	0.07	0.15	0.11	-0.36	-0.05	0.42	0.11	0.21	0.04	-0.26	-0.19	0.01	LINEARITY ERROR (dB)	0.42
			-1.13	-0.91	-0.78	-0.67	-0.68	-1.12	-0.79	-0.28	-0.56	-0.44	-0.58	-0.85	-0.75	-0.52	ACCURACY ERROR (dB)	-1.13
14000 MHz	INTERCEPT (mV)	4872	254	635	992	1345	1685	2008	2388	2773	3107	3471	3817	4152	4508	4874	Measured Value (mV)	
	SLOPE (mV/dB)	70.8	-18	9	12	12	-2	-33	-7	24	4	14	6	-13	-10	2	Error (mV)	
			-0.25	0.13	0.18	0.16	-0.03	-0.47	-0.10	0.34	0.06	0.20	0.09	-0.18	-0.15	0.02	LINEARITY ERROR (dB)	-0.47
			-0.86	-0.47	-0.41	-0.41	-0.60	-1.03	-0.64	-0.19	-0.46	-0.31	-0.41	-0.66	-0.62	-0.44	ACCURACY ERROR (dB)	-1.03
18000 MHz	INTERCEPT (mV)	4869	269	654	1007	1358	1692	2007	2381	2761	3100	3465	3804	4147	4516	4897	Measured Value (mV)	
	SLOPE (mV/dB)	70.6	-13	19	19	17	-1	-39	-18	9	-5	7	-7	-16	0	28	Error (mV)	
			-0.18	0.27	0.27	0.25	-0.02	-0.56	-0.26	0.13	-0.07	0.10	-0.09	-0.23	0.00	0.39	LINEARITY ERROR (dB)	-0.56
			-0.65	-0.20	-0.20	-0.23	-0.50	-1.04	-0.74	-0.36	-0.56	-0.39	-0.59	-0.73	-0.51	-0.11	ACCURACY ERROR (dB)	-1.04
	Flatness	+/- dB	0.85	0.98	0.92	0.78	0.79	0.76	0.64	0.58	0.54	0.57	0.84	0.64	0.50	0.38		0.98



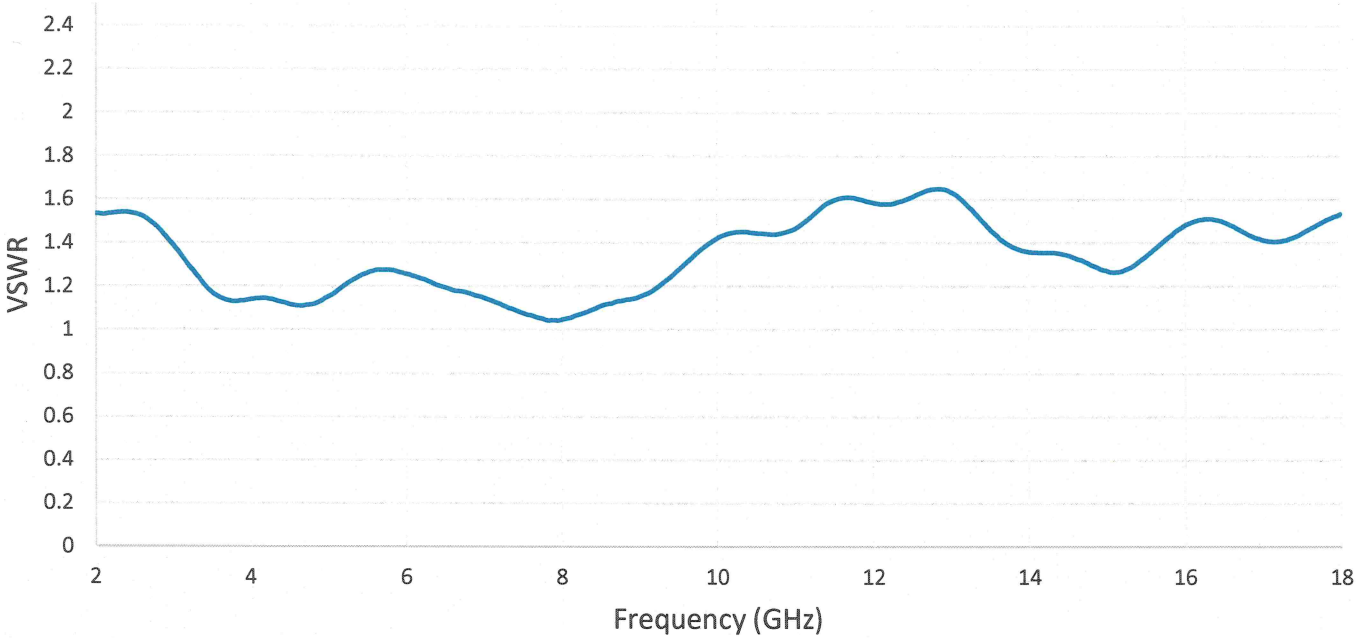


7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
Website: www.pmi-rf.com Email: sales@pmi-rf.com

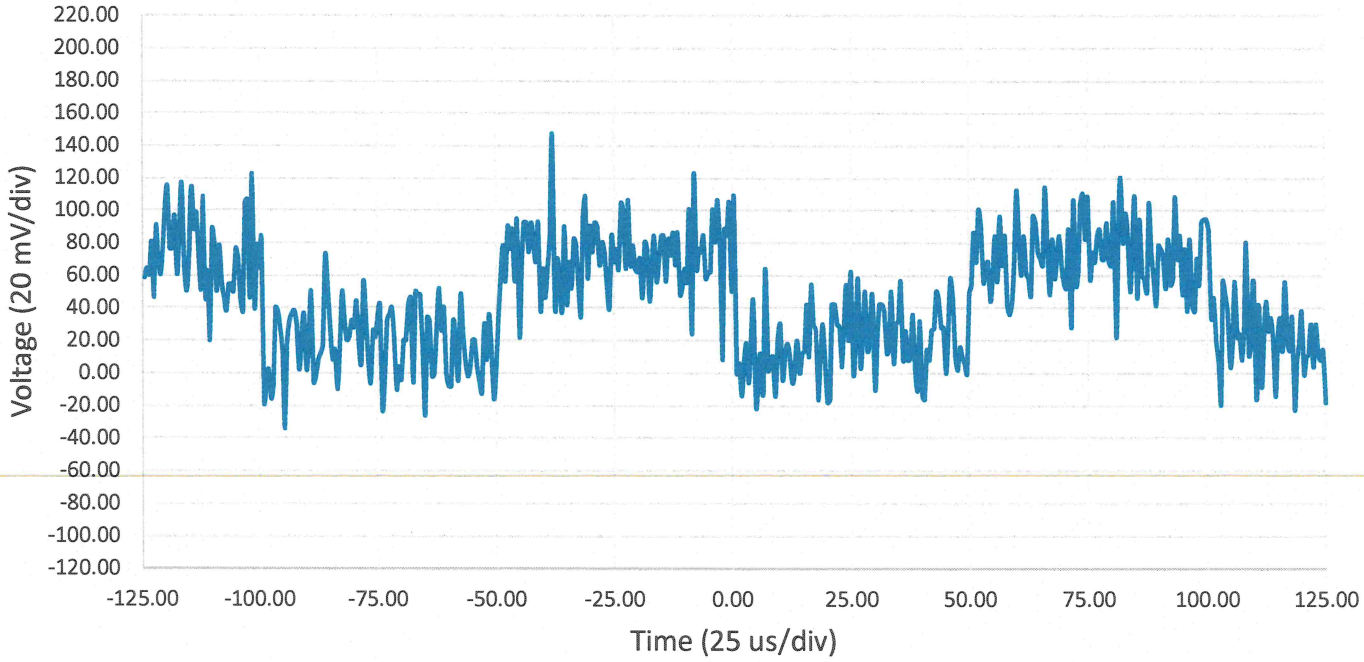
Summary Data
For
ERDLVA-2G18G-65-70MV-70C

PL49659/2448

VSWR 1.65:1



TSS @ -71.7 dBm

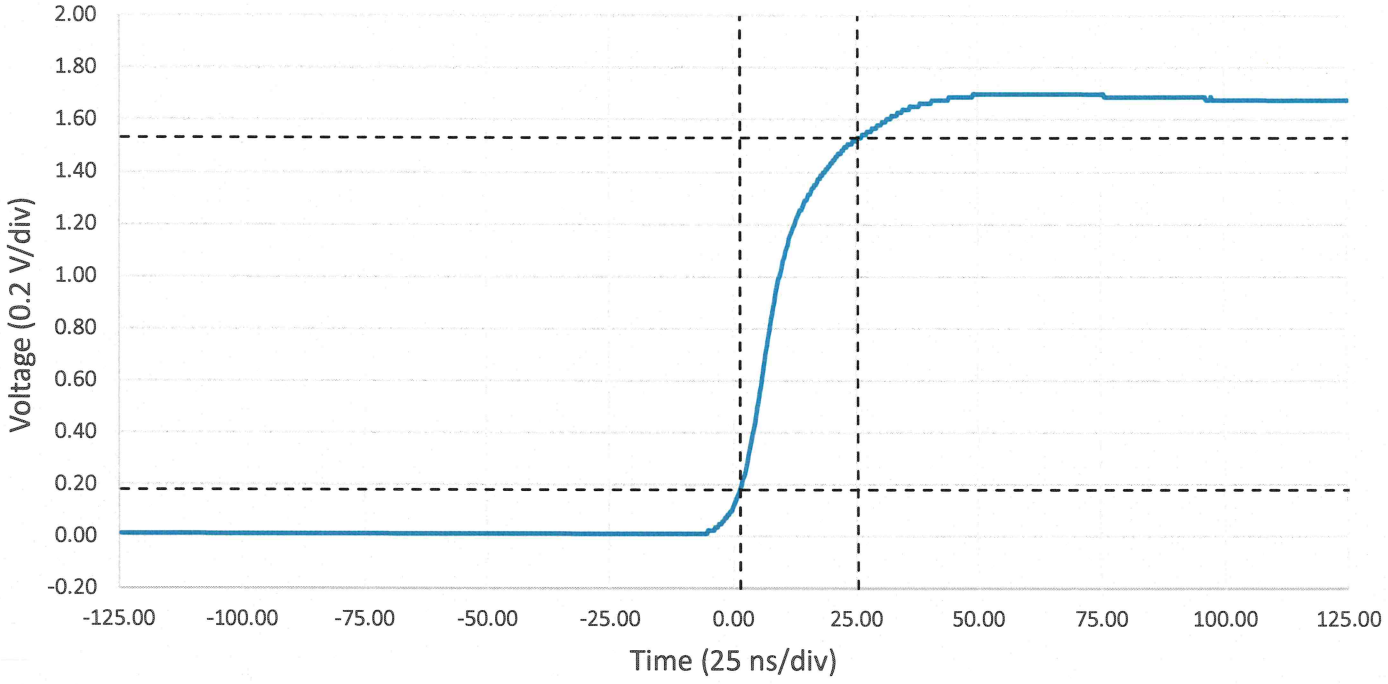


7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
Website: www.pmi-rf.com Email: sales@pmi-rf.com

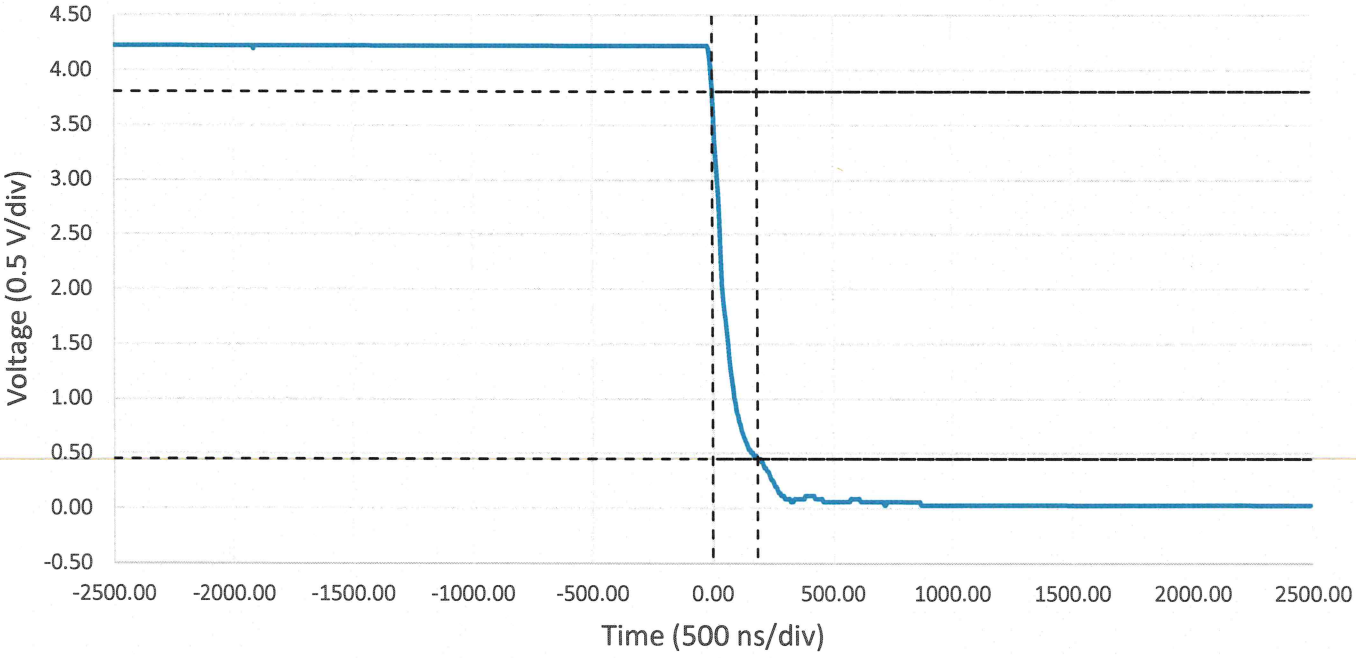
Summary Data
For
ERDLVA-2G18G-65-70MV-70C

PL49659/2448

Rise time 22.5 ns



Fall time 188.8 ns

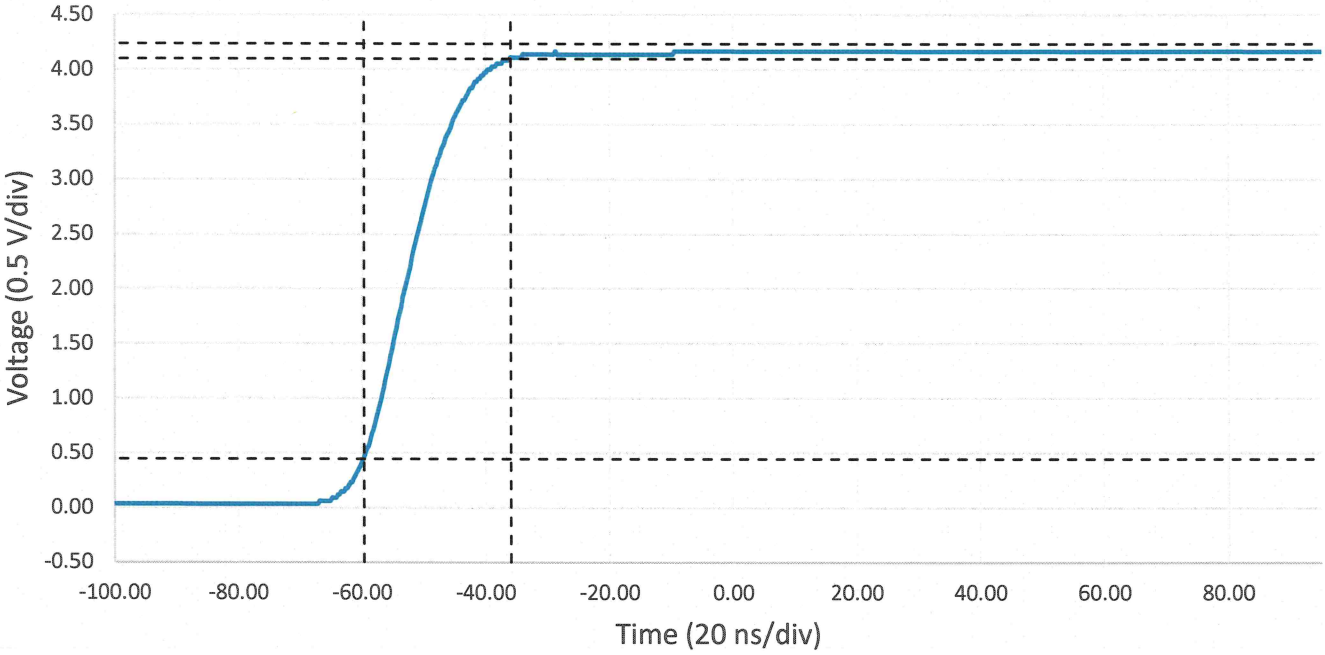


7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
Website: www.pmi-rf.com Email: sales@pmi-rf.com

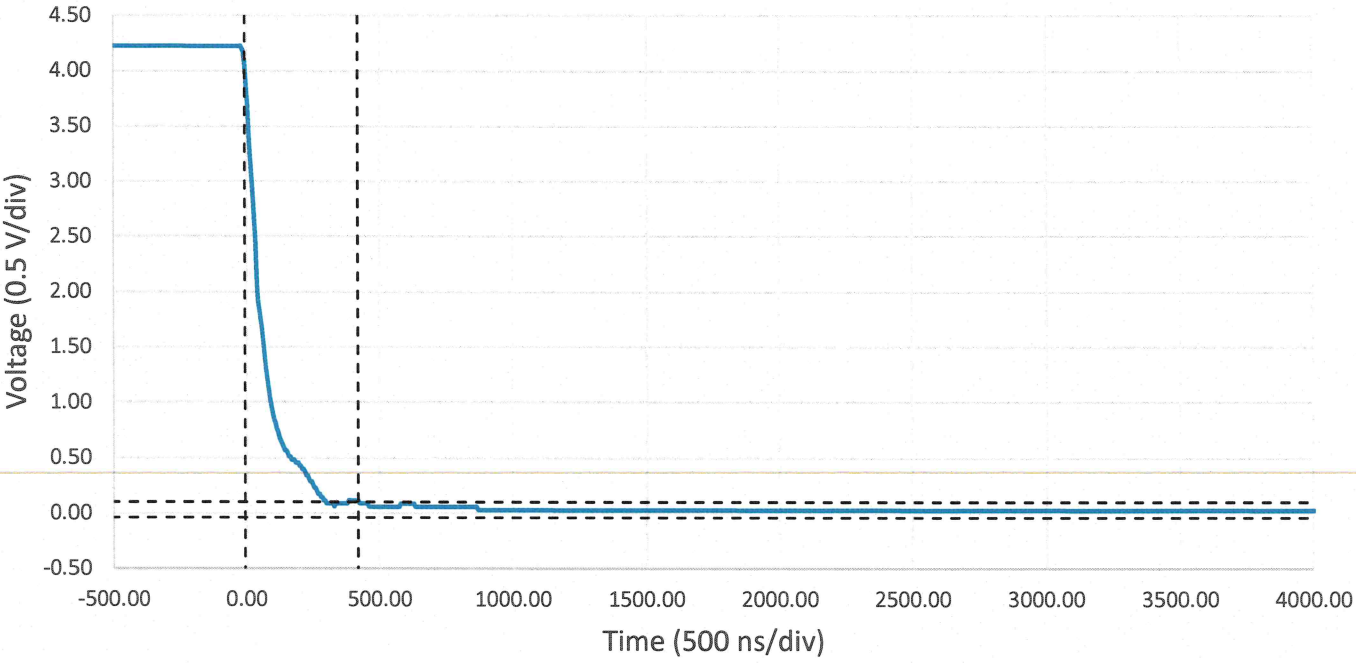
Summary Data
For
ERDLVA-2G18G-65-70MV-70C

PL49659/2448

Settle time 23.8 ns



Recovery time 425 ns

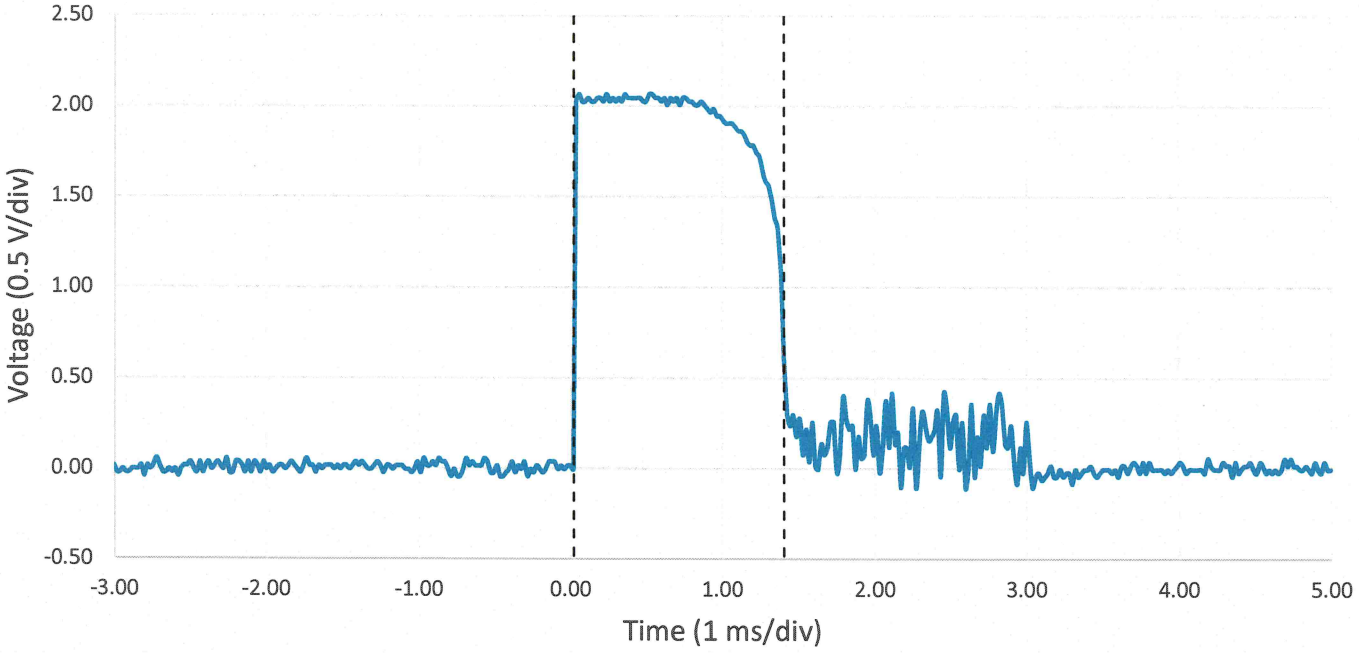


7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
Website: www.pmi-rf.com Email: sales@pmi-rf.com

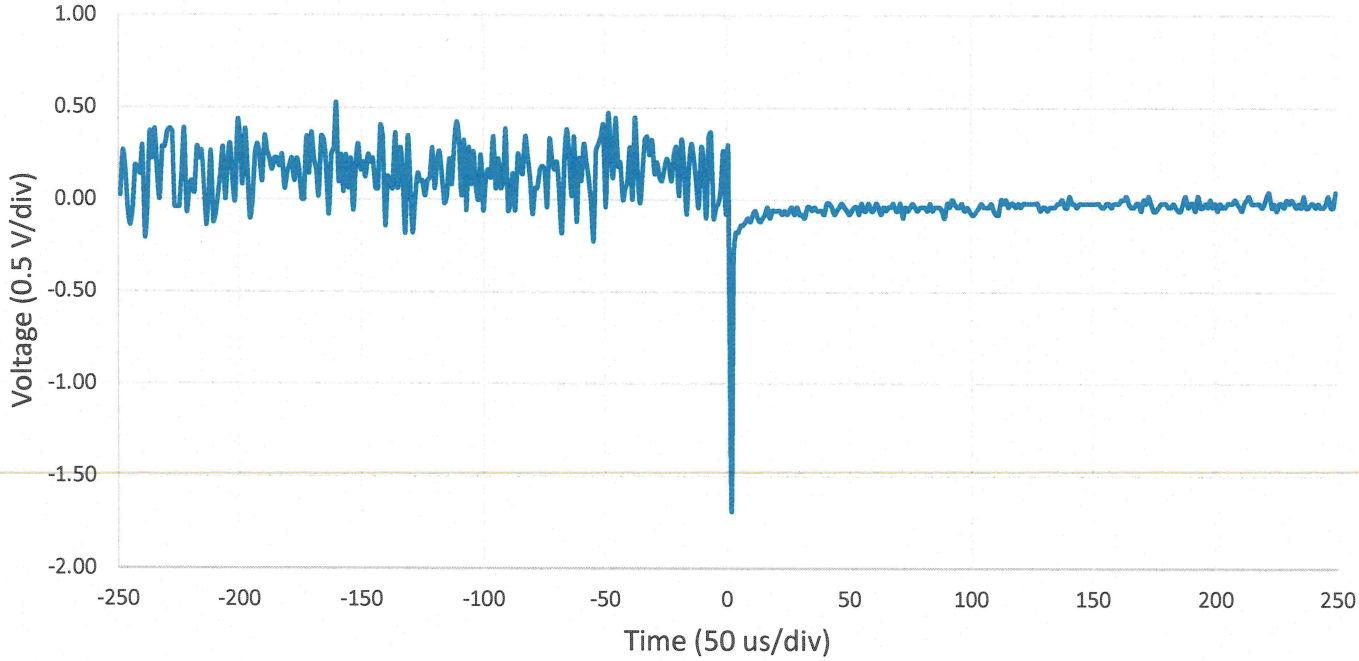
Summary Data
For
ERDLVA-2G18G-65-70MV-70C

PL49659/2448

CW Immunity 1.39 ms



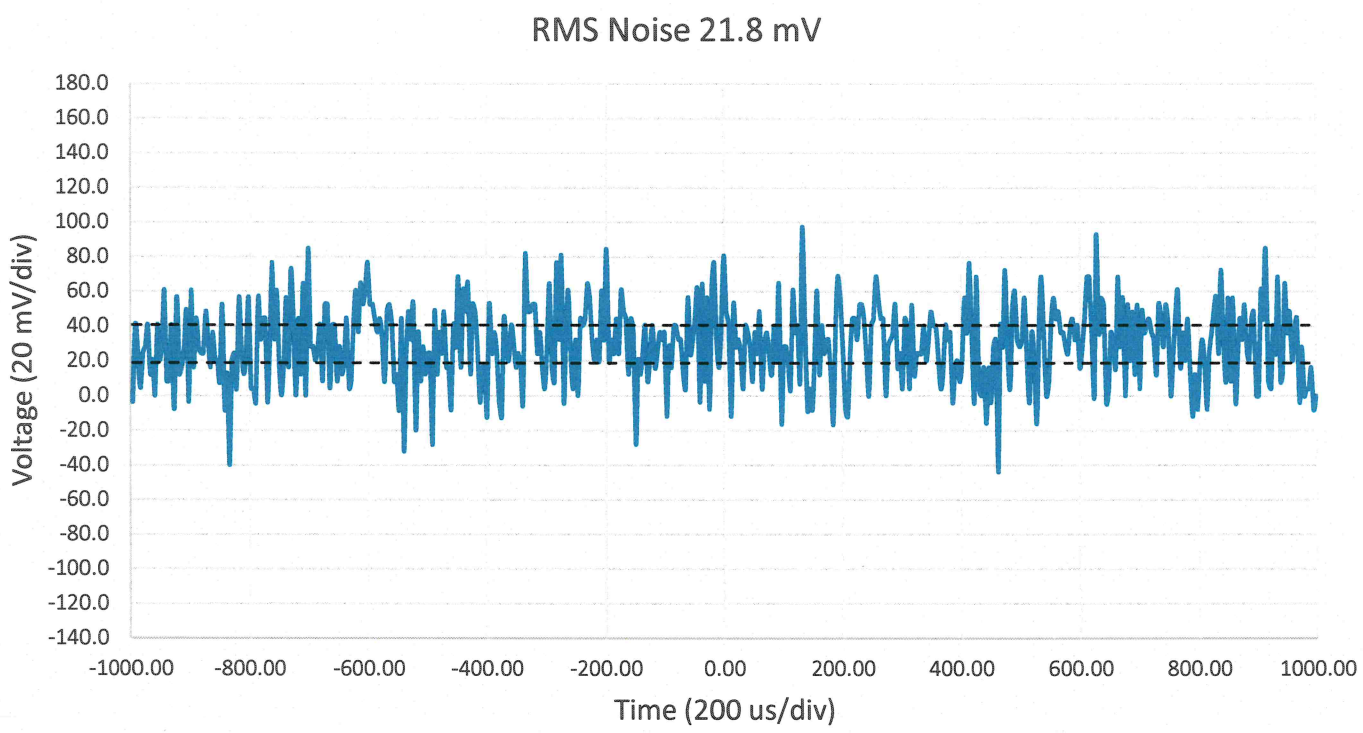
CW Recovery Plot



7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
Website: www.pmi-rf.com Email: sales@pmi-rf.com

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

PL49659/2448



7311-F Grove Road Frederick, MD 21704 USA
Phone: (301)662-5019 Fax: (301)662-1731
Website: www.pmi-rf.com Email: sales@pmi-rf.com