

**DESCRIPTION:**

PLANAR MONOLITHICS INDUSTRIES MODEL NUMBER PMIX-11D2G14D6G-1G4D4G-12V IS A DOWN CONVERTER MODULE WITH AN AMPLIFIED BANDPASS OUTPUT OF 1-4.4 GHz.

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	3/15/2019	
	D1	ECN # 23-0137	8/7/2023	
	D2	ECN # 24-0323	11/25/2024	

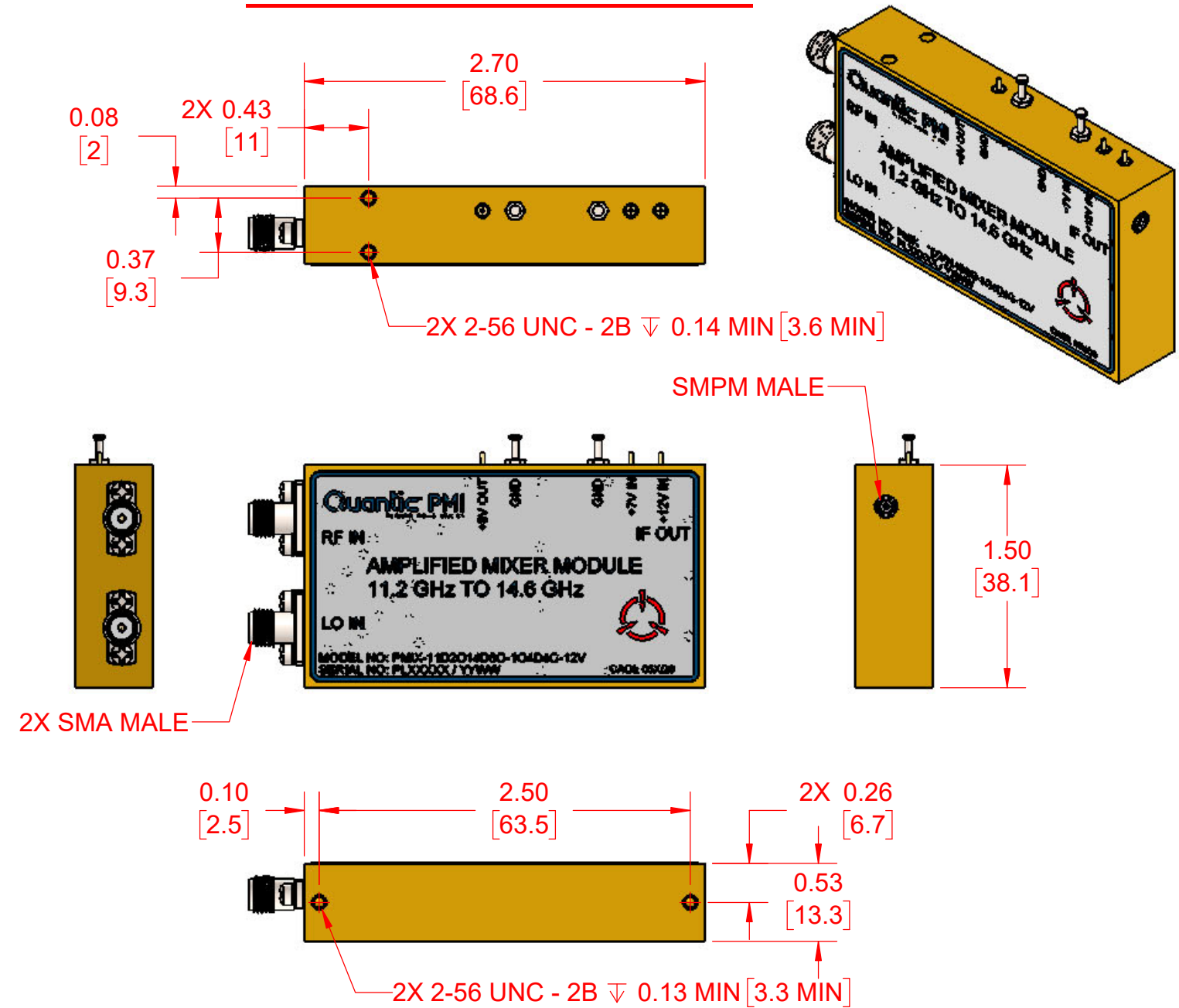
**SPECIFICATIONS:**

- RF INPUT FREQUENCY RANGE:..... 11.2 TO 14.6 GHz
  - RF INPUT POWER:..... -13 dBm TYP
  - LO INPUT:..... 10.2 GHz
  - LO INPUT POWER:..... +21 dBm TYP
  - IF OUTPUT RANGE:..... 1 TO 4.4 GHz
  - GAIN:..... 1 TO 5.5 dB
  - HARMONICS:..... -60 dBc MAX @ -13 dBm INPUT
  - SPURIOUS:..... -60 dBc MAX @ -13 dBm INPUT
  - OUTPUT IP3:..... +30 dBm TYP, +26 dBm MIN
  - RF INPUT VSWR:..... 1.9:1 MAX
  - IF OUTPUT VSWR:..... 2:1 MAX
  - DC POWER:..... +7VDC @ 250 mA (REQUIRED)  
+12V (ONLY REQUIRED TO USE +8V OUTPUT)
  - NOISE FIGURE:..... 13 dB MAX
  - CONNECTORS:
    - INPUTS:..... SMA MALE
    - OUTPUT:..... SMPM MALE
  - SIZE:..... 2.70" X 1.50" X 0.525"
  - FINISH:..... GOLD PLATED
- (OPTIONAL)
- DC POWER OUT:..... +8VDC @ 500 mA  
(+12V INPUT REQUIRED)

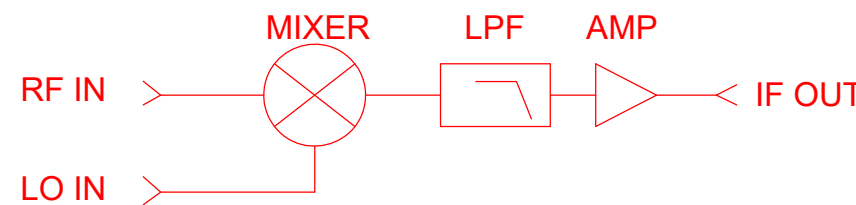
**ENVIRONMENTAL RATINGS:**

- TEMPERATURE:..... -40°C TO +85°C (OPERATING)  
-40°C TO +85°C (STORAGE)
- HUMIDITY:..... MIL-STD-810, 0 TO 95% NON-CONDENSING
- SHOCK:..... MIL-STD-810, 516.6 COMPLIANT, 20G, 11 ms DURATION
- VIBRATION:..... MIL-STD-810, METHOD 515, FIG. 3 (NON-OP)
- ALTITUDE:..... MIL-STD-810, 15000 FT

**MECHANICAL OUTLINE**



**BLOCK DIAGRAM**



PMI CONFIDENTIAL AND PROPRIETARY

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES  
TOLERANCES ARE:

FRACTIONS	DECIMALS	ANGLES
±	.XX ± 0.02	±
	.XXX ± 0.01	

APPROVALS	DATE
DRAWN <b>M. HANKEN</b>	3/15/2019
REDRAWN	
ISSUED	

**Quantic PMI**  
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ISO 9001 CERTIFIED

TITLE: **OUTLINE**  
PMIX-11D2G14D6G-1G4D4G-12V

SIZE	FSCM NO.	DWG NO.	REV.
B	05XQ0	27036180	D2

SCALE 1:1 SHEET 1 OF 1

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