

**DESCRIPTION:**

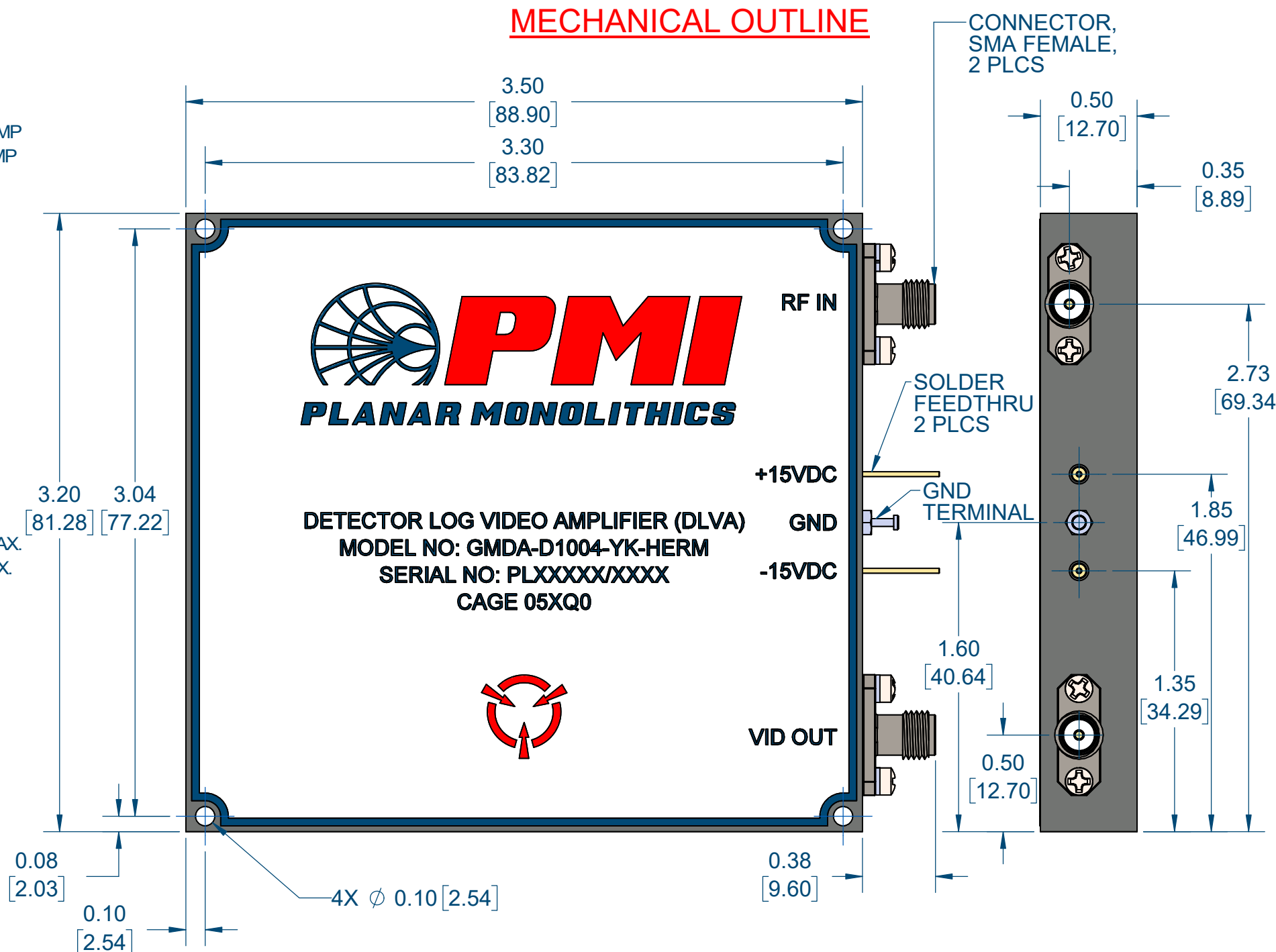
PMI MODEL GMDA-D1004-YK-HERM IS AN EXTENDED DYNAMIC RANGE DLVA DESIGNED TO OPERATE OVER THE 2.0 TO 18.0 GHz FREQUENCY RANGE. IT EMPLOYS PLANAR DIODE DETECTORS AND INTEGRATED VIDEO CIRCUITRY FOR HIGH SPEED PERFORMANCE AND OUTSTANDING RELIABILITY. IT IS OF SUPERIOR CONSTRUCTION USING STATE OF THE ART MIC/MMIC TECHNOLOGY.

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	3/9/2026	

**SPECIFICATIONS:**

- FREQUENCY RANGE:.....2.0 TO 18.0 GHz
- LOGGING RANGE (FIG. 1):.....-60 dBm TO +7 dBm
- TSS:.....-70 dBm MIN.
- LOGGING SLOPE (FIG. 1, 2):.....+25.0 ± 1.0 mV/dB AT ROOM TEMP  
+25.0 ± 2.0 mV/dB AT OVER TEMP  
+25.0 mV/dB TYP.
- LOGGING LINEARITY (FIG. 1):.....±1.5 dB AT ROOM TEMP  
±2.0 dB AT OVER TEMP
- FLATNESS (FIG. 3):.....100 mV MAX.
- RF SAFE INPUT POWER:.....+23 dBm MAX. CW
- MAX OUTPUT VOLTAGE:.....+2.5 V MAX.
- INPUT VSWR (50 Ω):.....2.3:1 MAX.
- VIDEO LOAD IMPEDANCE:.....75 Ω TYP.
- RISE TIME (FIG. 4):.....30 ns MAX.
- RECOVERY TIME (FIG. 4):.....100 ns MAX.
- THROUGHPUT TIME (FIG. 4):.....30 ns MAX.
- VIDEO BANDWIDTH:.....10 MHz TYP.
- OFFSET VOLTAGE:.....± 50 mV MAX.
- LEADING AND TRAILING EDGE:.....SEE FIGURE 5
- REVERSE SHOOT AND SLOPE REVERSE:.....SEE FIGURE 6
- DC POWER SUPPLY:.....+12 TO +15.5 VDC @ 400 mA MAX.  
-12 TO -15.5 VDC @ 165 mA MAX.
- SIZE:.....88.9 mm x 81.3 mm x 12.7 mm  
3.50" x 3.20" x 0.50"  
(EXCLUDING CONNECTORS)
- WEIGHT:.....220 g MAX.
- FINISH:.....NICKEL PLATE  
HERMETIC SEAL

**MECHANICAL OUTLINE**



**ENVIRONMENTAL RATINGS:**

- TEMPERATURE:.....-54°C TO +85°C (OPERATING)  
-57°C TO +85°C (STORAGE)
- ALTITUDE:.....0 - 43,000 FT
- HUMIDITY:.....MIL-HDBK-5400 4.6.2.4 100% RH
- SHOCK:.....MIL-HDBK-5400 4.6.2.6  
FUNC SHOCK: 196 m/s<sup>2</sup>, 6~9 ms
- VIBRATION:.....MIL-STD-810F ANNEX C  
FIG 514 5C-8 (REFER TO FIG 1)

NOTE: SPECIFICATIONS WILL VARY OVER TEMPERATURE  
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± 0.02 ± ± .XXX ± 0.01		<table border="1"> <tr> <th>APPROVALS</th> <th>DATE</th> </tr> <tr> <td>DRAWN <b>ANTON L.</b></td> <td>10/9/25</td> </tr> <tr> <td>REDRAWN</td> <td></td> </tr> <tr> <td>ISSUED</td> <td></td> </tr> </table>		APPROVALS	DATE	DRAWN <b>ANTON L.</b>	10/9/25	REDRAWN		ISSUED		 7309-A GROVE ROAD FREDERICK, MARYLAND 21704 USA TEL: (301) 662-5019, FAX: (301) 662-1731 WEB: WWW.QUANTICPMI.COM, EMAIL: SALES@QUANTICPMI.COM ISO 9001 CERTIFIED	
APPROVALS	DATE												
DRAWN <b>ANTON L.</b>	10/9/25												
REDRAWN													
ISSUED													
TITLE OUTLINE GMDA-D1004-YK-HERM		SIZE B	FSCM NO. 05XQ0	DWG NO. 27052540	REV. A1								
SCALE 1:5		SHEET 1 OF 2											

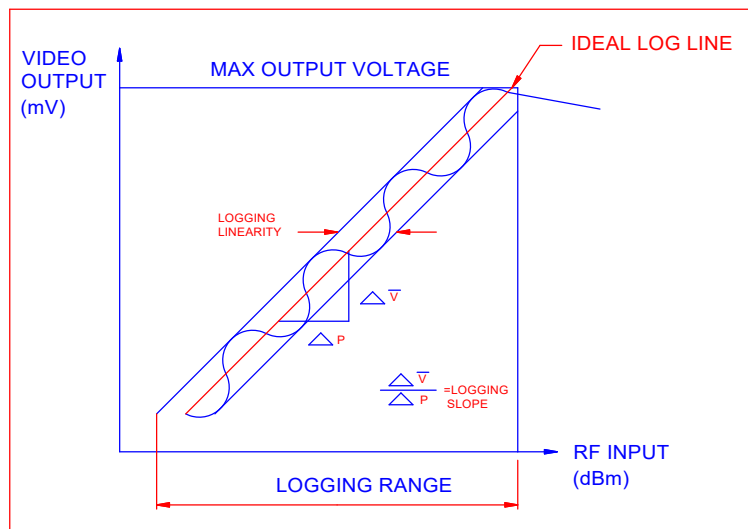


FIGURE 1: RF INPUT POWER vs. VIDEO OUTPUT VOTLAGE

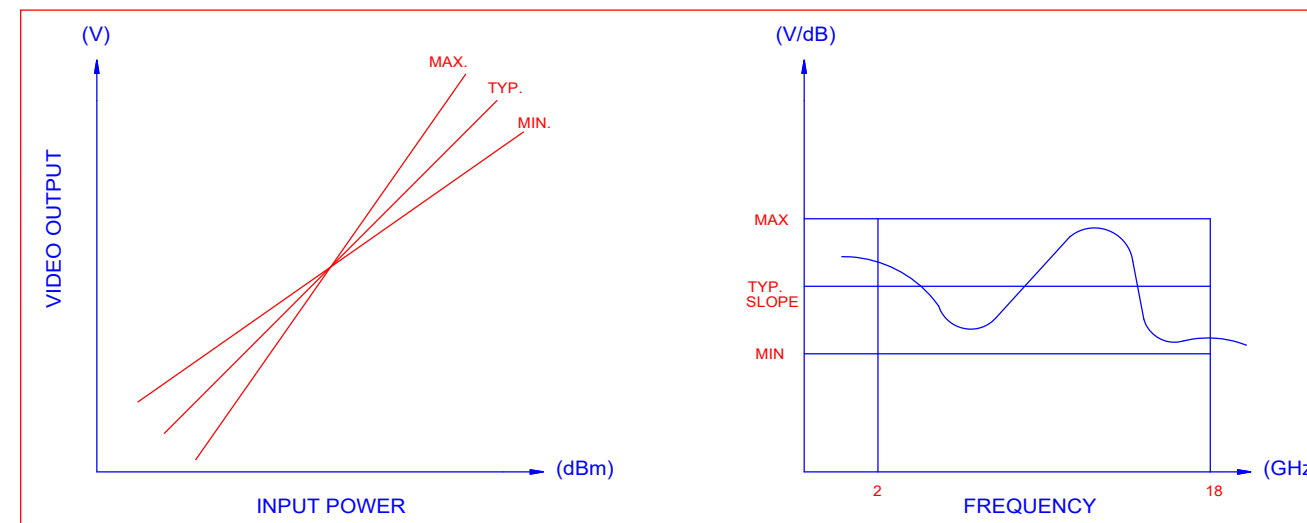


FIGURE 2: LOGGING SLOPE

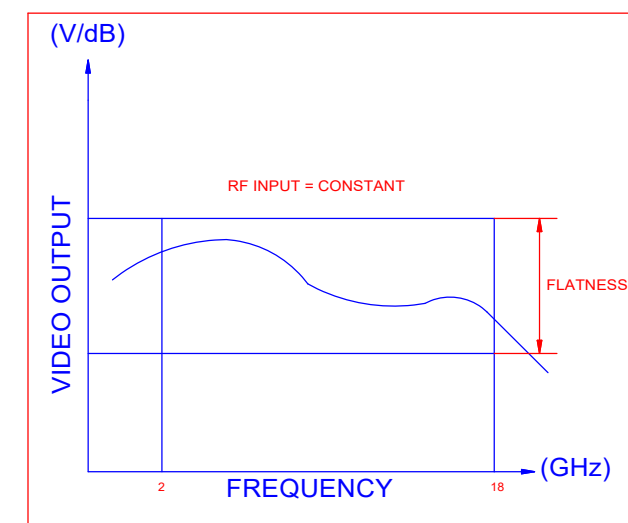


FIGURE 3: FLATNESS

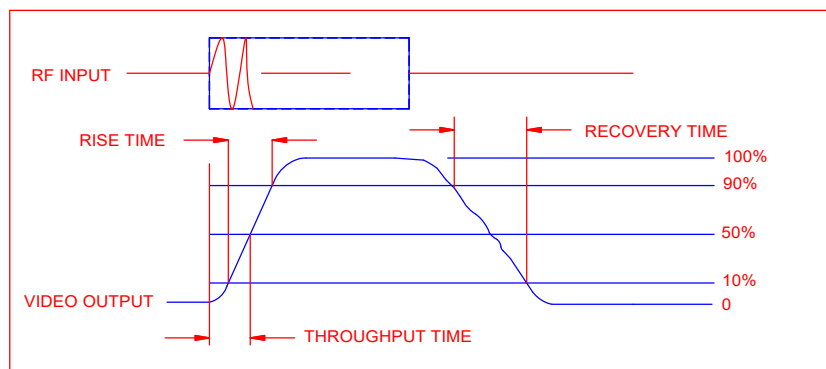


FIGURE 4: PULSE

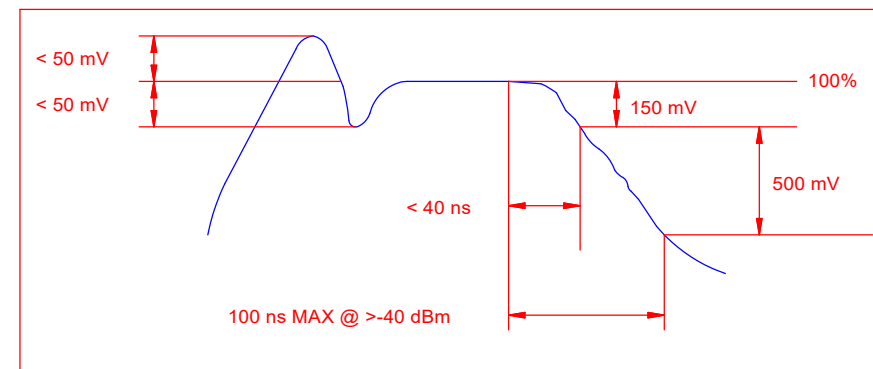


FIGURE 5: PULSE RESPONSE

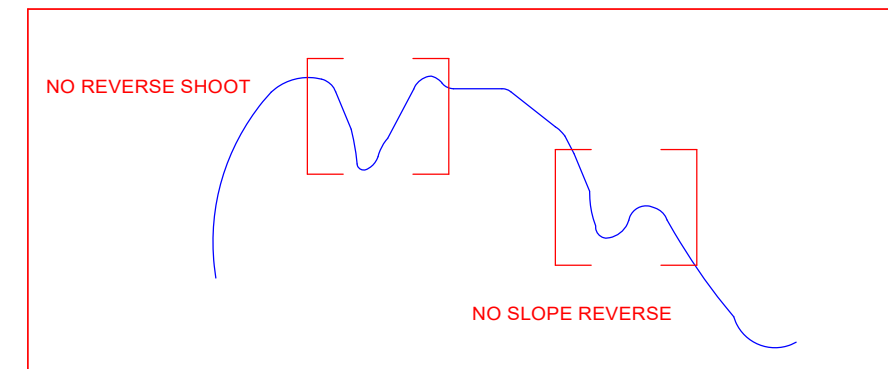


FIGURE 6: REVERSE

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TITLE			
OUTLINE			
GMDA-D1004-YK-HERM			
SIZE	FSCM NO.	DWG NO.	REV.
B	05XQ0	27052540	A1
SCALE 1:1			SHEET 2 OF 2