



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

PL29421/2034

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>PL29421/2034</u>	Drawing No: <u>27633805</u> Rev: <u>A1</u>

TEST. ITEM NO	PARAMETERS	SPECIFIED VALUE	TEST RESULTS	QA QC PMI QA3
1	Frequency Range	2 GHz to 18 GHz	2 GHz to 18 GHz	QA3
2	Frequency Flatness	±2.0 dB TYP.	±1.2 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	97.6 mV/dB	
7	Log Linearity	±1.5 dB Max	+1.32 dB -1.08 dB	
8	DC Offset	±150 mV TYP.	2 mV	
9	Output Rise Time	25 ns Max	25 ns	
10	Settling Time	55ns Max, 90% Output to ±0.5dB of Final Value	Pass	
11	Recovery Time	500 ns Max	203 ns	
12	Input VSWR	2.5 : 1 TYP.	2.59 : 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



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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: PL29421
TEST TEMP: +25C



PLANAR MONOLITHICS INDUSTRIES
4921 Robert J. Mathews Parkway Suite 1
El Dorado Hills, CA 95762
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EMAIL: SALES@PMI-RF.COM

DC Offset= 0.002 V

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)
2 GHz	4732	98.8

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)
9.25 GHz	4553	97.6

Frequency	INTERCEPT (mV)	SLOPE (mV/dB)
18 GHz	4743	98.6

Flatness +/- dB	
Max Video Output Volts	
Min Video Output Volts	

	-40	-35	-30	-25	-20	-15	-10	-5	0	5
2 GHz	737	1295	1746	2264	2849	3306	3637	4167	4793	5224
9.25 GHz	-42	22	-21	3	93	56	-107	-71	61	-3
18 GHz	-0.42	0.22	-0.21	0.03	0.95	0.57	-1.08	-0.72	0.61	-0.03
Flatness +/- dB	0.50	1.17	0.76	1.03	1.97	1.62	-0.01	0.37	1.74	1.12
Max Video Output Volts	575	1206	1628	2166	2670	3218	3520	3963	4572	5093
Min Video Output Volts	-74	69	3	53	69	129	-57	-102	19	52
Linearity Error (dB)	-0.76	0.70	0.03	0.54	0.71	1.32	-0.58	-1.04	0.20	0.54
Logging Accuracy (dB)	-1.15	0.27	-0.44	0.03	0.15	0.73	-1.20	-1.70	-0.51	-0.21
Linearity Error (dB)	751	1311	1771	2290	2823	3308	3658	4192	4802	5223
Linearity Error (dB)	-47	20	-13	13	53	44	-99	-58	59	-13
Linearity Error (dB)	-0.47	0.20	-0.13	0.13	0.53	0.45	-1.00	-0.59	0.60	-0.14
Linearity Error (dB)	0.64	1.34	1.01	1.29	1.71	1.64	0.20	0.63	1.83	1.11
Linearity Error (dB)	0.90	0.50	0.70	0.60	0.90	0.50	0.70	1.20	1.20	0.70
Linearity Error (dB)	0.751	1.311	1.771	2.290	2.849	3.308	3.658	4.192	4.802	5.224
Linearity Error (dB)	0.575	1.206	1.628	2.166	2.670	3.218	3.520	3.963	4.572	5.093

RF Input Power (dBm)

Measured Value (mV)	Error (dB)
Error (mV)	MAX MIN
LINEARITY ERROR (dB)	0.95 -1.08
LOGGING ACCURACY (dB)	1.97 -0.01

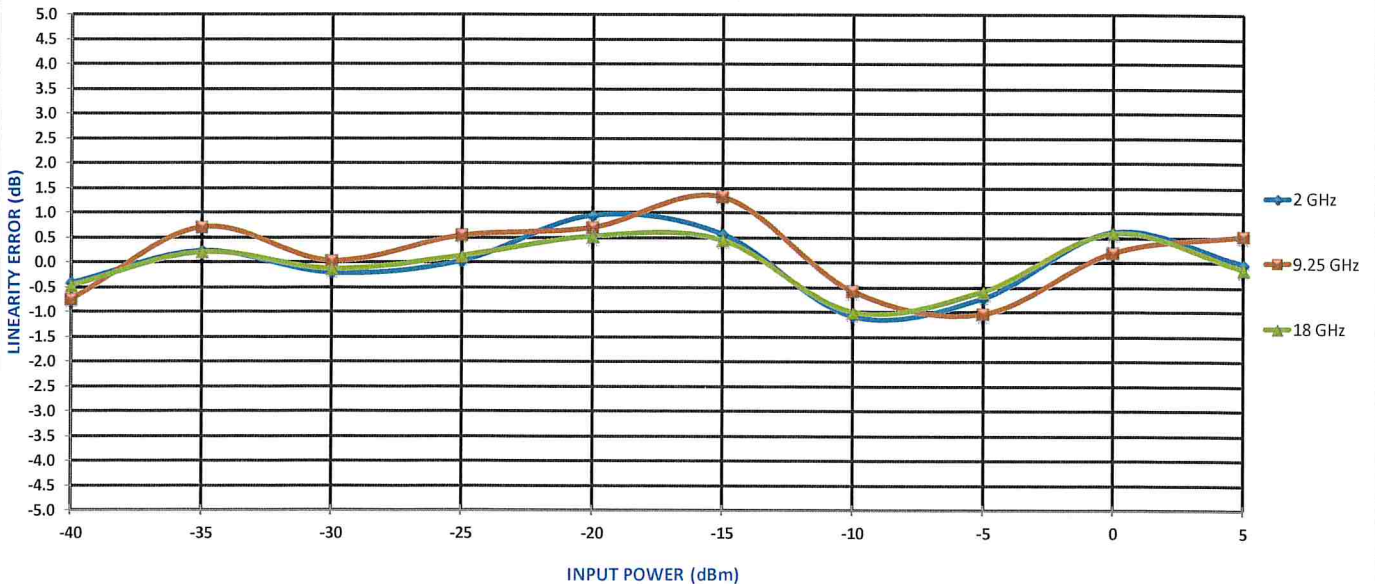
Measured Value (mV)	Error (dB)
Error (mV)	MAX MIN
LINEARITY ERROR (dB)	1.32 -1.04
LOGGING ACCURACY (dB)	0.73 -1.70

Measured Value (mV)	Error (dB)
Error (mV)	MAX MIN
LINEARITY ERROR (dB)	0.60 -1.00
LOGGING ACCURACY (dB)	1.83 0.20

Logging Linearity vs Frequency	Error (dB)
TOTAL LOG LINEARITY (dB)	MAX MIN
	1.32 -1.08

Logging Accuracy vs Frequency	Error (dB)
TOTAL LOGGING ACCURACY (dB)	MAX MIN
	1.97 -1.70

Linearity Error VS Input Power



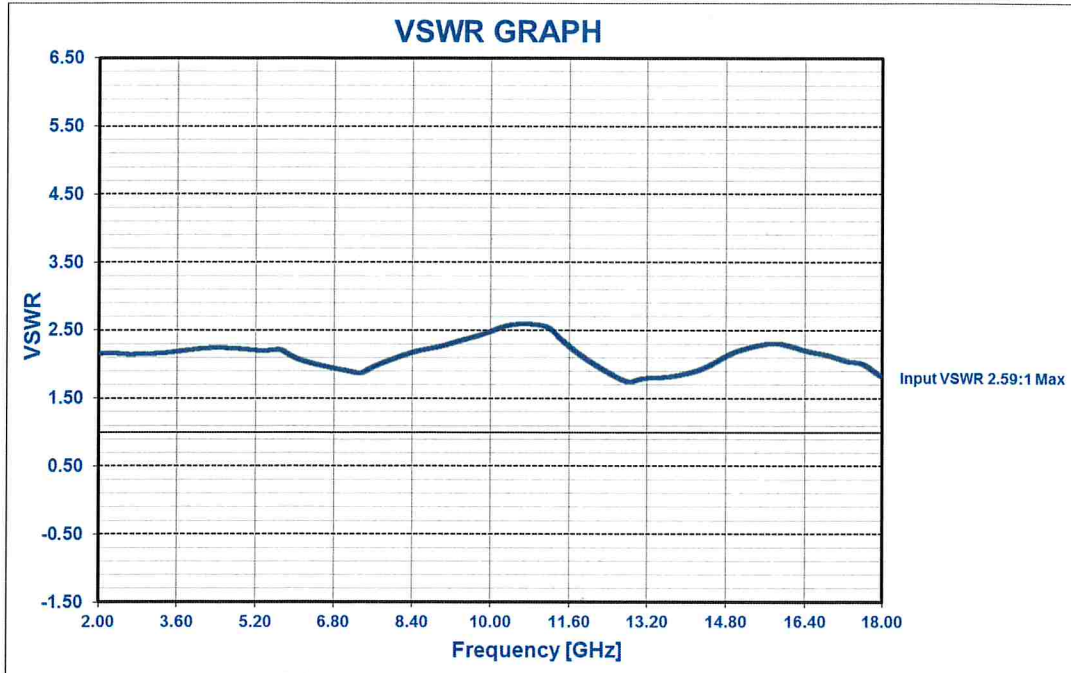
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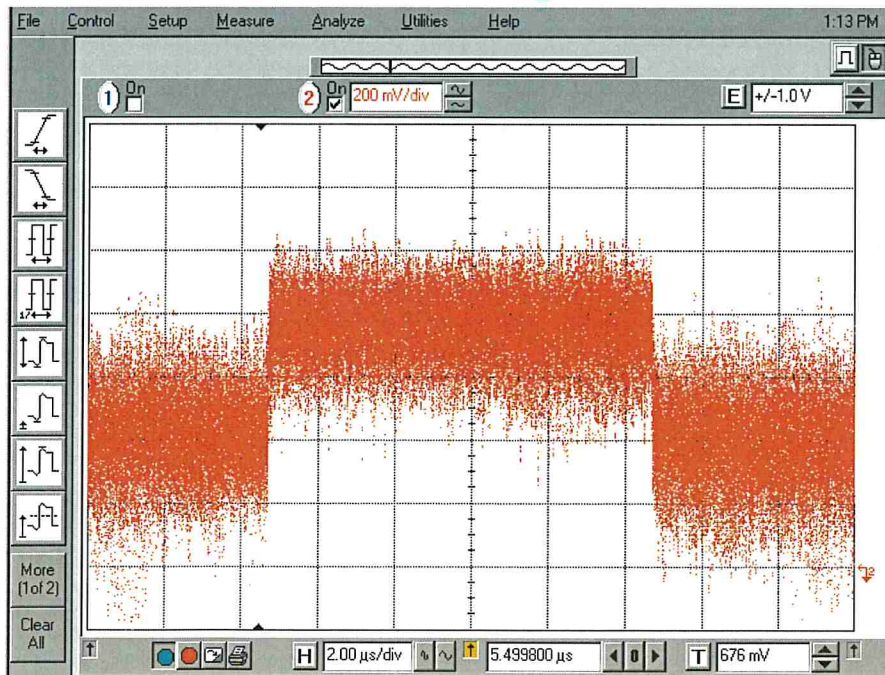
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VSWR



TSS -46 dBm @ -20°C



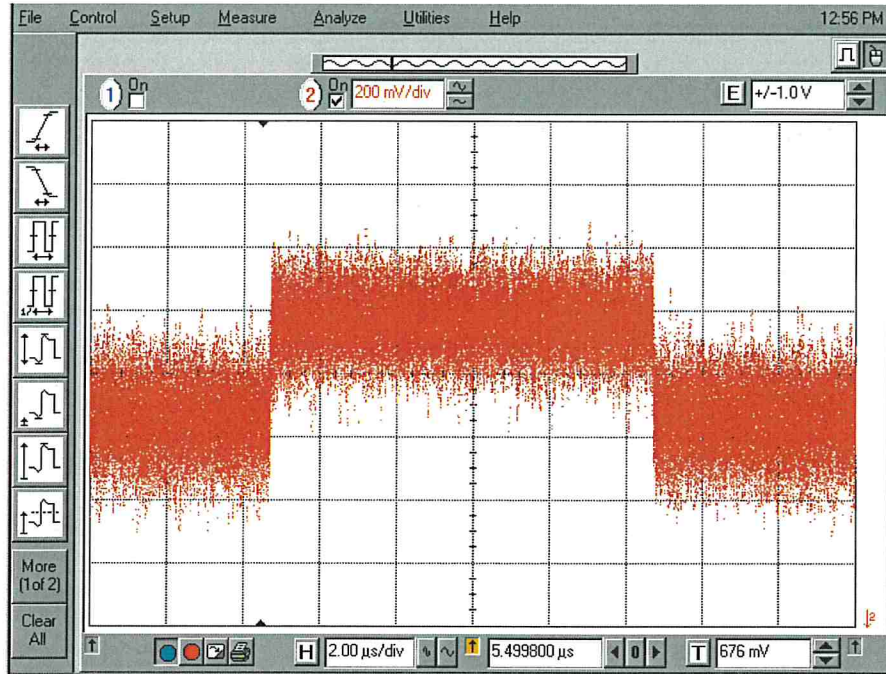
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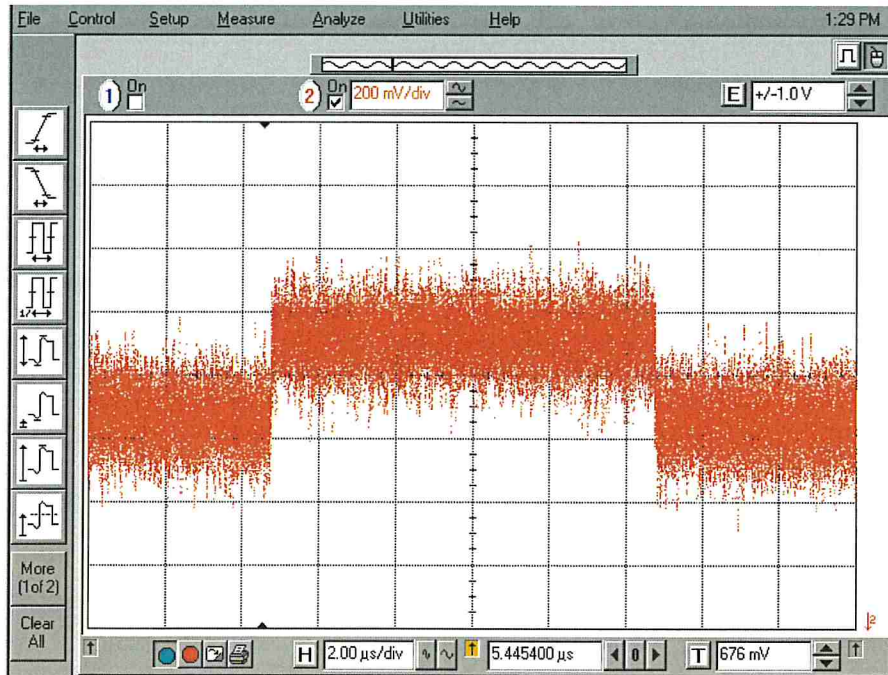
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TSS -45 dBm @ 25°C



TSS -44 dBm @ 85°C



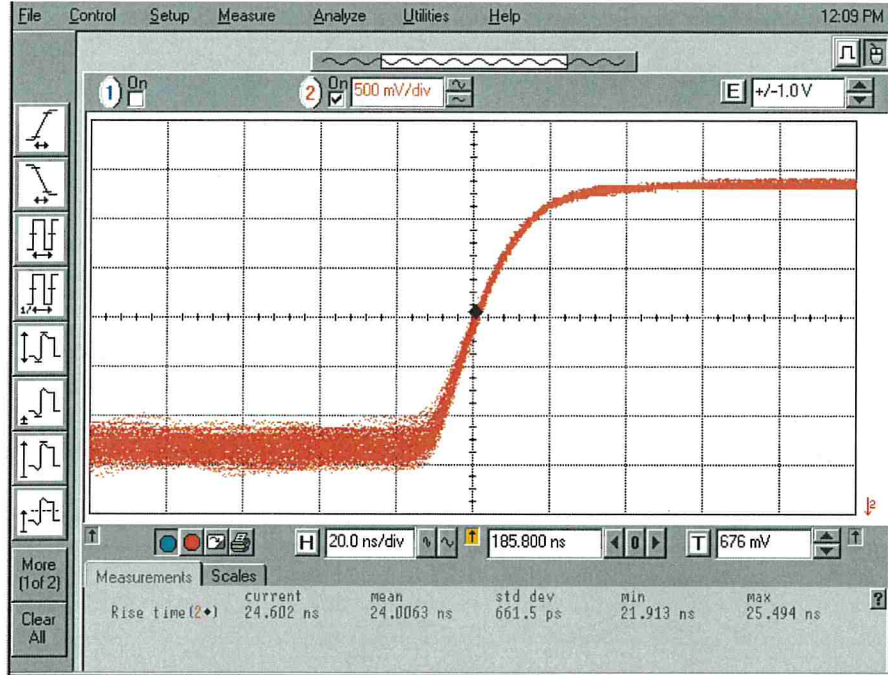
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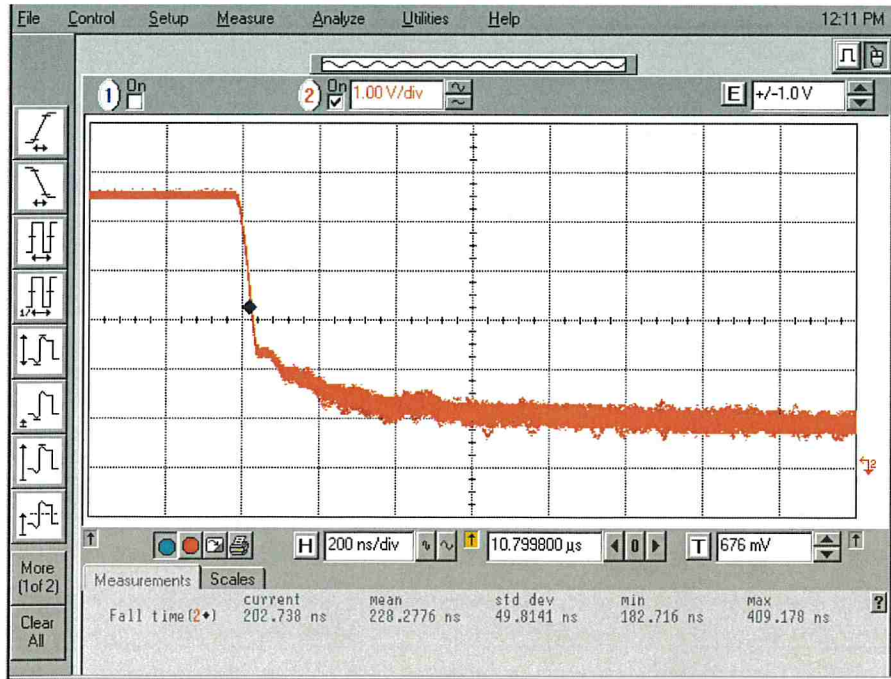
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Rise Time



Recovery Time



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