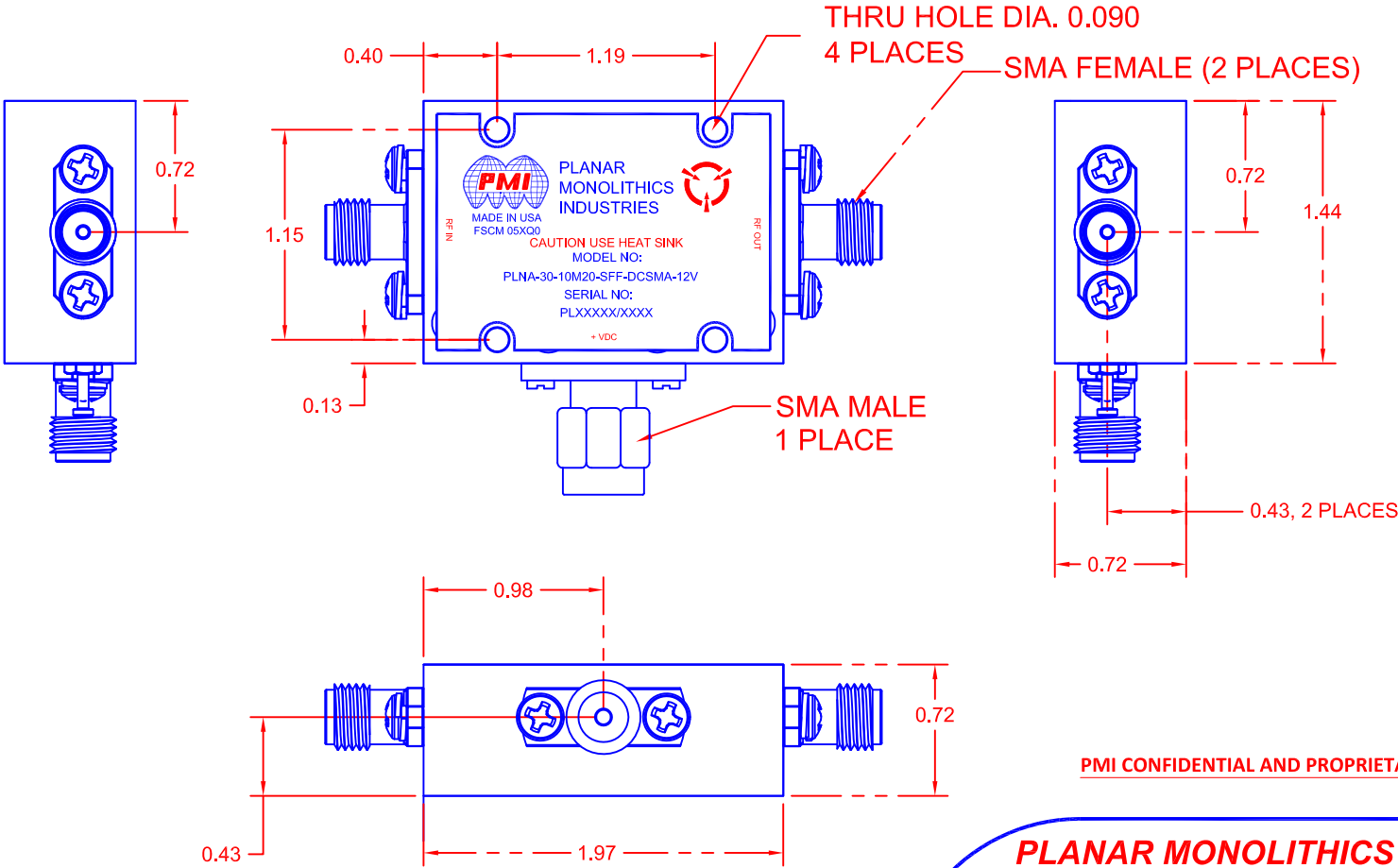


DESCRIPTION:

PMI MODEL NUMBER: PLNA-30-10M20-SFF-DCSMA-12V IS A VERY LOW NOISE AMPLIFIER WITH WORKING FREQUENCY RANGE OF 10MHZ TO 20GHZ.

REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
	-	PRELIMINARY	10/10/23
	1	MODEL UPDATE	2/8/24



PMI CONFIDENTIAL AND PROPRIETARY

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

ENVIRONMENTAL RATINGS:

Temperature: -40°C to + 85°C (Operating)
-40°C to +100°C (Storage)
Humidity: MIL-STD-202F, METHOD 103B COND B.
Shock: MIL-STD-202F, METHOD 213B COND B.
Altitude: MIL-STD-202F, METHOD 105C COND B.
Temperature Cycle: MIL-STD-202F, METHOD 107D COND A
Note: The above specifications are subject to change or revision.
Specifications will vary over operating temperature.

FEATURES:
Unconditional Stability
AVAILABLE OPTIONS:
Various Package types
Various Connector types
Temperature Compensation
Gain and Phase Matching
MIL-STD-883 Screening Available

PLANAR MONOLITHICS INDUSTRIES, INC.
7309-A GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-662-5019 FAX: 301-662-1731
WEBSITE: www.pmi-rf.com
E-MAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED



APPROVALS		DATE		TITLE	
DRAWN AF		10/10/23		PRODUCT FEATURE	
REDRAWN				PLNA-30-10M20-SFF-DCSMA-12V	
ISSUED				PRELIMINARY	
SIZE A		FSCM NO.		DWG NO	
SCALE N:S				SHEET 2 OF 2	
				REV. 1	

DESCRIPTION:

PMI MODEL NUMBER: PLNA-30-10M20-SFF-DCSMA-12V IS A VERY LOW NOISE AMPLIFIER WITH WORKING FREQUENCY RANGE OF 10MHZ TO 20GHZ.

SPECIFICATIONS:

Frequency Range: 10 MHz to 20 GHz

Gain: +26 dB Min. (10MHz to 18 GHz)
+28 dB Min. (18 to 20 GHz)

Gain Flatness: ± 2.0 dB Typ. (10MHz to 18 GHz)
 ± 2.5 dB Typ. (10MHz to 20 GHz)

Noise Figure: 3.0 dB Typ. (20MHz to 0.5 GHz)
(See Note) 2.5 dB Typ. (0.5 to 18 GHz)
3.3 dB Typ. (18 to 20 GHz)

OP1dB: +14 dBm Typ. (10MHz to 18 GHz)
+13 dBm Typ. (18 to 20 GHz)

PSat: +15 dBm Typ. (10 MHz to 18 GHz)
+14 dBm Typ. (18 to 20 GHz)

OIP3: +25 dBm Typ. (10MHz to 18 GHz)
+23 dBm Typ. (18 to 20 GHz)

VSWR Input: 2.0:1 Max.(10MHz to 18 GHz)
2.2:1 Typ. (18 to 20 GHz)

VSWR Output: 2.1:1 Max.(10MHz to 18 GHz)
2.4:1 Typ. (18 to 20 GHz)

Note: Noise figure only valid above 20 MHz

ENVIRONMENTAL RATINGS:

Temperature: -40°C to + 85°C (Operating)
-40°C to +100°C (Storage)

Humidity: MIL-STD-202F, METHOD 103B COND B.

Shock: MIL-STD-202F, METHOD 213B COND B.

Altitude: MIL-STD-202F, METHOD 105C COND B.

Temperature Cycle: MIL-STD-202F, METHOD 107D COND A

Note: The above specifications are subject to change or revision.
Specifications will vary over operating temperature.

SPECIFICATIONS:

Second Harmonic:
(-30dBm Input Power) 70 dBc Typ.
(At P1dB) 12 dBc Typ.
(+5dBm Over P1dB) 12 dBc Typ.
(+10dBm Over P1dB) 12 dBc Typ.
(+15dBm Over P1dB) 12 dBc Typ.

Reverse Isolation: 36 dB Min. (10 MHz to 18 GHz)
35 dB Min. (18 to 20 GHz)

DC Supply: SMA Connector (Male)
+12 to +15 VDC @ 150 mA Max.

Connectors In/Out: SMA Connector (Female)

Finish: Gold Plated

FEATURES:

Unconditional Stability

AVAILABLE OPTIONS:

Various Package types
Various Connector types
Temperature Compensation
Gain and Phase Matching
MIL-STD-883 Screening Available

REVISIONS			
ZONE	REV.	DESCRIPTION	DATE
	-	PRELIMINARY	10/10/23
	1	MODEL UPDATE	2/8/24

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APPROVALS		DATE		TITLE			
DRAWN		AF		10/10/23		PRODUCT FEATURE	
REDRAWN						PLNA-30-10M20-SFF-DCSMA-12V	
ISSUED						SIZE	REV.
						A	1
						FSCM NO.	DWG NO
							PRELIMINARY
						SCALE	SHEET
						N:S	1 OF 2