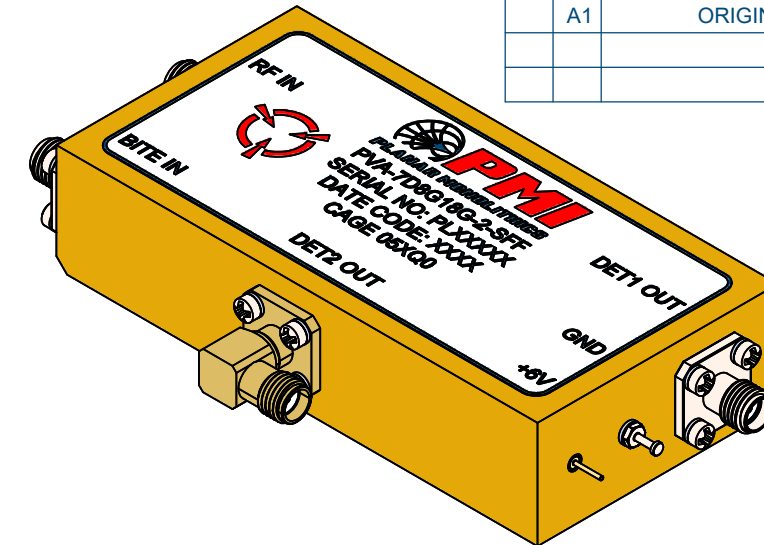


ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	12/24/2025	

DESCRIPTION:

QUANTIC PMI MODEL NO: PVA-7D8G18G-2-SFF IS A BROADBAND MICROWAVE INTEGRATED DETECTOR THAT IS A HIGH-PERFORMANCE RF SUB-ASSEMBLY DESIGNED FOR ACCURATE AND RELIABLE MONITORING OF MICROWAVE SIGNAL POWER IN DEMANDING APPLICATIONS. IT OPERATES OVER THE FREQUENCY RANGE OF 7.8 GHz TO 18 GHz AND HAS TWO VIDEO OUTPUTS WITH A DYNAMIC RANGE OF 70 dBm AND A TANGENTIAL SIGNAL SENSITIVITY OF AT LEAST 65 dBm, DELIVERING A STABLE AND RREPEATABLE DETECTION ACROSS A BROAD DYNAMIC RANGE.



SPECIFICATIONS:

- FREQUENCY RANGE:..... 7.8 GHz TO 18 GHz
- RF BANDWIDTH (DET1 OUT ONLY):..... 11 GHz MAX.
- BITE IN (OUTPUT RATIO TO RF IN @ 8.8 GHz):.... -13±0.5 dB
- DET1 OUT:..... SEE FIGURE 1
- DET2 OUT:..... SEE FIGURE 2
- TSS LEVEL:..... -65 dBm MAX.
- INPUT PEAK POWER:..... 1000 W MAX. (1 μs PW, 1% DC)
- INPUT AVERAGE POWER:..... 3 W MAX.
- RECOVERY TIME:..... 400 ns MAX.
- VSWR (RF IN/BITE IN):..... 2.5:1 MAX.
- DET1/DET2 OUT PULSE WAVEFORM:..... SEE FIGURE 3
- RISE TIME:..... 20 ns MAX.
- FALL TIME:..... 20 ns MAX.
- DET1 OUT FLATNESS:..... ±2.0 dB MAX.
- DET2 OUT FLATNESS:..... ±1.5 dB MAX.
- OUTPUT CONDITION:..... 100 Ω LOAD
- VOLTAGE:..... +6V±0.5V
- CURRENT:..... 700 mA MAX.
- WEIGHT:..... 250 g MAX
- CONNECTORS:..... SMA FEMALE

FIGURE 1

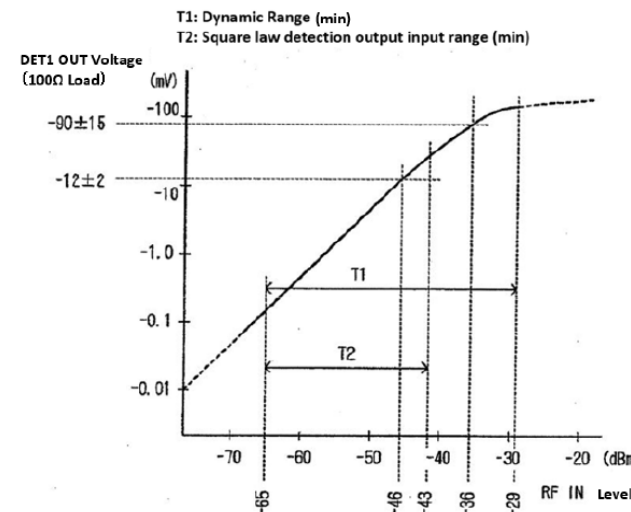


FIGURE 2

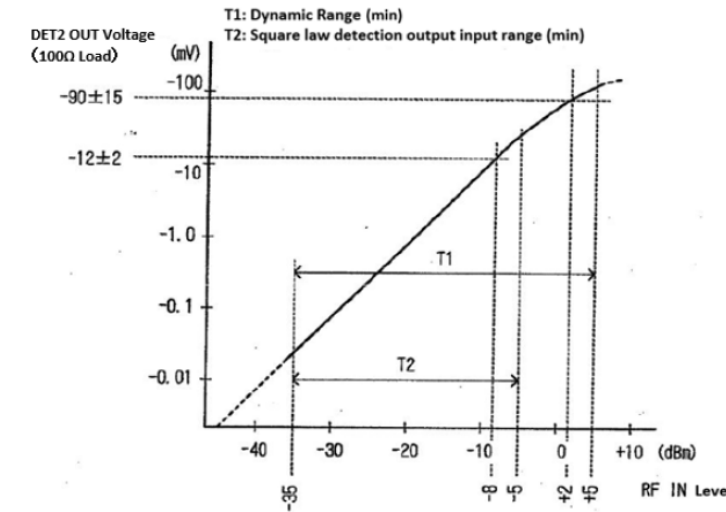
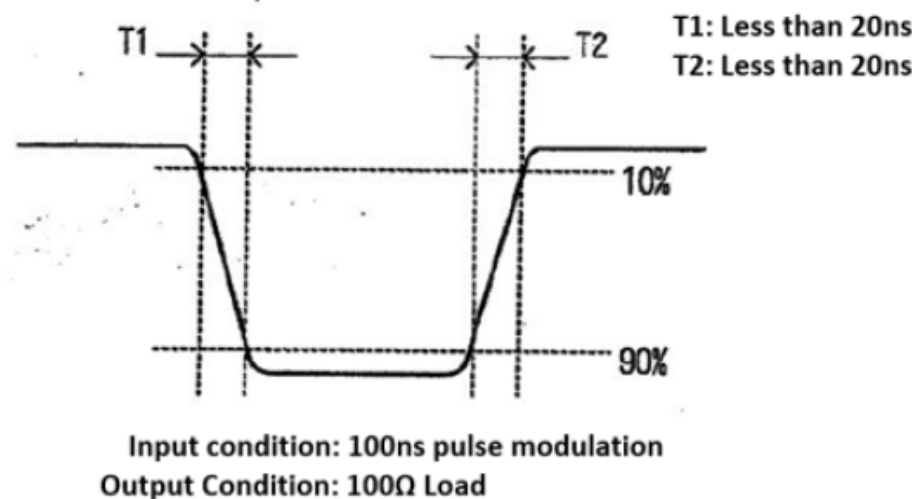


FIGURE 3



ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... -20°C TO +85°C (OPERATING)
-30°C TO +95°C (STORAGE)
- HUMIDITY:..... 95% RELATIVE HUMIDITY @ +45°C
- SHOCK:..... 20G @ 11ms
- VIBRATION:..... 5mm p-p @ 2 TO 5 Hz
1.5mm p-p @ 5 TO 10 Hz
0.3mm p-p @ 10 TO 25 Hz
IN ALL XYZ AXES, 2 HOURS PER AXIS

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

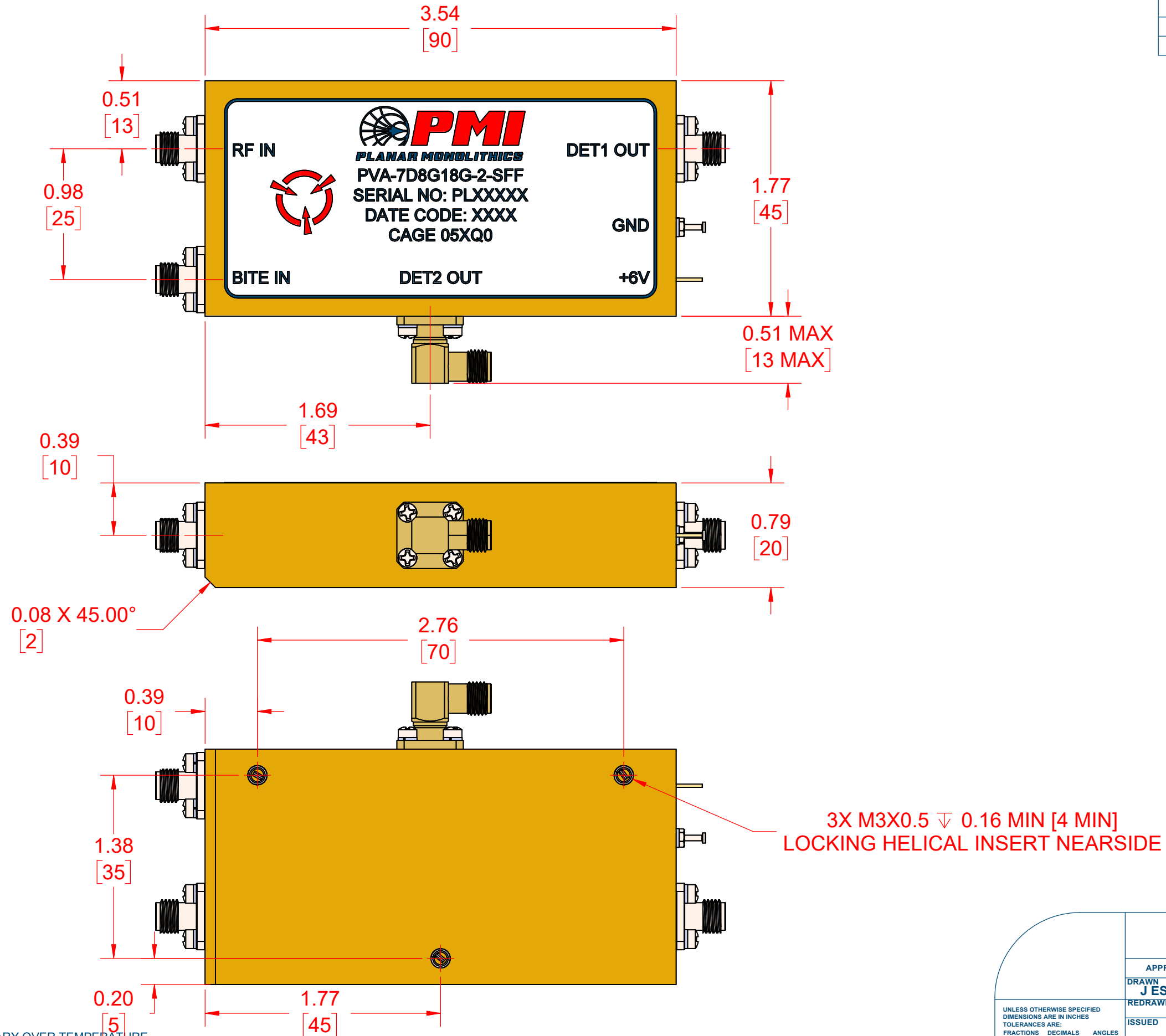
PMI CONFIDENTIAL AND PROPRIETARY

APPROVALS		DATE	TITLE	
DRAWN J ESCANO		12/24/2025	OUTLINE PVA-7D8G18G-2-SFF	
REDRAWN			SIZE	FSCM NO.
ISSUED			B	05XQ0
			DWG NO.	REV.
			27050900	A1
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS DECIMALS ANGLES ± .XX ± 0.02 ± .XXX ± 0.01			SCALE 1.5:1	SHEET 1 OF 2




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ISO 9001 CERTIFIED

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NOTE: SPECIFICATIONS WILL VARY OVER TEMPERATURE
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APPROVALS J ESCANO REDRAWN		DATE	 PLANAR MONOLITHICS 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		
		12/24/2025			
ISSUED		TITLE	OUTLINE PVA-7D8G18G-2-SFF		
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE: FRACTIONS .XX ± 0.02 ANGLES ± DECIMALS .XXX ± 0.01		SIZE	FSCM NO.	DWG NO.	REV.
		B	05XQ0	27050900	A1
		SCALE	.25:1		SHEET 2 OF 2