

## DESCRIPTION

PMI MODEL NO. PA-50-0D81-SFNF IS A POWER AMPLIFIER THAT OPERATES OVER THE FREQUENCY RANGE OF 0.8 TO 1.0 GHz. IT HAS A TYPICAL GAIN OF 50 dB AND A MAXIMUM NOISE FIGURE OF 10 dB. THIS MODEL IS OUTFITTED WITH A SMA FEMALE INPUT CONNECTOR AND A N FEMALE OUTPUT CONNECTOR.

## SPECIFICATIONS

- FREQUENCY RANGE: 0.8 TO 1.0 GHz
- GAIN: 45 dB MIN, 50 dB TYP, 57 dB MAX
- GAIN FLATNESS:  $\pm 1.0$  dB TYP,  $\pm 1.5$  dB MAX
- OUTPUT POWER @ 1 dB COMPRESSION: +47.5 dBm MIN, +49 dBm TYP
- OUTPUT POWER @ 3 dB COMPRESSION: +48.5 dBm MIN, +50 dBm TYP
- NOISE FIGURE: 7 dB TYP, 10 dB MAX
- OUTPUT THIRD ORDER INTERCEPT POINT: +52 dBm MIN, +60 dBm TYP
- INPUT VSWR: 1.3:1 TYP, 1.6:1 MAX
- OUTPUT VSWR: 1.4:1 TYP, 1.6:1 MAX
- DC SUPPLY VOLTAGE: +28 V TYP, +30 V MAX
- SUPPLY CURRENT: 10 A TYP, 15 A MAX
- RF IN/OUT CONNECTORS: SMA FEMALE / N FEMALE

## MAXIMUM RATINGS

- OPERATING TEMPERATURE: -20°C TO +45°C
- BASE PLATE TEMPERATURE: 60°C
- STORAGE TEMPERATURE: -55°C TO +100°C
- DC VOLTAGE: 30 V
- INPUT RF POWER (NO DAMAGE): +7 dBm

PERMANENT DAMAGE MAY OCCUR IF ANY OF THESE LIMITS ARE EXCEEDED.

## ENVIRONMENTAL RATINGS

- TEMPERATURE: -20 °C TO +45 °C (OPERATING)  
-55 °C TO +100 °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

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE

NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

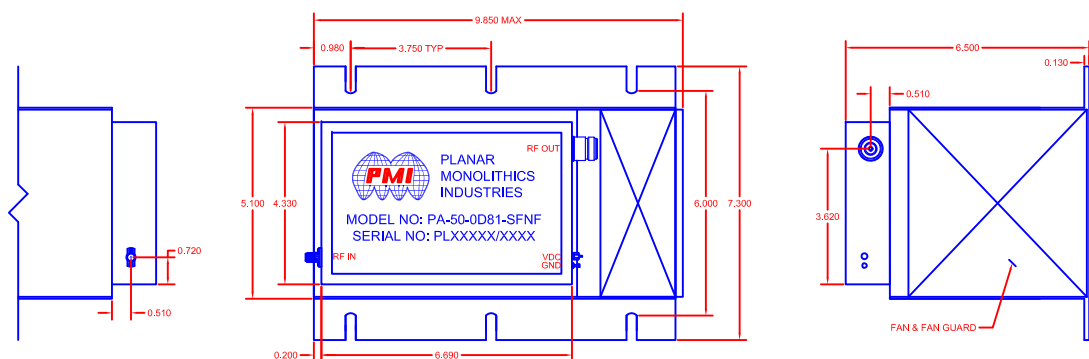
**PMI CONFIDENTIAL AND PROPRIETARY**

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

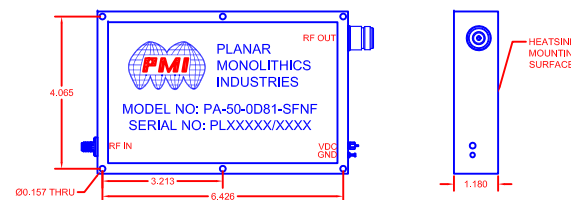
REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	1/15/2022	

## MECHANICAL OUTLINE

OUTLINE DRAWING FOR MODELS WITH HEATSINK



OUTLINE DRAWING FOR MODELS WITHOUT HEATSINK



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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE		
DRAWN		EW	PRODUCT FEATURE		
REDRAWN			PA-50-0D81-SFNF		
ISSUED			SIZE	FSCM NO.	DWG NO.
			A	05XQ0	27043580
			SCALE	N:S	SHEET
					1 OF 1