

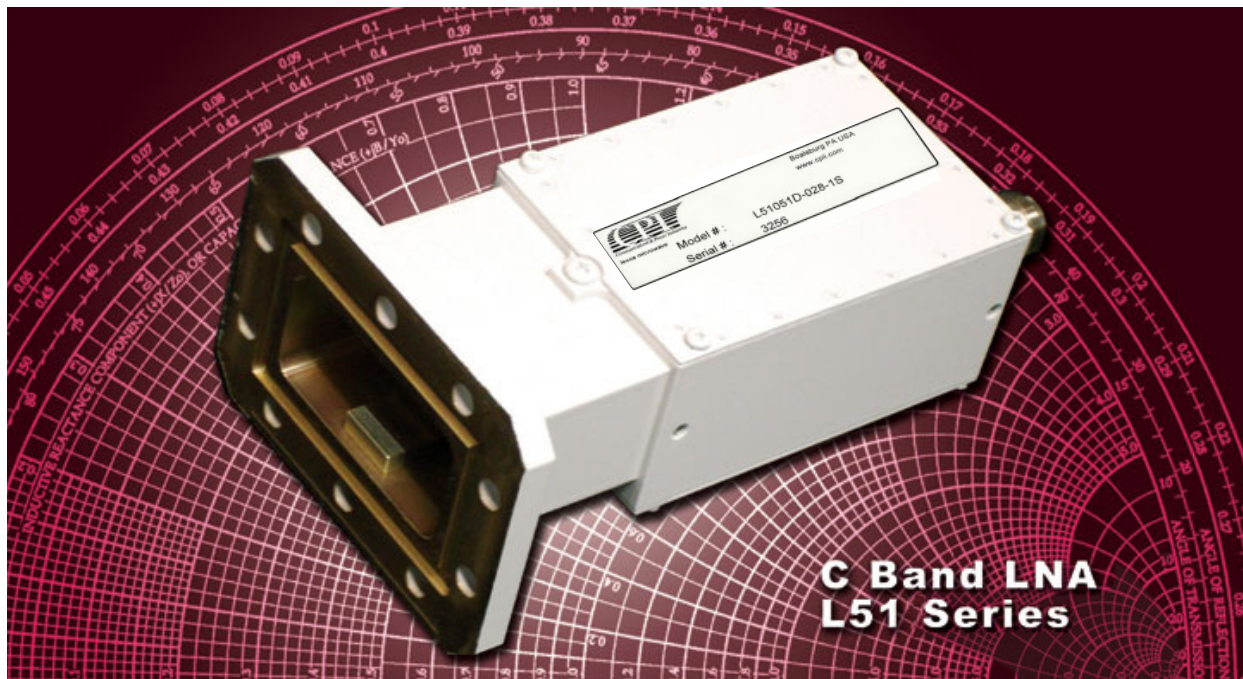
High Performance C-Band Low Noise Amplifiers

General Information

Intended for either indoor or outdoor environments, the CPI Locus Microwave, Inc. L51 Series C-Band Low Noise Amplifier (LNA) provides a combination of superior performance, reliability and cost effectiveness.

Features

- Outdoor packaging
- Integral Fault Alarm



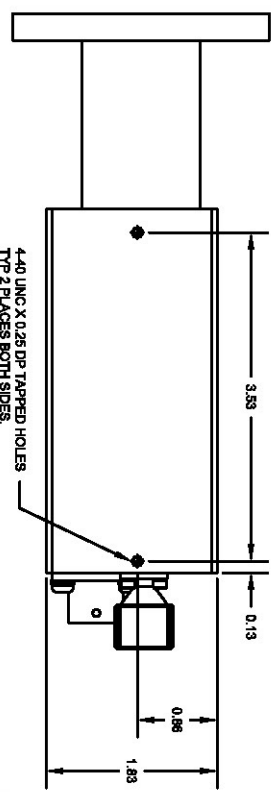
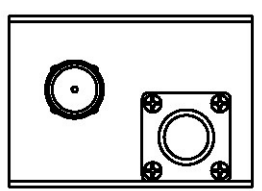
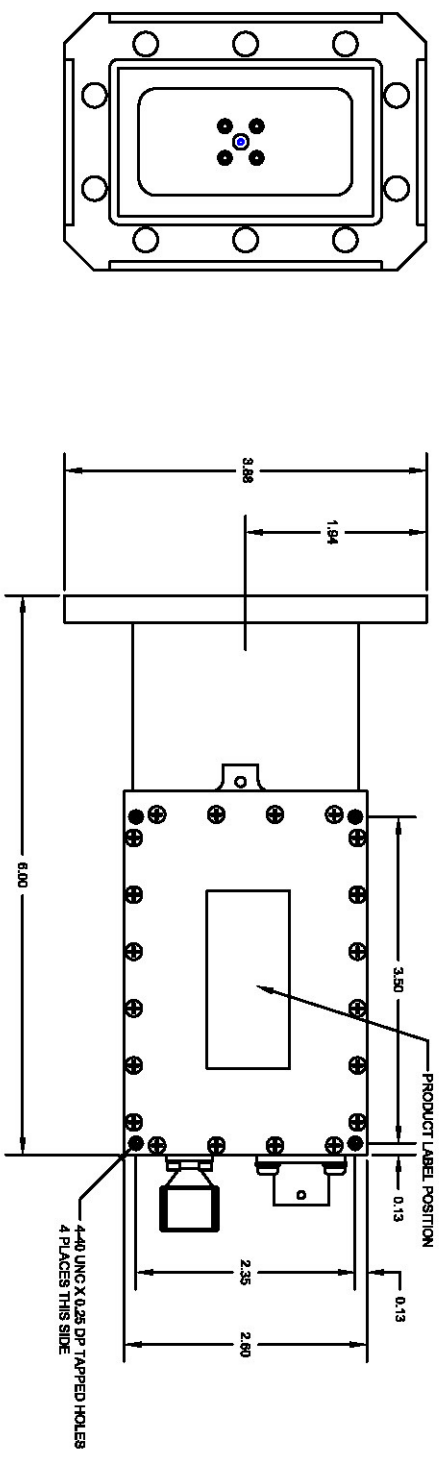
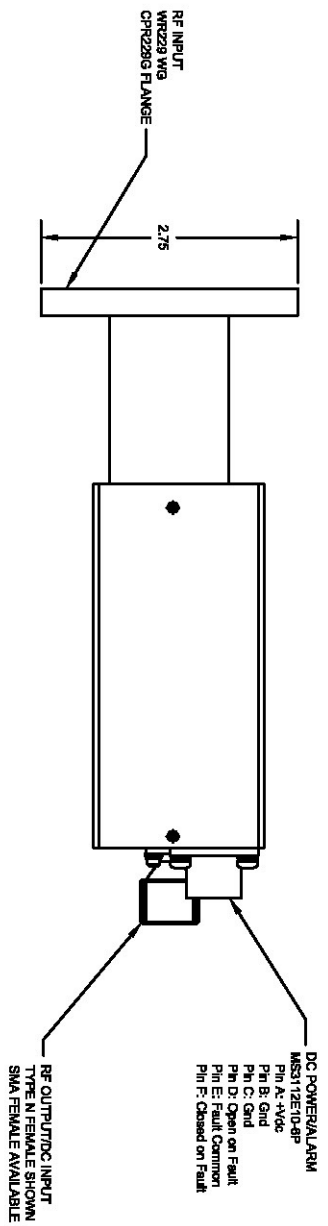
L51 Series Low Noise Amplifier

	Range		Units	Notes
Electrical Specifications				
Frequency	3.6-4.2	3.4-4.2	GHz	
Noise Temperature	28, 30, 35 or 40 max.	30, 35 or 40 max.	K	@+23°C
Gain	50 or 60 min.	50 or 60 min.	dB	
Gain Flatness	+/-0.5 max.	+/-1.0 max.	dB	per full band
Gain Slope	+/-0.2 max.	+/-0.2 max.	dB	per 40 MHz
P _{1dB}	+10 or 20 min.	+10 or 20 min.	dBm	
VSWR				
Input	1.20 typ., 1.25 max.	1.20 typ., 1.25 max.	:1	
Output	1.25 typ., 1.50 max.	1.25 typ., 1.50 max.	:1	
Input Overdrive	0 max.	0 max.	dBm	non-damaging
Input De-Sense (5.825-6.425 GHz)	-10 max.	-10 max.	dBm	normal operation
AM/PM Conversion	0.05 max.	0.05 max.	°/dB	@-5 dBm output
Group Delay				
Linear	0.01 max.	0.01 max.	ns/MHz	per 40 MHz
Parabolic	0.001 max.	0.001 max.	ns/MHz ²	per 40 MHz
Ripple	0.1 max.	0.1 max.	ns p-p	per full band
Power Requirement				110/220 VAC available
Input Voltage	+12 to +24	+12 to +24	VDC	
Current	330 nom.	330 nom.	mA	current sensing
Fault Alarm	contact closure	contact closure	Form 'C'	
Mechanical Specifications				
Outline	LMI Dwg #10130		inches	VAC LMI Dwg #10304
Weight	1.2 nom.		lbs.	
Finish	paint		white	other options available
Connectors				
RF Input	CPR229G		Flange	WR229 waveguide
RF Output	N or SMA		Female	
Power/Alarm	6 pin		MS-type	mate included
Pressure Test	5		psi	
Environmental				
Operating Temperature	-40 to +70		°C	consult factory for VAC option
Humidity	100		%	with condensation

Seal all connectors using ap

n time and repair expenses

REVISION HISTORY				1
ZONE	REV	CHANGE NO	DESCRIPTION	DATE
-	-	-	INITIAL RELEASE	09/05/05
-	A	906	ADD VIEWS, CHANGE FLANGE CALLOUT	11/02/24



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

FRACTIONS	DECIMALS
2/16"	.125"
ANGLES	DECIMALS
±0°30'	±.005

THIRD ANGLE PROJECTION

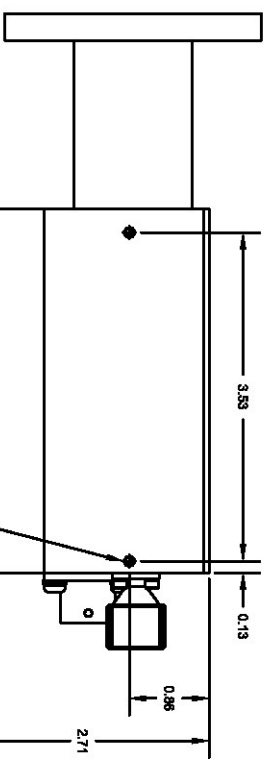
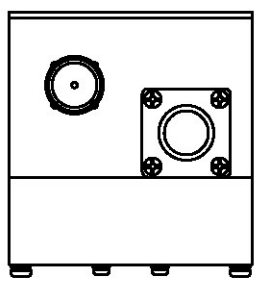
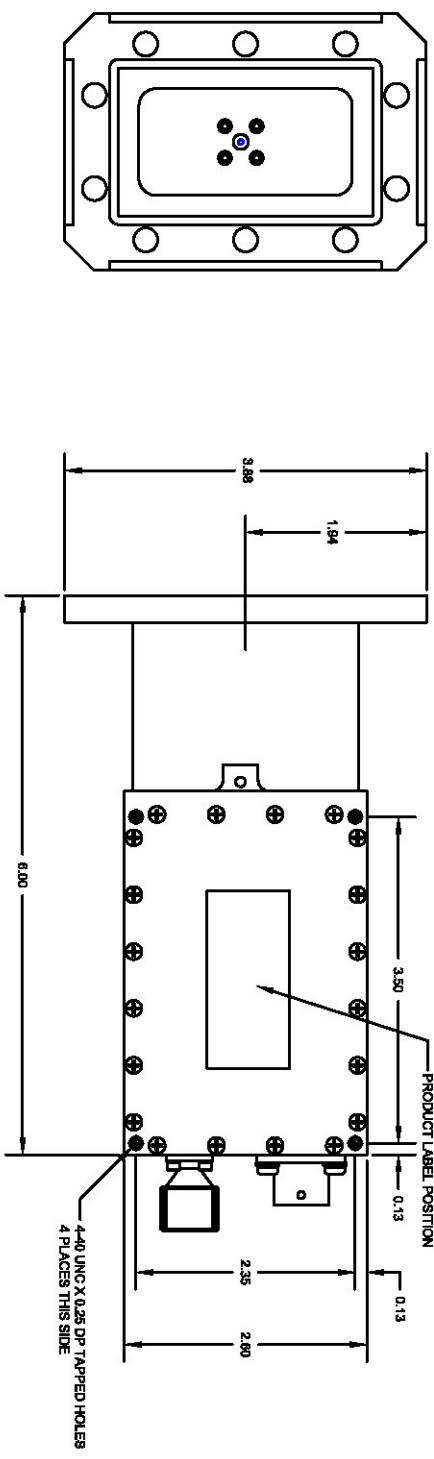
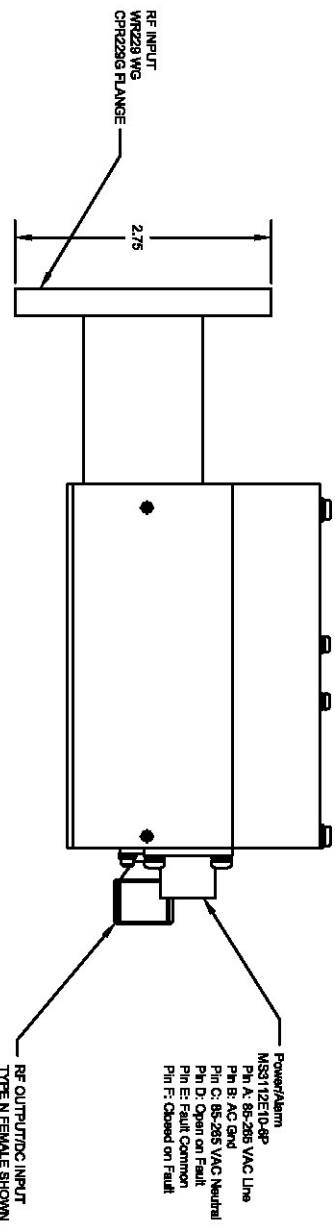
LOCUS MICROWAVE INC.
OUTLINE, C-BAND LNA

SIZE	CODE/IDENT	DWG NO.	REV
C	34TH3	10130	A

SCALE 1:1 PROJ.:

PAGE 1 OF 1

REVISION HISTORY				1
ZONE	REV	CHANGE NO	DESCRIPTION	DATE
-	-	-	INITIAL RELEASE	09/05/12
-	A	906	ADD VIEWS, CHANGE FLANGE CALLOUT	11/02/24



4-440 UNC X 0.25 DP TAPPED HOLES
TYP 2 PLACES BOTH SIDES.

UNLESS OTHERWISE SPECIFIED DIMENSIONS TO CENTER		LOCUS MICROWAVE INC.	
FRACTIONS	DECIMALS	OUTLINE - C-BAND LNA, VAC P/S	
2/16"	0.125"	SIZE	C 34TH3
ANGLES	30° ± .01	CODE IDENT	DWG NO. 10304
3/16"	0.1875"	SCALE	1:1
THIRD ANGLE PROJECTION		PROJ.	A
		REV	A
		PAGE	1 OF 1

L51 Series Low Noise Amplifier

Model Number Configuration

1 2 3 4 5 6 7

L 5 1 x x x x - x x x - x x

1 Frequency	2 Gain	3 P _{1dB}	4 Power	5 Noise Temp
0 = 3.6-4.2 GHz	5 = 50 dB	1 = 10 dBm	D = 12-24 VDC *3	028 K
1 = 3.4-4.2 GHz *1	6 = 60 dB	5 = 20 dBm	A = 110/220 VAC	030 K
				035 K
				040 K

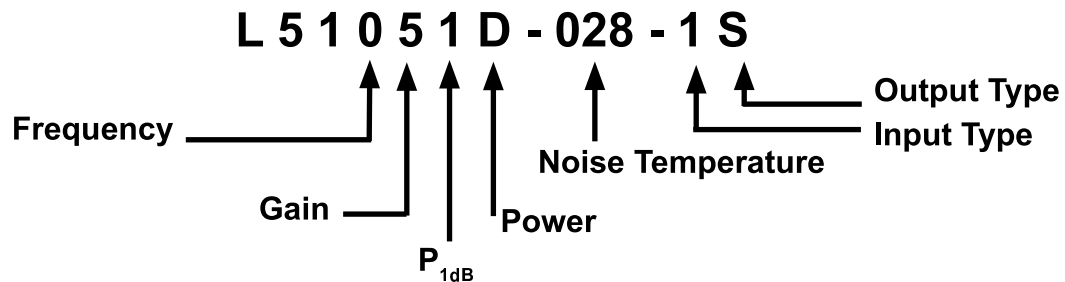
6 Input Type	7 Output Type	A Accessories	B Finish	Federal Standard
1 = CPR229G Flange *2	S = SMA (F)	0 = None	0 = White	37925
	N = N (F) *3	1 = 6 Pin Mate	1 = Dark Green	34094
		2 = 6 Pin Pigtail DC Only	2 = Desert Tan	33446
		3 = 6 Pin Pigtail AC Only	3 = Beige	37722
			4 = Sand	33303
			5 = Forest Green	34083
			6 = Metalast	

*1 NOTE: 30K Noise Temp Minimum

*2 NOTE: CPR229G Flange includes gasket.

*3 NOTE: LNAs ordered as components of a Redundancy system require DC Power and an N (F) output connector.

Example: 3.6-4.2 GHz, 50 dB Gain, +10 dBm P_{1dB}, DC Power, 28K Noise



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