

**DESCRIPTION**

PMI MODEL PEC-40/25-218-21-12-SFF-TTLVG IS A DUAL GAIN AMPLIFIER THAT OPERATES BETWEEN THE FREQUENCY RANGE 2 - 18GHz.

**SPECIFICATIONS**

- FREQUENCY RANGE:..... 2 - 18GHz
- GAIN @ -25°C
  - MAX GAIN POSITION:..... +42dB ±2dB Max
  - MIN GAIN POSITION:..... +27dB ±2dB Max
- GAIN @ +25°C
  - MAX GAIN POSITION:..... +40dB ±2dB Max
  - MIN GAIN POSITION:..... +25dB ±2dB Max
- GAIN @ +75°C
  - MAX GAIN POSITION:..... +37dB ±2dB Max
  - MIN GAIN POSITION:..... +22dB ±2dB Max
- Pout @ 1dB COMPRESSION @ -25°C
  - MAX GAIN POSITION:..... +21dB Min
  - MIN GAIN POSITION:..... +20dB Min
- Pout @ 1dB COMPRESSION @ +25°C
  - MAX GAIN POSITION:..... +21dB Min
  - MIN GAIN POSITION:..... +20dB Min
- Pout @ 1dB COMPRESSION @ +75°C
  - MAX GAIN POSITION:..... +20dB Min
  - MIN GAIN POSITION:..... +20dB Min
- SATURATED OUTPUT POWER (BOTH GAINS)
  - OVER OPERATING TEMP RANGE:..... +26dBm Max
- NOISE @ -25°C
  - MAX GAIN POSITION:..... +3.8dB Max
  - MIN GAIN POSITION:..... +6.0dB Max
- NOISE @ +25°C
  - MAX GAIN POSITION:..... +4.5dB Max
  - MIN GAIN POSITION:..... +7.0dB Max
- NOISE @ +75°C
  - MAX GAIN POSITION:..... +5.0dB Max
  - MIN GAIN POSITION:..... +8.0dB Max

**ENVIRONMENTAL RATINGS**

- TEMPERATURE:.....-55°C TO + 85°C (OPERATING)  
-65°C TO +125°C (STORAGE)
- HUMIDITY:.....MIL-STD-202F, METHOD 103B COND. B
- SHOCK:.....MIL-STD-202F, METHOD 213B COND. B
- VIBRATION:.....MIL-STD-202F, METHOD 204D COND. B
- ALTITUDE:.....MIL-STD-202F, METHOD 105C COND. B
- TEMPERATURE CYCLE:.....MIL-STD-202F, METHOD 107D COND. A

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

ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XX ±0.020  
X.XXX ±0.010

**PMI CONFIDENTIAL AND PROPRIETARY**

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	06/27/12	
	A2	ECN # 13-0177	10/07/13	
	A3	ECN # 14-0198	12/08/14	
	A4	ECN # 18-0077	3/29/18	
	A5	ECN # 20-0096	6/09/20	
	A6	ECN # 20-0113	6/22/20	

- VSWR IN/OUT:..... 2.0:1 MAX
- INPUT/OUTPUT IMPEDANCE:..... 50Ω NOMINAL
- INPUT POWER (WITHOUT DAMAGE):..... +20dBm CW Max
- IN-BAND HARMONICS @ OR BELOW
  - THE 1dB COMPRESSION POINT:..... -10dBc Min
- SPURIOUS OUTPUT SIGNAL @
  - ANY SIGNAL LEVEL UP TO THE  
MAX INPUT LEVEL:..... -80dBc Max
- PULSE RISE TIME WITH INPUT SIGNALS
  - UP TO 20dBm:..... <5ns
- PULSE OVERSHOOT WITH INPUT SIGNALS
  - UP TO 20dBm:..... <0.5dB
- PULSE DROOP WITH THE FOLLOWING
  - PULSES UP TO 250u IN DURATION  
INPUT SIGNAL UP TO -20dBm:..... <2.0dB
- PULSE RECOVERY TIME WITH THE FOLLOWING
  - PULSES UP TO 250u IN DURATION  
INPUT SIGNAL UP TO -20dBm:..... 15ns
- GAIN SWITCHING TIME:..... <500ns
- GAIN SWITCH CONTROL:..... TTL HIGH "1" - Max GAIN  
TTL LOW "0" - Min GAIN
- DC SUPPLY:..... 780mA Max@ +12V ±5% Max GAIN POSITION  
610mA Max@ +12V ±5% Min GAIN POSITION
- FINISH ..... PAINTED GRAY (MOUNTING SURFACE FREE OF PAINT, GOLD)

**PLANAR MONOLITHICS INDUSTRIES, INC.**

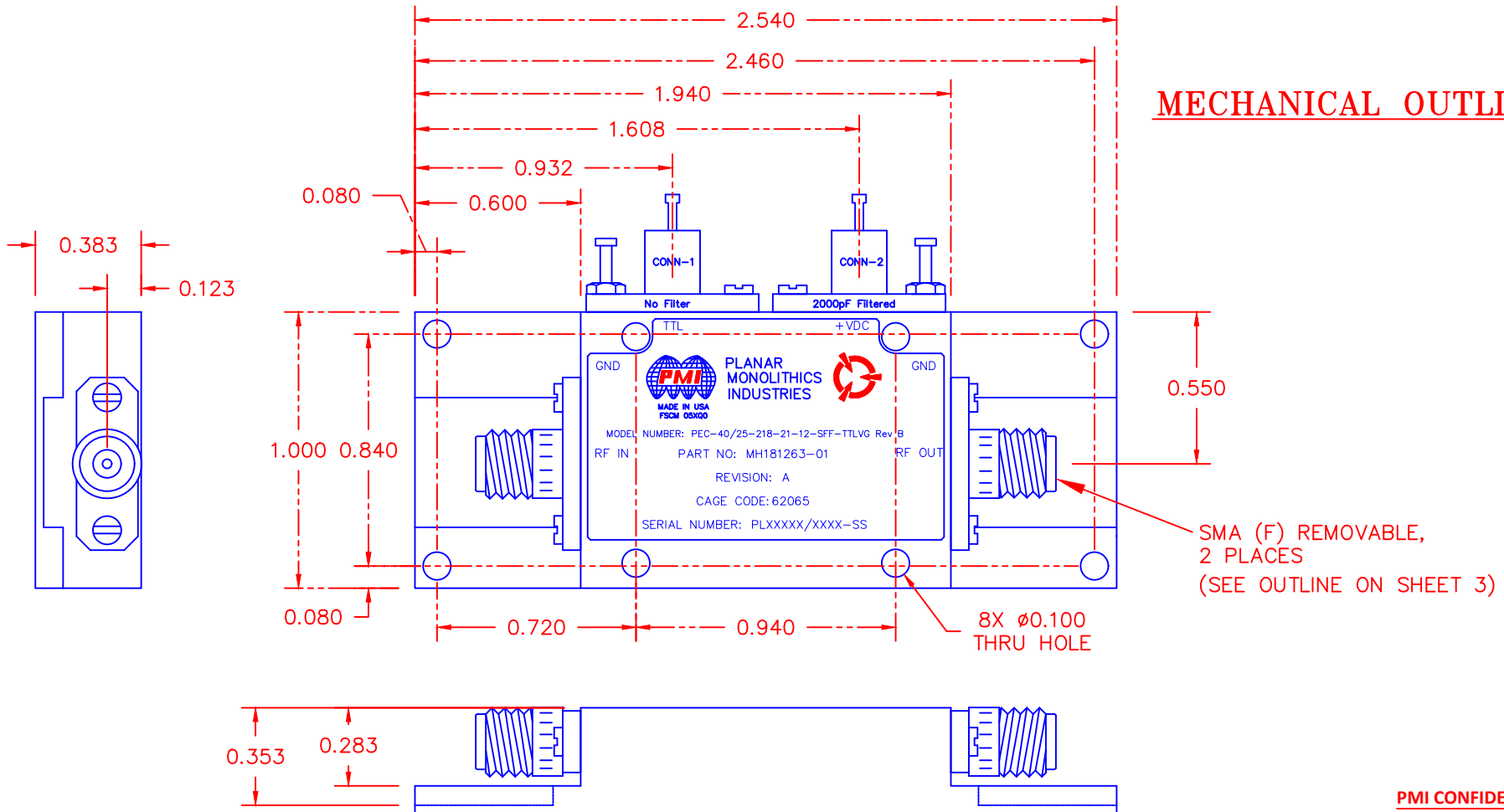
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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN <i>afk</i>		06/27/12	PRODUCT FEATURE PEC-40/25-218-21-12-SFF-TTLVG		
CHECKED			SIZE	FSCM NO.	DWG NO.
ISSUED			A	05XQ0	27005731
			SCALE	N: S	SHEET 1 OF 3
			REV.	A6	

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**MECHANICAL OUTLINE**

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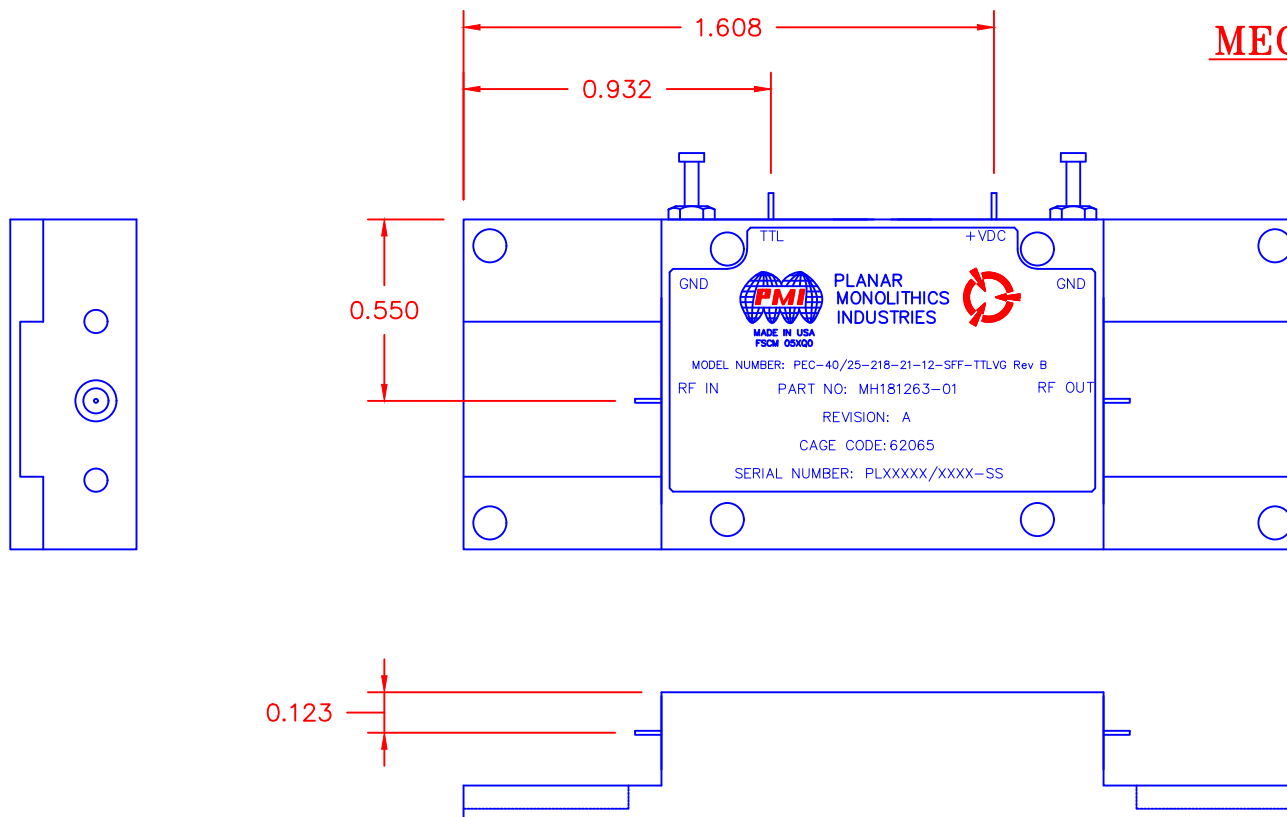
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