



**SUMMARY TEST DATA  
ON  
DLVA-218-45-100MV-CW**

**PL29423/2034**

Customer:		Tested By: <u>Simon K.</u>	
SO No:		Temperature: <u>+25°C</u>	
Model No: <u>DLVA-218-45-100MV-CW</u>		Date: <u>08/21/20</u>	
Serial No: <u>PL29423/2034</u>		Drawing No: <u>27633805</u>	Rev: <u>A1</u>

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC
1	Frequency Range	2 GHz to 18 GHz	2 GHz to 18 GHz	PMI QA3
2	Frequency Flatness	±2.0 dB TYP.	±0.7 dB	
3	Signal Capability	Pulse (100 ns – 300 µs)	Pass	
4	TSS from -20°C to +85°C	-45 dBm TYP.	-45 dBm Typ	
5	Log Dynamic Range	-40 dBm to +5 dBm	-40 dBm to +5 dBm	
6	Log Slope	100 mV/dB Nominal	94.4 mV/dB	
7	Log Linearity	±1.5 dB Max	+0.95 dB -1.03 dB	
8	DC Offset	±150 mV TYP.	39 mV	
9	Output Rise Time	25 ns Max	24 ns	
10	Settling Time	55ns Max, 90% Output to ±0.5dB of Final Value	Pass	
11	Recovery Time	500 ns Max	176 ns	
12	Input VSWR	2.5 : 1 TYP.	2.48 : 1	
13	Max Input Level	+20dBm CW	+20 dBm CW	↓
14	Power Supply	+15VDC @ 150mA Max -15VDC @ 150mA Max	70 mA 70 mA	PMI QA3

QA/QC Approval: Arthur Zimmerman Date: 8-26-2020

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



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### Transfer Response @ 25°C

LOG TRANSFER WITH FREQUENCY  
 MODEL: DLVA-218-45-100MV-CW  
 TESTED BY: Simon K.  
 TEST DATE: 08/13/2020  
 SERIAL NO: PL29423  
 TEST TEMP: +25C



PLANAR MONOLITHICS INDUSTRIES  
 4921 Robert J. Mathews Parkway Suite 1  
 El Dorado Hills, CA 95762  
 TEL: 916-542-1401 FAX: 916-265-2597  
 EMAIL: SALES@PMI-RF.COM

DC Offset= 0.039 V

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)
2 GHz	4211	94.4

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)
9.25 GHz	4257	95.1

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)
18 GHz	4200	96

Flatness +/- dB	0.30
Max Video Output Volts	0.361
Min Video Output Volts	0.312

	-40	-35	-30	-25	-20	-15	-10	-5	0	5
2 GHz	342	859	1391	1833	2287	2822	3345	3694	4149	4590
9.25 GHz	361	893	1406	1857	2295	2849	3377	3741	4209	4634
18 GHz	312	792	1356	1781	2207	2720	3331	3701	4170	4609
Flatness +/- dB	0.30	0.50	0.30	0.40	0.50	0.70	0.20	0.20	0.30	0.20
Max Video Output Volts	0.361	0.893	1.406	1.857	2.295	2.849	3.377	3.741	4.209	4.634
Min Video Output Volts	0.312	0.792	1.356	1.781	2.207	2.720	3.331	3.694	4.149	4.590

RF Input Power (dBm)

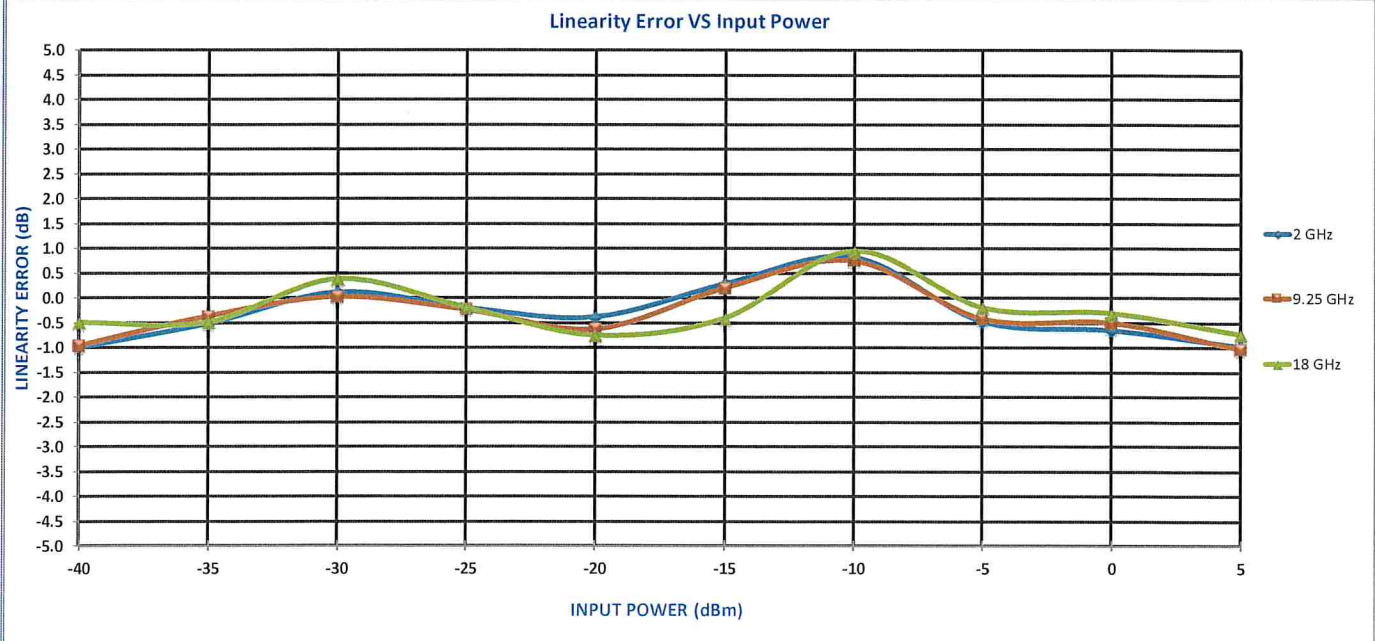
Measured Value (mV)	Error (dB)
Error (mV)	MAX MIN
LINEARITY ERROR (dB)	0.82 -1.00
LOGGING ACCURACY (dB)	1.60 -0.32

Measured Value (mV)	Error (dB)
Error (mV)	MAX MIN
LINEARITY ERROR (dB)	0.75 -1.03
LOGGING ACCURACY (dB)	1.93 0.14

Measured Value (mV)	Error (dB)
Error (mV)	MAX MIN
LINEARITY ERROR (dB)	0.95 -0.76
LOGGING ACCURACY (dB)	1.45 -0.36

Logging Linearity vs Frequency	Error (dB)
TOTAL LOG LINEARITY (dB)	MAX MIN
	0.95 -1.03

Logging Accuracy vs Frequency	Error (dB)
TOTAL LOGGING ACCURACY (dB)	MAX MIN
	1.93 -0.36



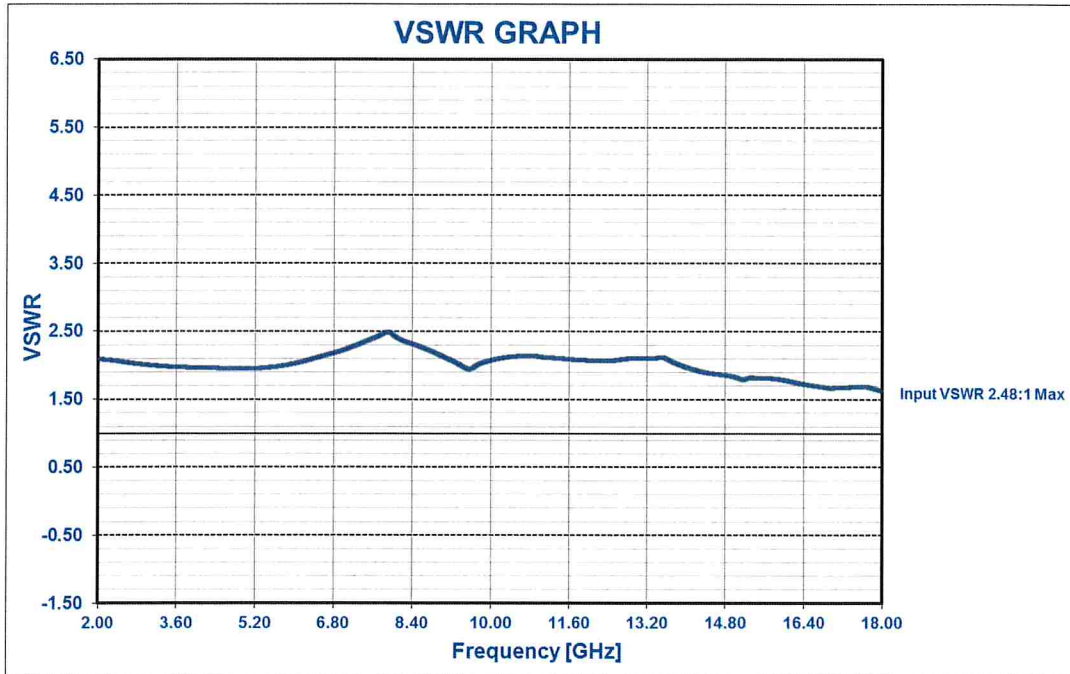
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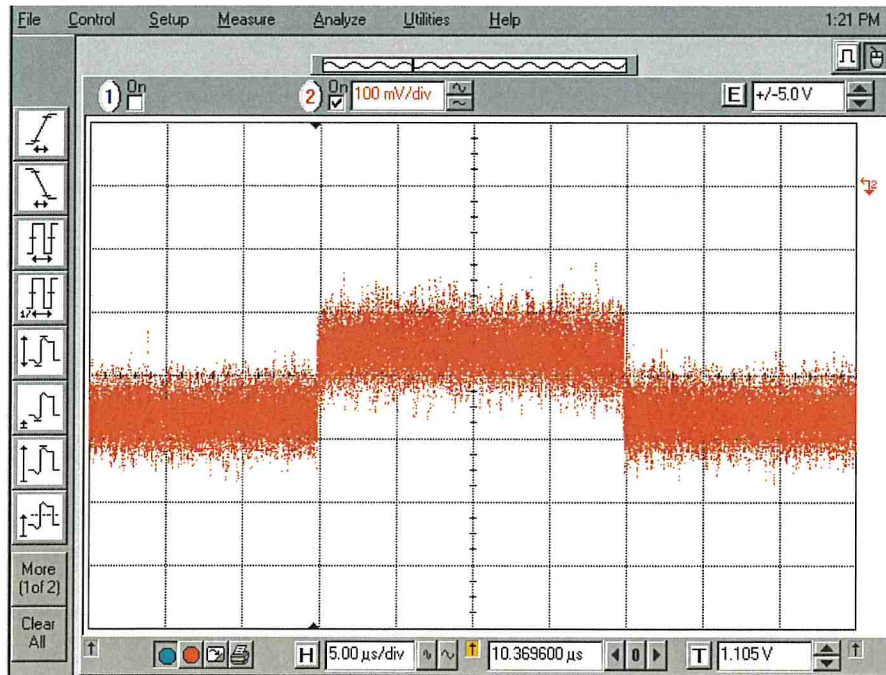
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## VSWR



## TSS -46 dBm @ -20°C



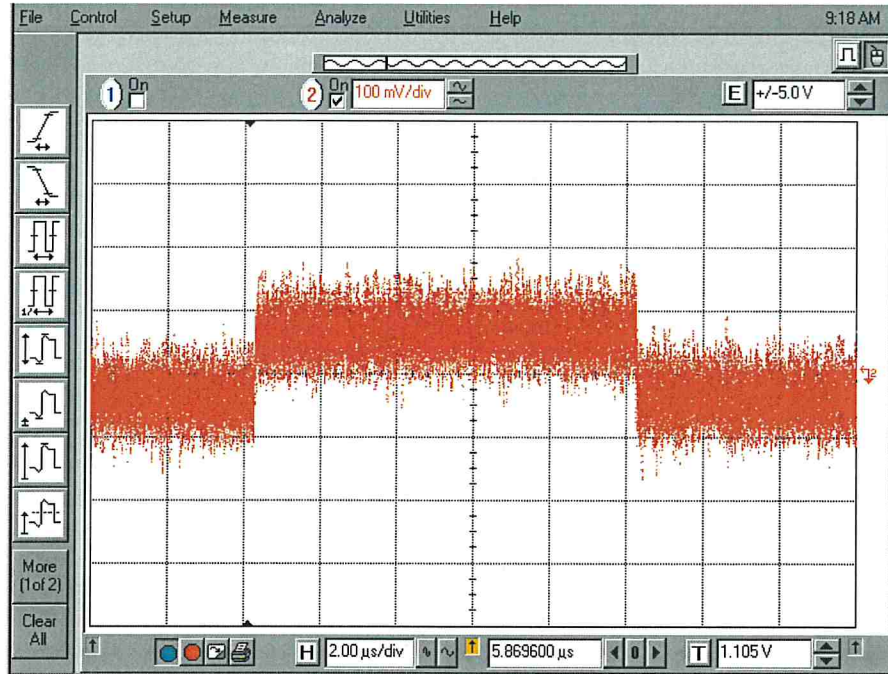
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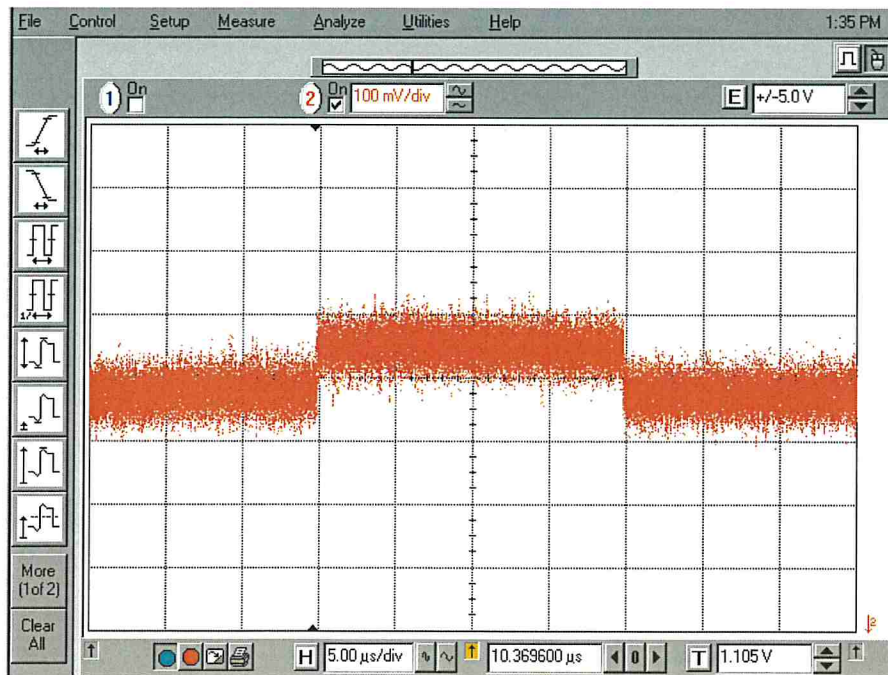
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TSS -45 dBm @ 25°C



TSS -44 dBm @ 85°C



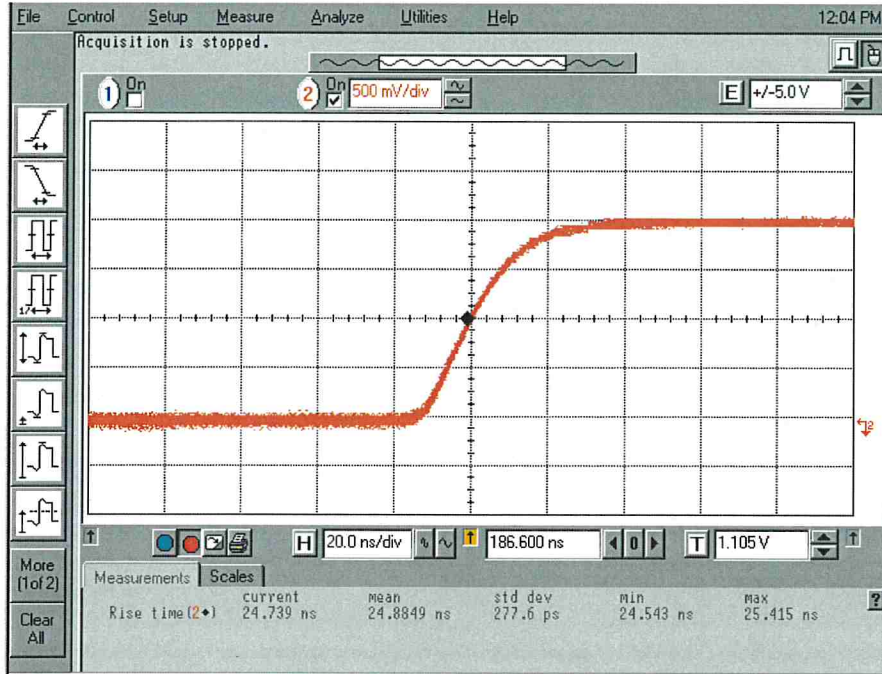
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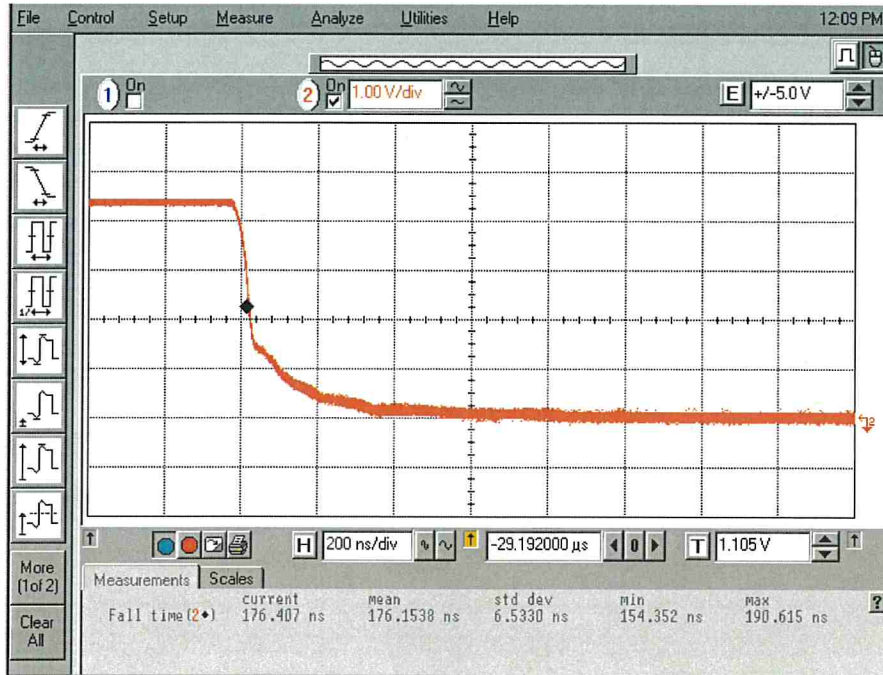
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## Rise Time



## Recovery Time



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