

## DESCRIPTION:

PMI MODEL NUMBER: PLNA-30-10M20-292FF IS A VERY LOW NOISE AMPLIFIER WITH WORKING FREQUENCY RANGE OF 10MHZ TO 20GHZ. THIS AMPLIFIER IS SUPPLIED IN A HOUSING THAT CAN BE USED AS A 2.92MM SURFACE MOUNT OR CONNECTORIZED COMPONENT.

## 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: (See Note)	3.0 dB Typ. (20MHz to 0.5 GHz) 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. (20 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)
Reverse Isolation:	36 dB Min. (10 MHz to 18 GHz) 35 dB Min. (18 to 20 GHz)
DC Supply:	+5 VDC @ 120 mA Max.
Connectors In/Out:	2.92mm Female
Finish:	Gold Plated

Note: Noise figure only valid above 20 MHz

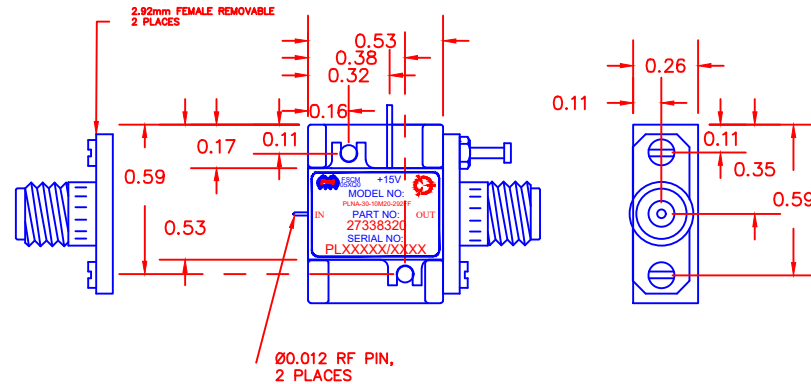
## ENVIRONMENTAL RATINGS:

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.	

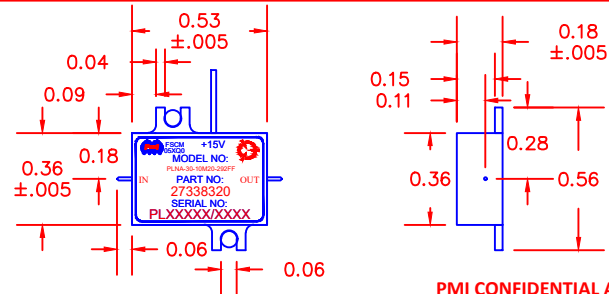
ALL DIMENSIONS ARE IN INCHES  
TOLERANCES:  
X.XX ±0.020  
X.XXX ±0.010

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	02/12/21	

## HOUSING WITH CARRIER



## HOUSING WITHOUT CARRIER (SURFACE MOUNT)



PMI CONFIDENTIAL AND PROPRIETARY

## FEATURES:

Internal Voltage Regulation  
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.

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E-MAIL: [sales@pmi-rf.com](mailto:sales@pmi-rf.com)  
ISO 9001 CERTIFIED



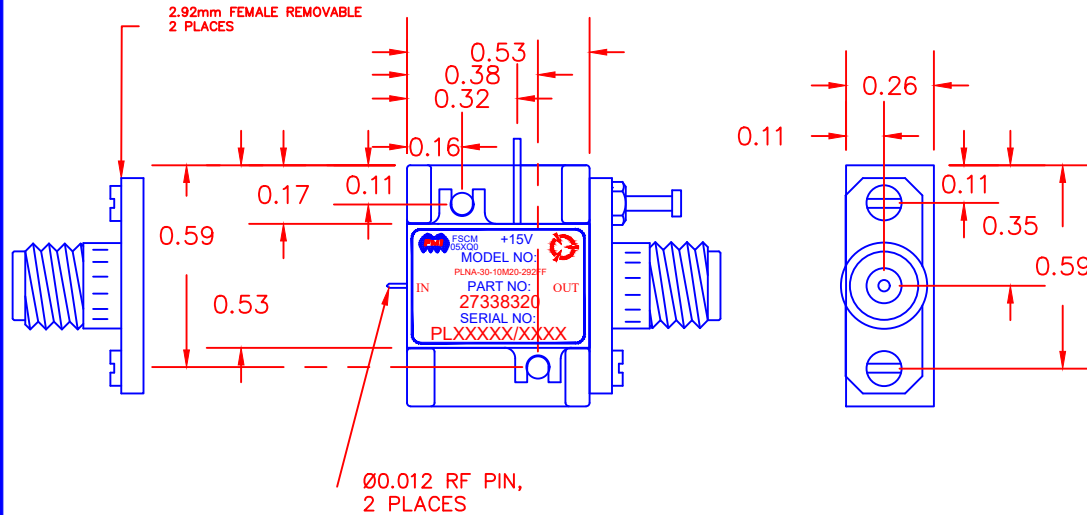
APPROVALS		DATE	TITLE		REV.
DRAWN		01/12/2021	PRODUCT FEATURE		
REDRAWN	ALC		PLNA-30-10M20-292FF		
ISSUED			SIZE A	FSCM NO.	DWG NO PRELIMINARY
			SCALE N:S	SHEET 1 OF 2	

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## HOUSING WITH CARRIER



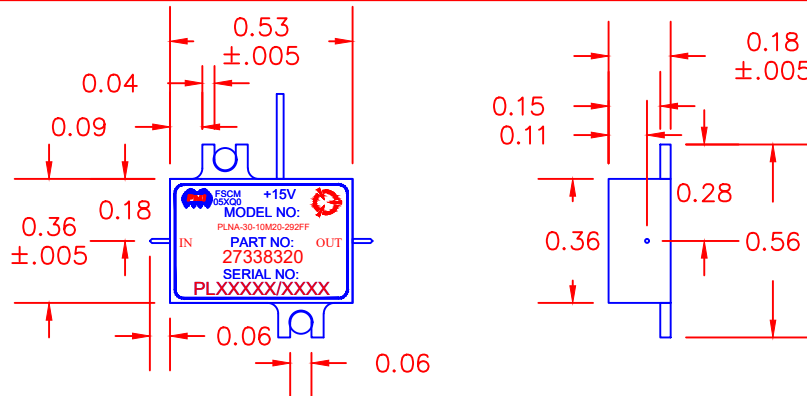
## MECHANICAL OUTLINE

### ENVIRONMENTAL RATINGS:

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			A		PRELIMINARY	
			SCALE	N:S	SHEET	2 OF 2