

# DATASHEET

## High Performance S-Band Low Noise Amplifiers

### General Information

Intended for either indoor or outdoor environments, the Locus Microwave L41 Series S-Band Low Noise Amplifier (LNA) provides a combination of superior performance, reliability and cost effectiveness.

### Features

- Outdoor packaging
- Integral Fault Alarm



# L41 Series Low Noise Amplifiers

CODAN SATCOM



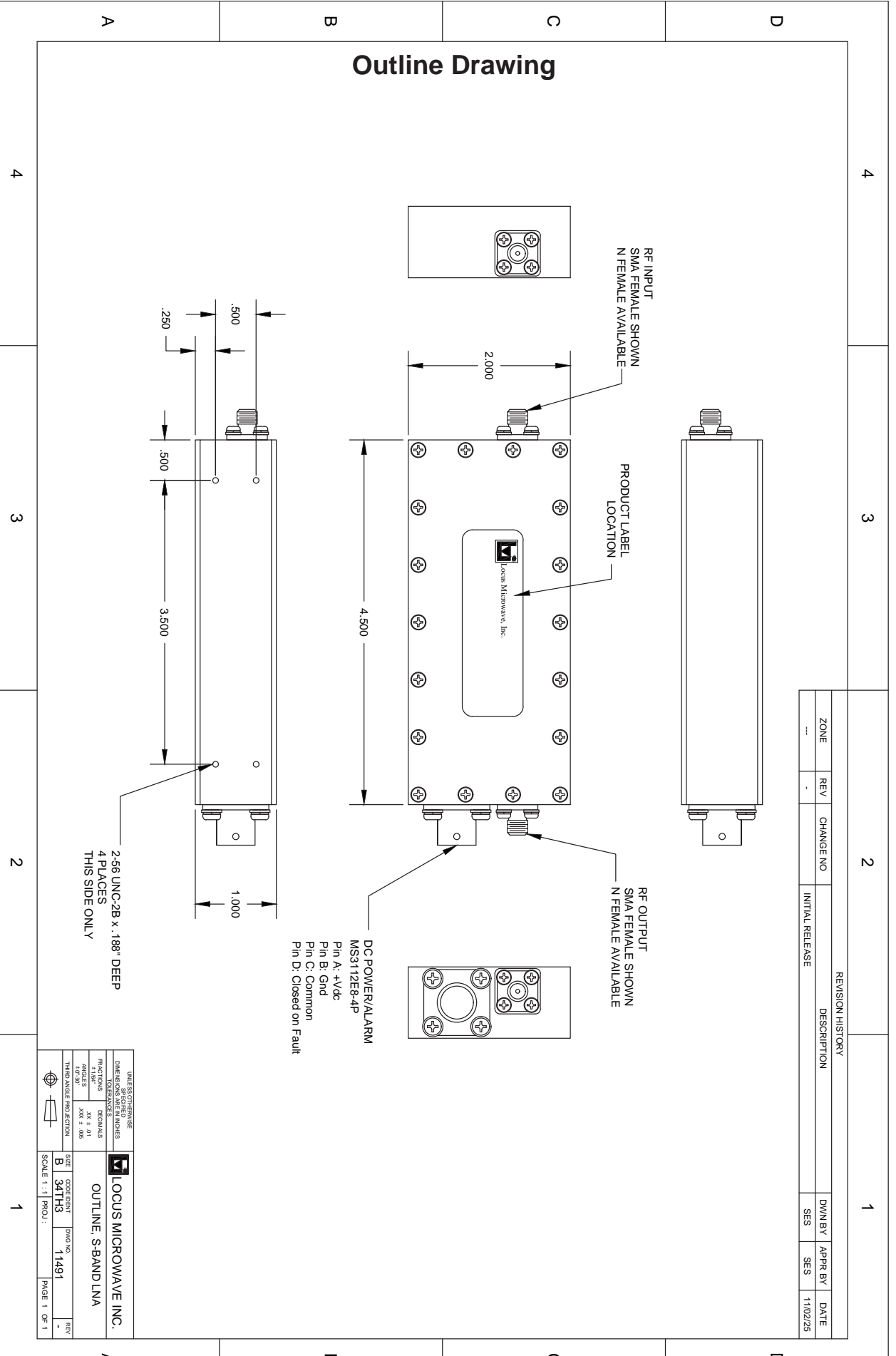
	Range	Units	Notes
<b>Electrical Specifications</b>			
Frequency	2.10-2.20 or 2.20-2.30	GHz	2.4-2.7 GHz
Noise Temperature	30, 35, 40, 45 or 50 max.	K	@+23°C
Gain	50 or 60 min.	dB	
Gain Flatness	+/-0.5 max.	dB	per full band
Gain Slope	+/-0.25 max.	dB	per 10 MHz
$P_{1dB}$	+10, 12, or 20 min.	dBm	
VSWR			
Input	1.3 typ., 1.5 max.	:1	
Output	1.3 typ., 1.5 max.	:1	
Overdrive	0 max.	dBm	non-damaging
AM/PM Conversion	0.1 max.	°/dB	@-5 dBm output
Group Delay			
Linear	0.01 max.	ns/MHz	per 40 MHz
Parabolic	0.001 max.	ns/MHz <sup>2</sup>	per 40 MHz
Ripple	0.1 max.	ns p-p	per 40 MHz
Power Requirement			
Input Voltage	+12 to +24	VDC	110/220 VAC available
Current	220 nom.	mA	
Fault Alarm	contact closure	Form 'A'	current sensing
<b>Mechanical Specifications</b>			
Outline	LMI Dwg #11491	inches	
Weight	0.65	lbs.	
Finish	paint	white	
Connectors			
RF Input	N or SMA	Female	
RF Output	N or SMA	Female	
Power /Alarm	4 pin DC Only	MS-type	mate included
Power /Alarm	6 pin AC Only	MS-type	mate included
<b>Environmental</b>			
Operating Temperature	-40 to +60	°C	
Humidity	100	%	with condensation

Specifications are subject to change at the discretion of Locus Microwave, Inc.

06/11

REVISION HISTORY				DWN BY	APPR BY	DATE
ZONE	REV	CHANGE NO	INITIAL RELEASE	SES	SES	
...	-					11/02/25

# Outline Drawing



2-56 UNC-2B x .189" DEEP  
4 PLACES  
THIS SIDE ONLY

LOCUST MICROWAVE INC.		SCALE 1:1   PROJ:	
LOCUS MICROWAVE INC.		11491	
OUTLINE, S-BAND LNA		PAGE 1 OF 1	
DATE	REV	DATE	REV
11/02/25	-		-
APPR BY	DWG NO	APPR BY	DWG NO
	11491		
SES	PROJ:	SES	PROJ:



## Model Number Configuration

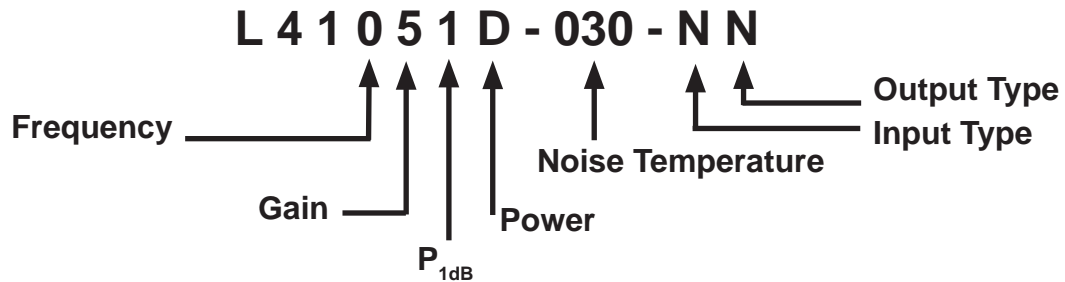
**1 2 3 4 5 6 7**

**L 4 1 x x x x - x x x - x x**

<b>1 Frequency</b>	<b>2 Gain</b>	<b>3 P 1dB</b>	<b>4 Power</b>	<b>5 Noise Temperature</b>
0 = 2.2-2.3 GHz	5 = 50 dB	1 = 10 dBm	D = 12-24 VDC	030 K
1 = 2.1-2.2 GHz	6 = 60 dB	2 = 12 dBm	A = 110/220 VAC	035 K
2 = 2.4-2.7 GHz		5 = 20 dBm		040 K
				045 K
				050 K
<b>6 Input Type</b>	<b>7 Output Type</b>	<b>A Accessories</b>	<b>B Finish</b>	<b>Federal Standard</b>
S = SMA (Female)	S = SMA (Female) *1	0 = None	0 = White	37925
N = N (Female)	N = N (Female)	1 = 4 Pin Mate DC Only	1 = Dark Green	34094
		2 = 4 Pin Pigtail DC Only	2 = Desert Tan	33446
		3 = 6 Pin Mate AC Only	3 = Beige	37722
		4 = 6 Pin Pigtail AC Only	4 = Sand	33303
			5 = Forest Green	34083
			6 = Metalast	

\*1 NOTE: LNAs ordered as components of a Redundancy system require an SMA (F) output connector.

Example: 2.2-2.3 GHz, 50 dB Gain, +10 dBm P<sub>1dB</sub>, DC Power, 30K Noise



**Note:** Selections shaded in gray will require Engineering review.

Please confirm configurations against product specifications, and with factory, prior to order.