

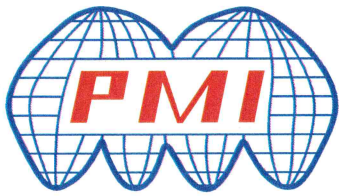


Rev: A1



Summary Data
For
EWDM-6G18G-65-70MV-1

13	SW Linear Gain	+7 dB MIN, 15 dB MAX	12.6 dB MIN / 14.7 dB MAX	PMI QA3
14	SW Frequency Flatness:	±1.5 dB MAX	±1.1 dB	
15	SW 1 dB Compression Point:	+3 dBm MIN	4.6 dBm	
16	SW Saturated Power:	+9 dBm MAX	5.9 dBm	
17	SW Second Harmonic:	-9 dBc MIN	-30.83 dBc	
18	SW Third Harmonic:	-12 dBc MIN	-49.33 dBc	
19	VIDEO OUT TSS:	-71 dBm MAX	-71 dBm	
20	VIDEO OUT Dynamic Range:	-65 to 0 dBm	-65 to 0 dBm	
21	VIDEO OUT Log Slope Fixed:	70 ± 3mV/dB	71.68/69.66 mv/db	
22	VIDEO OUT Log Linearity:	±1.0 dB MAX @12 GHZ	+0.46 / -0.3 dB	
23	VIDEO OUT Log Accuracy:	±2.0 dB MAX	+1.52 / -1.45 dB	
24	VIDEO OUT Absolute Log Accuracy:	±2.25 dB MAX	+1.96 / -1.98 dB	
25	VIDEO OUT DC Offset:	0 ±70 mV (RF Input Terminated & DC Power On)	-1 mV	
26	VIDEO OUT Rise Time (10% to 90%):	25 ns TYP 28 ns MAX	25.3 ns	
27	VIDEO OUT Fall Time (90% to 10%):	300 ns MAX	183.1 ns	
28	VIDEO OUT Settling Time:	50 ns With in ±70 mV of final value, MAX	40 ns typ	



**Summary Data
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29	VIDEO OUT Recovery Time:	0.5 us MAX to within 1 dB of baseline	.45 us	PMI QA3
30	VIDEO OUT Video Frequency Flatness:	±1.75 dB MAX	±1.3 dB	1
31	VIDEO OUT CW Immunity:	A. CW Immune Power TSS to -40 dBm Baseline Shift: 200 mV MAX	125 mV TYP	
		B. Pulse Peak Amplitude Loss; 2 dB MAX	1.7 dB TYP	
		CW Immunity Time at CW = -40 dBm, ≤ 3 ms	1.5ms	
		CW Recovery Time at CW = -40 dBm, ≤ 50 us	40 us TYP	
32	VIDEO OUT Pulse Response, input Signal:	100 ns to 300 us	100 ns to 300 us	
33	VIDEO OUT Impedance:	75 ±1 Ω	75 Ω	
34	VIDEO driver capability	150 ft RG11 into 75 ohm load	PASS	
35	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	
36	VIDEO OUT Noise Level (Vp-p):	160 mV TYP	144mV	
37	Droop of the Output Video Pulse: @ -65 dBm & 300 us pulse width	70mV (1 dB) MAX	45 mV TYP	



Summary Data
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38	VIDEO OUT Propagation Delay:	50 ns MAX (excluding cable)	33 ns Typ.	PMI QA3
39	Power Supply	+15 V @ 1000 mA MAX -15 V @ 500 mA MAX	+15 V @ 630 mA -15 V @ 140 mA	
40	Power Supply Ripple From DC to 10 MHz	100 mV MAX	PASS	

QA/QC Approval:

K. Klumpp

Date:

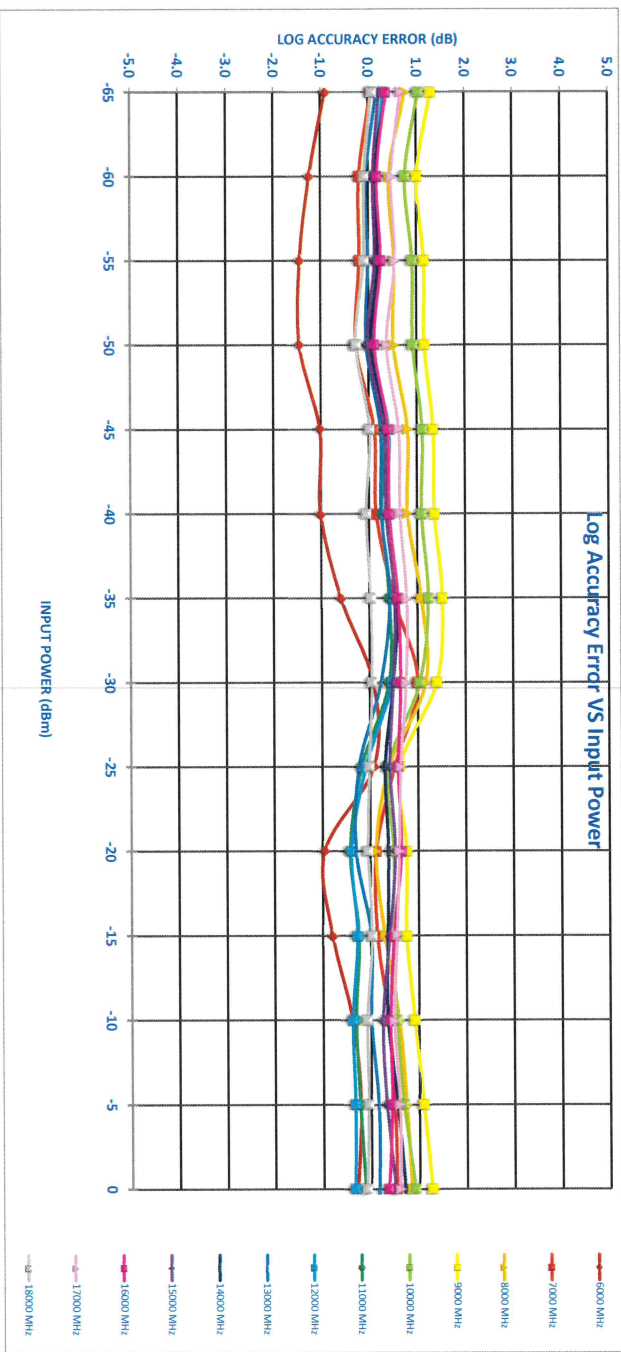
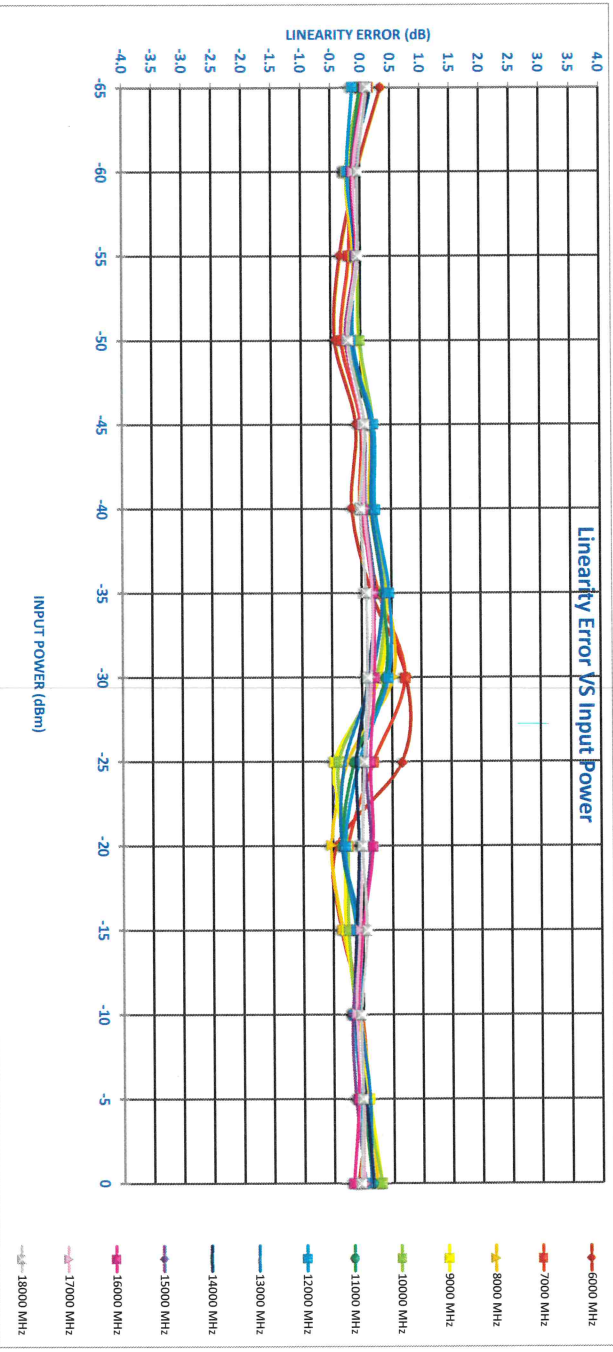
11-15-24

PLANAR MONOLITHICS INDUSTRIES
4921 Robert J. Mathews Parkway STE 1
TEL: 916-542-1401 FAX: 301-662-1731
EMAIL: SALES@PMI-RF.COM

Frequency	-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
6000 MHz	INTERCEPT (mV)	4889.8												
	SLOPE (mV/dB)	71.68												
	ACCURACY ERROR (dB)	-0.91	-1.24	-1.45	-1.45	-1.02	-1.01	-0.60	0.08	0.09	-0.96	-0.79	-0.38	-0.21
7000 MHz	INTERCEPT (mV)	4942.9												
	SLOPE (mV/dB)	71.22												
	ACCURACY ERROR (dB)	0.34	659	1012	1359	1738	2093	2471	2856	3176	3501	3855	4224	4585
8000 MHz	INTERCEPT (mV)	4947												
	SLOPE (mV/dB)	70.46												
	ACCURACY ERROR (dB)	0.15	-0.15	-0.19	-0.32	0.00	-0.01	0.29	0.73	0.19	-0.25	-0.27	-0.09	-0.02
9000 MHz	INTERCEPT (mV)	4971.7												
	SLOPE (mV/dB)	70.209												
	ACCURACY ERROR (dB)	0.06	-0.19	-0.18	-0.26	0.11	0.15	0.51	1.00	0.51	0.12	0.14	0.38	0.50
10000 MHz	INTERCEPT (mV)	4946.4												
	SLOPE (mV/dB)	70.061												
	ACCURACY ERROR (dB)	0.77	0.43	0.54	0.52	0.81	0.80	1.08	1.17	0.40	0.12	0.30	0.59	0.74
11000 MHz	INTERCEPT (mV)	4884.5												
	SLOPE (mV/dB)	69.865												
	ACCURACY ERROR (dB)	0.33	681	1037	1377	1752	2109	2464	2816	3128	3463	3828	4176	4534
12000 MHz	INTERCEPT (mV)	4879.1												
	SLOPE (mV/dB)	69.657												
	ACCURACY ERROR (dB)	0.00	-0.17	-0.07	-0.20	0.16	0.16	0.36	0.39	-0.14	-0.35	-0.12	-0.14	-0.02
13000 MHz	INTERCEPT (mV)	4906.2												
	SLOPE (mV/dB)	70.455												
	ACCURACY ERROR (dB)	0.38	684	1041	1384	1759	2109	2473	2820	3134	3465	3826	4171	4527
14000 MHz	INTERCEPT (mV)	4941												
	SLOPE (mV/dB)	70.876												
	ACCURACY ERROR (dB)	0.18	-0.11	-0.05	-0.23	0.05	0.07	0.22	0.10	-0.10	-0.06	-0.11	-0.14	0.03
15000 MHz	INTERCEPT (mV)	4936.6												
	SLOPE (mV/dB)	70.852												
	ACCURACY ERROR (dB)	0.23	679	1034	1376	1752	2107	2472	2822	3169	3529	3873	4215	4573
16000 MHz	INTERCEPT (mV)	4940.7												
	SLOPE (mV/dB)	70.762												
	ACCURACY ERROR (dB)	0.07	-0.09	-0.08	-0.25	0.05	0.06	0.21	0.15	0.05	0.13	-0.01	-0.18	-0.13
17000 MHz	INTERCEPT (mV)	4945.5												
	SLOPE (mV/dB)	70.526												
	ACCURACY ERROR (dB)	0.37	0.18	0.26	0.12	0.40	0.42	0.60	0.65	0.58	0.65	0.48	0.40	0.36
18000 MHz	INTERCEPT (mV)	4899.7												
	SLOPE (mV/dB)	70.511												
	ACCURACY ERROR (dB)	0.68	0.48	0.55	0.38	0.62	0.65	0.78	0.76	0.64	0.60	0.55	0.49	0.50
RF Input Power (dBm)	Measured Value (mV)	325	666	1018	1359	1731	2078	2437	2791	3139	3489	3847	4192	4546
	LINEARITY ERROR (dB)	-0.12	-0.04	-0.05	-0.22	0.06	-0.02	0.07	0.09	0.03	-0.01	0.07	-0.03	-0.04
	ACCURACY ERROR (dB)	0.07	-0.09	-0.10	-0.26	0.01	-0.06	0.03	0.05	-0.01	-0.05	0.03	-0.08	-0.06
Flatness	+	-1.10	-1.12	-1.30	-1.30	-1.18	-1.18	-1.06	-0.66	-0.43	-0.66	-0.77	-0.65	-0.71

PL 40934 RF

25°C



LOG TRANSFER WITH FREQUENCY

TESTED BY: Jim Hopson.
MODEL: EWDMM-6G18G-6S-70MV-1
SERIAL NO: PL40934 BIT
DATE: 11/12/24

Test Temp: 25C
Video Offset: -0.013

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ISO 9001:2000 CERTIFIED



Frequency

-65	-60	-55	-50	-45	-40	-35	-30	-25	-20	-15	-10	-5	0
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6000 MHz	INTERCEPT (mV)	4831.1
	SLOPE (mV/dB)	71.496

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

7000 MHz	INTERCEPT (mV)	4900.7
	SLOPE (mV/dB)	71.082

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

8000 MHz	INTERCEPT (mV)	4914.4
	SLOPE (mV/dB)	70.399

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

9000 MHz	INTERCEPT (mV)	4941.4
	SLOPE (mV/dB)	70.155

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

10000 MHz	INTERCEPT (mV)	4918.4
	SLOPE (mV/dB)	69.82

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

12000 MHz	INTERCEPT (mV)	4868.8
	SLOPE (mV/dB)	69.838

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

13000 MHz	INTERCEPT (mV)	4866.8
	SLOPE (mV/dB)	69.719

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

13000 MHz	INTERCEPT (mV)	4883.9
	SLOPE (mV/dB)	70.37

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

14000 MHz	INTERCEPT (mV)	4911.1
	SLOPE (mV/dB)	70.821

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

15000 MHz	INTERCEPT (mV)	4906.7
	SLOPE (mV/dB)	70.789

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

16000 MHz	INTERCEPT (mV)	4897.6
	SLOPE (mV/dB)	70.661

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

17000 MHz	INTERCEPT (mV)	4901.6
	SLOPE (mV/dB)	70.505

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

18000 MHz	INTERCEPT (mV)	4850.3
	SLOPE (mV/dB)	70.409

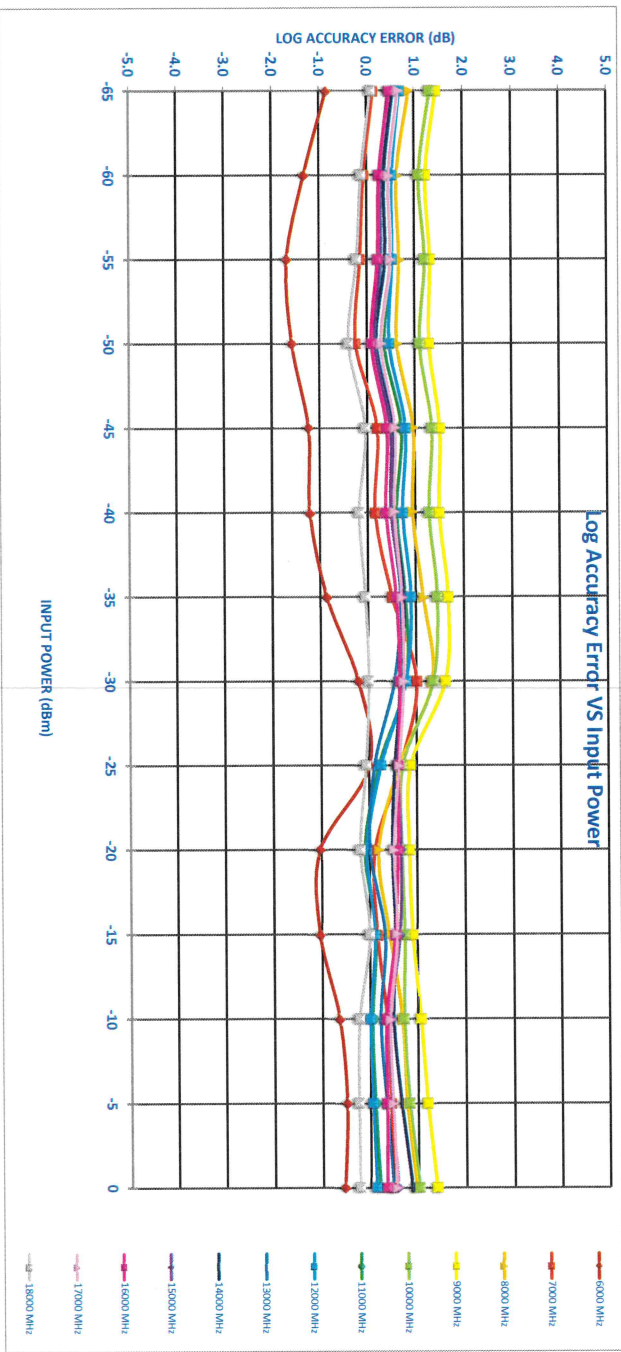
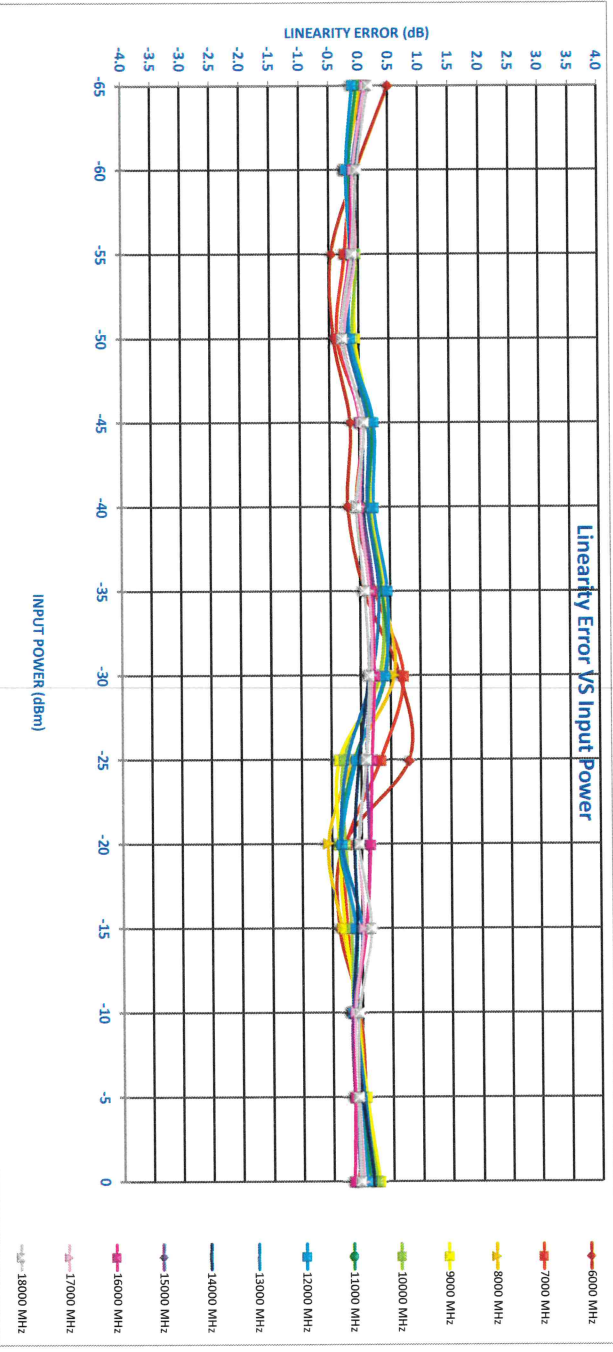
Measured Value (mV)	
Error (mV)	
LINEARITY ERROR (dB)	
ACCURACY ERROR (dB)	

Flatness	+/- dB
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1.15	1.28	1.50	1.44	1.38	1.35	1.27	0.91	0.43	0.94	0.97	0.85	0.84	0.96
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PL40934 BIT

25°C



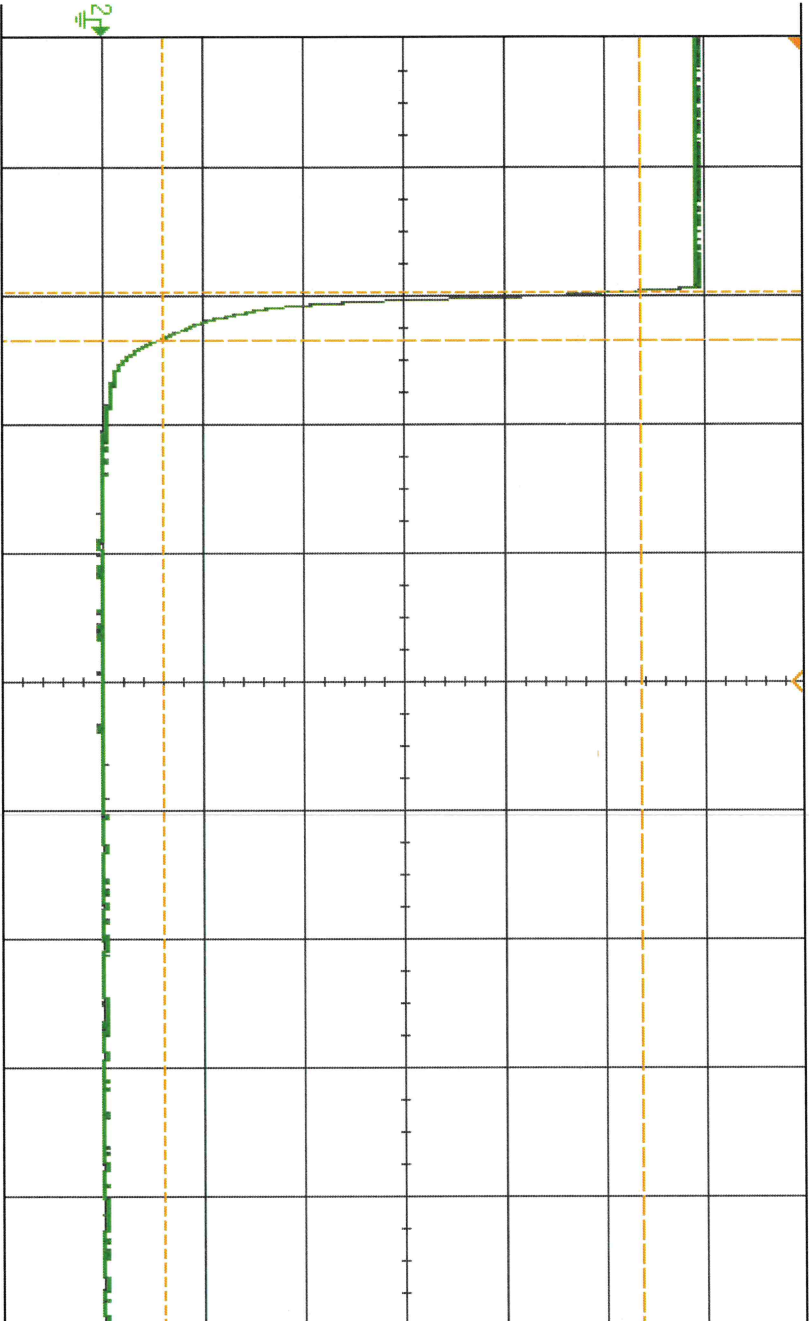
PL40934 Recovery

DSO-X 3034A, MW52394003: Tue Nov 12 13:59:20 2024

1 2 700% / 3 4

23.05ms 500.0ns / Auto

f E 2.51V



Measurement Menu

Source 2

Type: Fall

Add Measurement

Settings

Clear Meas

Statistics

		Acquisition	
		Averaging: 32	
		4.00GSa/s	
Channels			
DC	1.00:1		
DC	1.00:1		
DC	1.00:1		
DC	1.00:1		
Measurements			
Rise(2):	No edges		
AC RMS - FS(2):	1.6596V		
Fall(2):	183.1ns		