

DESCRIPTION

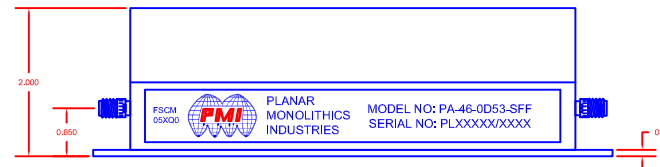
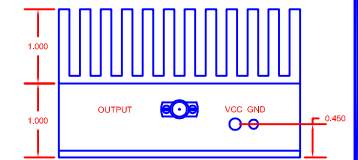
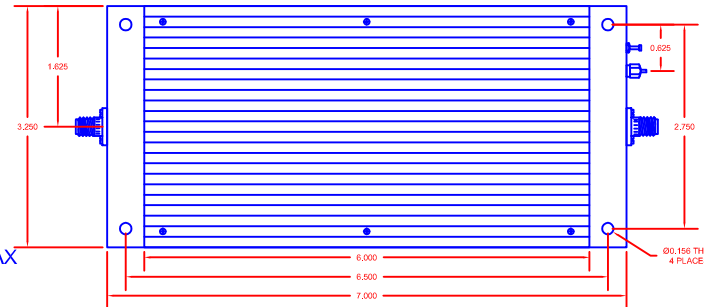
PMI MODEL NO. PA-46-0D5-SFF IS A POWER AMPLIFIER THAT OPERATES OVER THE FREQUENCY RANGE OF 0.5 TO 3.0 GHz. IT HAS A TYPICAL SMALL SIGNAL GAIN OF 46 dB AND A MAXIMUM NOISE FIGURE OF 6.0 dB. THIS MODEL IS OUTFITTED WITH SMA FEMALE CONNECTORS.

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	11/8/2021	
	A2	ECN # 21-0190	11/22/2021	

SPECIFICATIONS

- FREQUENCY RANGE: ----- 0.5 TO 3.0 GHz
- SMALL SIGNAL GAIN S21 (f = 1750 MHz): - 44 dB MIN, 46 dB TYP
- GAIN FLATNESS: ----- ±2.5 dB TYP, ±3.0 dB MAX
- OUTPUT POWER P_{OUT} @ P_{IN} = -5 dBm: --- +38 dBm MIN, +40 dBm TYP
- OUTPUT IP3 (f = 1750 MHz): ----- +49 dBm MIN, +51 dBm TYP
- REVERSE ISOLATION S12 (f = 1750 MHz): - -65 dB MIN, -70 dB TYP
- NOISE FIGURE (f = 1750 MHz): ----- 5.0 dB TYP, 6.0 dB MAX
- EFFICIENCY AT P_{OUT} = +40 dBm (f = 1750 MHz): ----- 18% MIN, 20% TYP
- INPUT VSWR S11 (f = 1750 MHz): ----- 1.7:1 TYP, 2.0:1 MAX
- DC POWER SUPPLY: ----- +11 V MIN, +12 V TYP, +15 V MAX
- SUPPLY CURRENT QUIESCENT (NO RF): - 3800 mA TYP, 4000 mA MAX
- SUPPLY CURRENT QUIESCENT @ P_{OUT} = +40 dBm: ----- 5800 mA TYP, 6800 mA MAX
- SIZE (EXCLUDING CONNECTORS): ----- 7.00" X 3.25" X 2.00"
- WEIGHT: ----- 24 oz

MECHANICAL OUTLINE



ABSOLUTE MAXIMUM RATINGS

- SUPPLY VOLTAGE: ----- +16 V
- RF INPUT POWER: ----- +5 dBm
- OPERATING TEMPERATURE: ----- -30°C TO +65°C
- STORAGE TEMPERATURE: ----- -55°C TO +125°C

ENVIRONMENTAL RATINGS

- TEMPERATURE: ----- -30 °C TO +65 °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

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 ±0.020
X,XXX ±0.010

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ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN <i>EW</i>		12/20/19	PRODUCT FEATURE PA-46-0D5-SFF			
REDRAWN			SIZE A	FSCM NO. 05XQ0	DWG NO. 27043120	REV. A2
ISSUED			SCALE N:S	SHEET 1 OF 1		