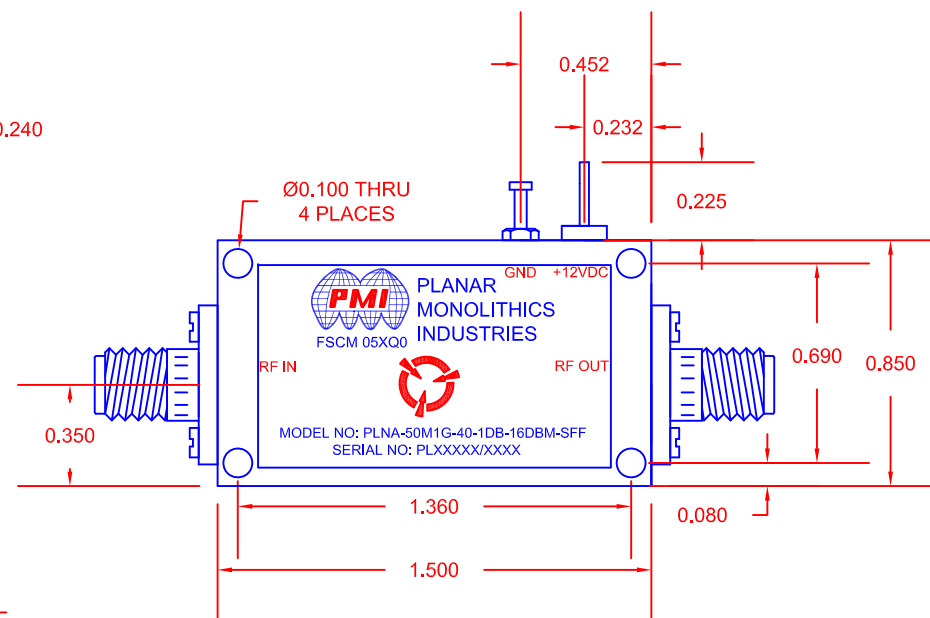
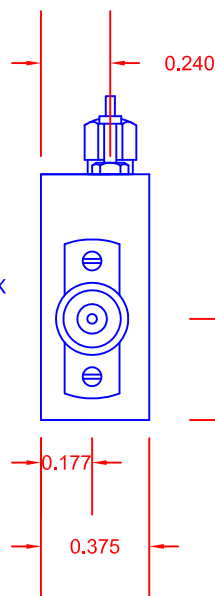


DESCRIPTION

PMI MODEL NO. PLNA-50M1G-40-1DB-16DBM-SFF IS A LOW NOISE AMPLIFIER THAT OPERATES OVER THE FREQUENCY RANGE OF 50 MHz TO 1.0 GHz. IT HAS A TYPICAL NOMINAL SS GAIN @ 25°C OF 40 dB AND A TYPICAL GAIN FLATNESS OF ±1.0 dB. THIS MODEL IS OUTFITTED WITH SMA FEMALE CONNECTORS.

SPECIFICATIONS

- FREQUENCY RANGE: ----- 0.05 TO 1.0 GHz
- NOISE FIGURE @ 25°C: ----- 0.8 dB TYP, 1.0 dB MAX
- P-1dB COMPRESSION POINT: ----- +16 dBm MIN, +17 dBm TYP
- OUTPUT IP3: ----- +28 dBm MIN, +31.5 dBm TYP
- NOMINAL SS GAIN @ 25°C: ----- 37 dB MIN, 40 dB TYP, 42 dB MAX
- GAIN FLATNESS: ----- ±1.0 dB TYP, ±1.25 dB MAX
- GAIN VARIATION: ----- ±1.25 dB TYP
- INPUT VSWR: ----- 1.45:1 TYP, 1.65:1 MAX
- OUTPUT VSWR: ----- 1.3:1 TYP, 1.5:1 MAX
- REVERSE ISOLATION: ----- 50 dB MIN, 55 dB TYP
- SPURIOUS: ----- 60 dBc MAX
- DC VOLTAGE: ----- +10.0 V MIN, +12 V TYP, +15 V MAX
- DC SUPPLY CURRENT: ----- 110 mA TYP, 125 mA MAX
- CONNECTORS: ----- SMA FEMALE
- FINISH: ----- NICKEL PLATED



ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- -40 °C TO +75 °C (OPERATING)
----- -55 °C TO +125 °C (STORAGE)
- HUMIDITY: ----- MIL-STD-202, METHOD 103B COND. B
- SHOCK: ----- MIL-STD-202, METHOD 213B COND. B
- VIBRATION: ----- MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: ----- MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: ----- MIL-STD-202, METHOD 107D COND. A

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

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

PMI CONFIDENTIAL AND PROPRIETARY

REVISIONS

ZONE	REV.	DESCRIPTION	DATE	APPROVED
	-	PRELIMINARY	11/18/2022	

MECHANICAL OUTLINE

ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- -40 °C TO +75 °C (OPERATING)
----- -55 °C TO +125 °C (STORAGE)
- HUMIDITY: ----- MIL-STD-202, METHOD 103B COND. B
- SHOCK: ----- MIL-STD-202, METHOD 213B COND. B
- VIBRATION: ----- MIL-STD-202, METHOD 204D COND. B
- ALTITUDE: ----- MIL-STD-202, METHOD 105C COND. B
- TEMPERATURE CYCLE: ----- MIL-STD-202, METHOD 107D COND. A

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

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

PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F GROVE ROAD

FREDERICK, MARYLAND 21704 USA

TEL: (301)-662-5019, FAX: (301)-662-1731

WEB: www.pmi-rf.com, EMAIL: sales@pmi-rf.com

ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE				REV.
DRAWN <i>AF</i>		11/18/22	PRODUCT FEATURE PLNA-50M1G-40-1DB-16DBM-SFF				-
REDRAWN			SIZE	FSCM NO.	DWG NO.	PRELIMINARY	
ISSUED			A	05XQ0			
			SCALE	N:S	SHEET		1 OF 1