



**SUMMARY TEST DATA
ON
PLVA-218-50-618**

PL47871/2438

Customer: _____ Tested By: Daniel Weinrob
SO No: _____ Temperature: +25°C
Model No: PLVA-218-50-618 Date: 09/20/24
Serial No: PL47871/2438 Drawing No: 27618591 Rev: B1

| TEST ITEM NO | PARAMETERS | SPECIFIED VALUE | TEST RESULTS | QA QC |
|--------------|------------------------------------|--------------------------------------|--------------------------------|------------|
| 1 | Frequency Range: | 6 GHz – 18 GHz | 6 GHz – 18 GHz | PMI QA3 |
| 2 | Frequency Flatness: | ± 1.0 dB Max. | ± 0.9 dB | |
| 3 | Logging Range: | -40 to 0 dBm Min. | -40 to 0 dBm | |
| 4 | Useful Range: | -40 to + 5 dBm | -40 to + 5 dBm | |
| 5 | Log Linearity Error: | ± 1.0 dB Max (Room Temp) | ± 0.73 dB | |
| 6 | Log Slope: (Log Slope Accuracy) | 50mV/dB (±4% of Average Slope) | Pass (See Plot) | |
| 7 | Temperature Stability: | ± 1.0 dB Max (-54°C to 85°C) | See Typical Characteristics | |
| 8 | Rise Time: | 20 ns Max. | See Typical Characteristics | |
| 9 | Settling: | 45 ns Max. | See Typical Characteristics | |
| 10 | Recovery Time: | 150 ns Typ. 300 ns Max. | < 300 nS | |
| 11 | TSS: | -40 dBm Min. | -43 dBm | |
| 12 | VSWR: | 3.0:1 Max | 2.76:1 (See Plot) | |
| 13 | Max RF Input: | + 15 dBm | + 15 dBm | |
| 14 | Video Output Level: | 0 – 2.5 Volts (50Ω Minimum Load) | Pass (See Plot) | |
| 15 | DC Supply: | +15V @ 75 mA Max -15V @ 75 mA Max | 50 mA 50 mA | |

QA/QC Approval: K. Klanning Date: 9-23-24

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



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Log Transfer vs. Frequency

LOG TRANSFER WITH FREQUENCY
MODEL: PLVA-218-50-618
TESTED BY: D. Weinrob
TEST DATE: 9/20/24
SERIAL NO: PL47871
TEST TEMP: +25C

Friday, September 20, 2024
8:43 AM



PLANAR MONOLITHICS INDUSTRIES
7311-F GROVE ROAD, FREDERICK, MD
21704 USA
TEL: 301-662-5019 FAX: 301-662-1731
URL: WWW.PMI-RF.COM

Frequency

| | | -40 | -35 | -30 | -25 | -20 | -15 | -10 | -5 | 0 | |
|--------|----------------|-------|------|-----|-----|-----|------|------|------|------|------|
| 6 GHz | INTERCEPT (mV) | 2247 | 2288 | 502 | 742 | 987 | 1230 | 1499 | 1774 | 2014 | 2242 |
| | SLOPE (mV/dB) | 49.63 | 36 | -8 | -16 | -19 | -24 | -3 | 24 | 15 | -5 |
| 12 GHz | INTERCEPT (mV) | 2225 | 278 | 491 | 731 | 977 | 1214 | 1481 | 1757 | 1982 | 2216 |
| | SLOPE (mV/dB) | 49.37 | 28 | -6 | -13 | -14 | -23 | -3 | 26 | 14 | -9 |
| 18 GHz | INTERCEPT (mV) | 2165 | 270 | 482 | 726 | 972 | 1194 | 1451 | 1710 | 1936 | 2149 |
| | SLOPE (mV/dB) | 47.75 | 15 | -12 | -7 | 1 | -16 | 2 | 23 | 10 | -16 |

RF Input Power (dBm)

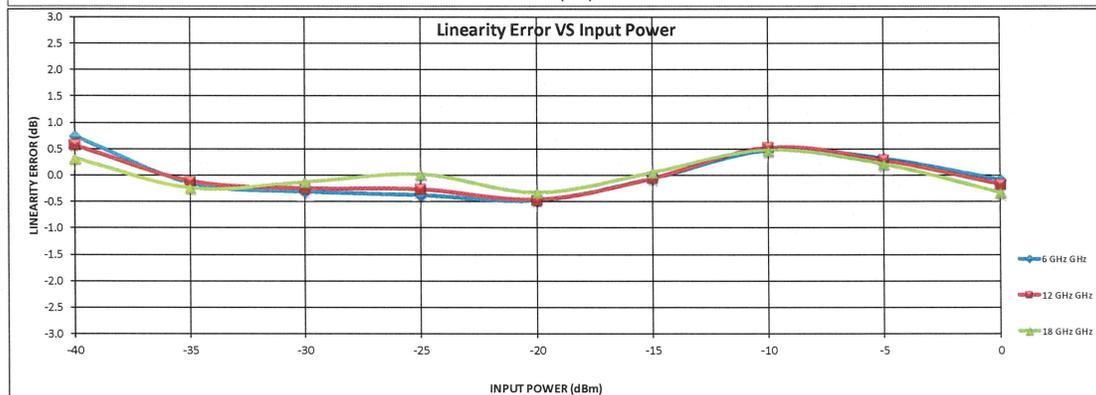
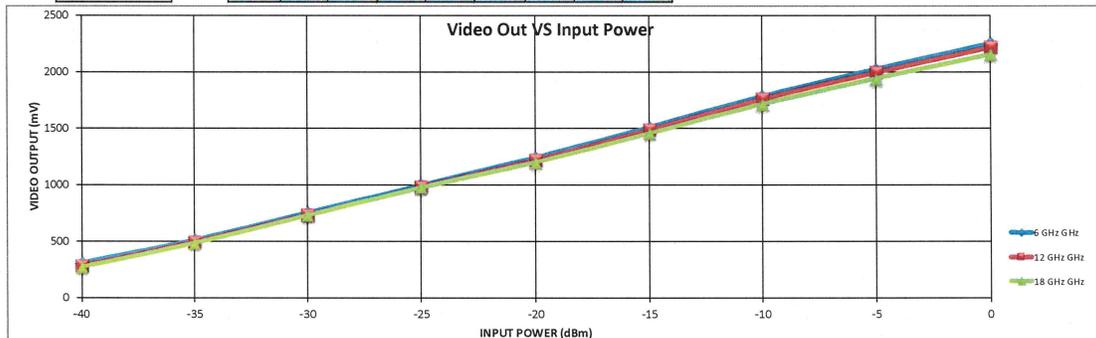
| |
|----------------------|
| Measured Value (mV) |
| Error (mV) |
| LINEARITY ERROR (dB) |

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

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

Flatness +/-dB

| | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0.3 | 0.2 | 0.2 | 0.2 | 0.4 | 0.5 | 0.6 | 0.8 | 0.9 |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|

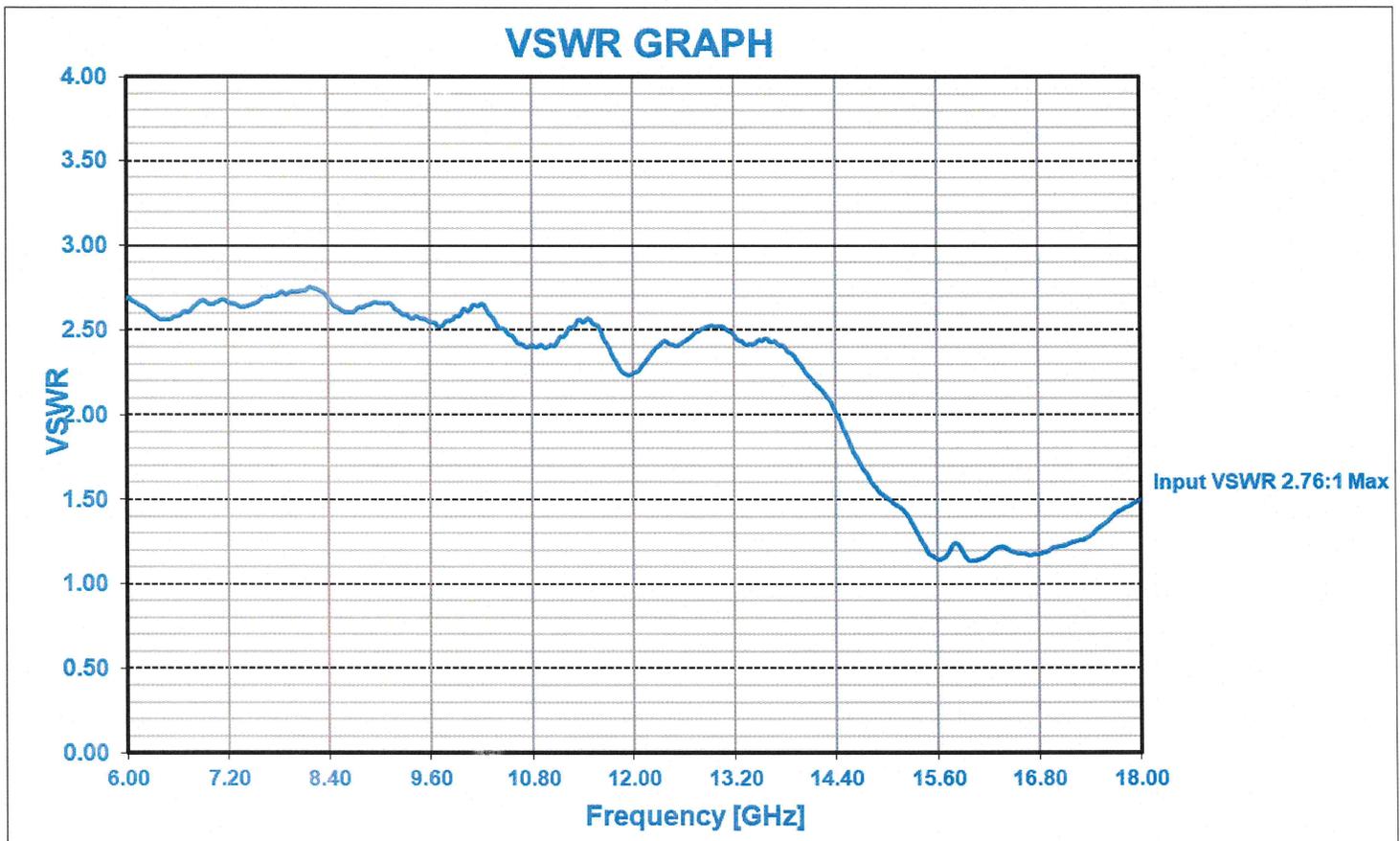




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Return Loss @ -20 dBm



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