

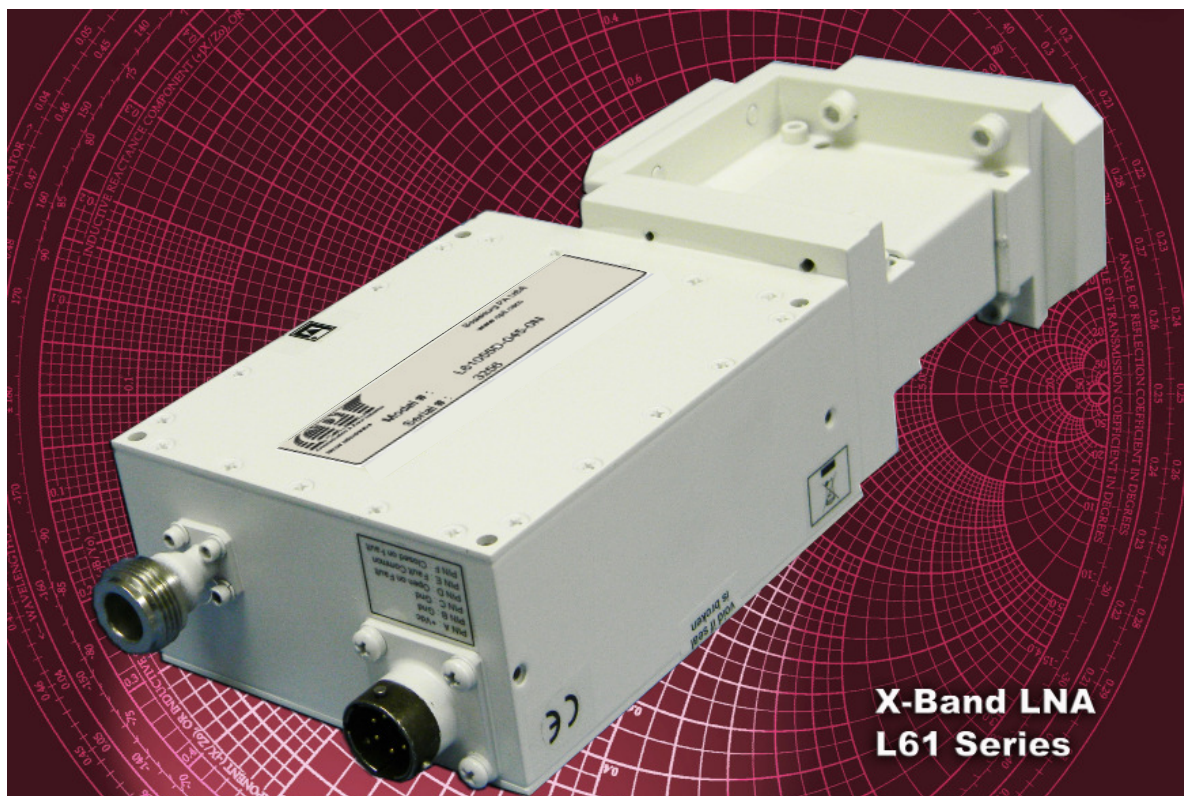
High Performance X-Band Low Noise Amplifiers

General Information

Intended for either indoor or outdoor environments, the CPI Locus Microwave, Inc. L61 X-Band Low Noise Amplifier (LNA) provides a combination of superior performance, reliability and cost effectiveness.

Features

- Outdoor packaging
- Integral Fault Alarm
- Interstage Tx De-Sense Filter



11560 DS Rev C

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L61 Series Low Noise Amplifier



	Range	Units	Notes
Electrical Specifications			
Frequency	7.25-7.75	GHz	
Noise Temperature	40 or 45 max.	K	@+23°C
Gain	50 or 60 min.	dB	
Gain Flatness (incl. Tx Reject Filter)	+/-1.0 max.	dB	per full band
Gain Slope	+/-0.2 max.	dB	per 40 MHz
P _{1dB}	+15 or 20 min.	dBm	
VSWR			
Input	1.20 typ., 1.25 max.	:1	
Output	1.25 typ., 1.50 max.	:1	
Input Overdrive	0 max.	dBm	non-damaging
Input De-Sense (7.9-8.4 GHz) *1	-25 max.	dBm	Interstage Transmit Reject Filter incl.
AM/PM Conversion	0.05 max.	°/dB	@-5 dBm output
Group Delay			
Linear	0.03 max.	ns/MHz	per 40 MHz
Parabolic	0.003 max.	ns/MHz ²	per 40 MHz
Ripple	0.3 max.	ns p-p	per full band
Power Requirement			110/220 VAC available
Input Voltage	+12 to +24	VDC	
Current	330 nom.	mA	current sensing
Fault Alarm	contact closure	Form 'C'	
Mechanical Specifications			
Outline	LMI Dwg #11719	inches	UDR84 LMI Dwg #11876
Weight	1.9 nom.	lbs.	
Finish	paint	white	other options available
Connectors			
RF Input	UG-138/U, CPR112G or UDR84	Flange	WR112 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

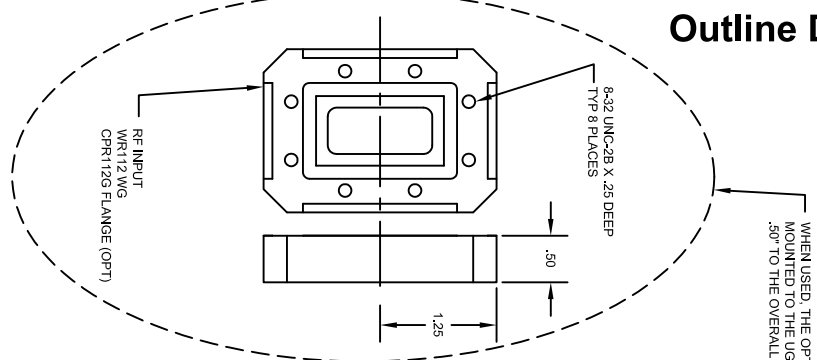
Notes: *1 -30 dBm max. with optional 60dB gain.

Seal all connectors using appropriate weatherproofing materials. Failure to seal connectors could result in down time and repair expenses that are not covered under warranty.

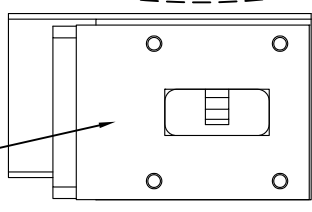
Specifications are subject to change at the discretion of CPI Locus Microwave, Inc.

REVISION HISTORY				DESCRIPTION	DWN BY	APPR BY	DATE
ZONE	REV	CHANGE NO	INITIAL RELEASE				
--	-	--	REMOVE ITAR STATEMENT	MES	SES		12/05/11
--	A	1538		MES	TDG		13/05/08

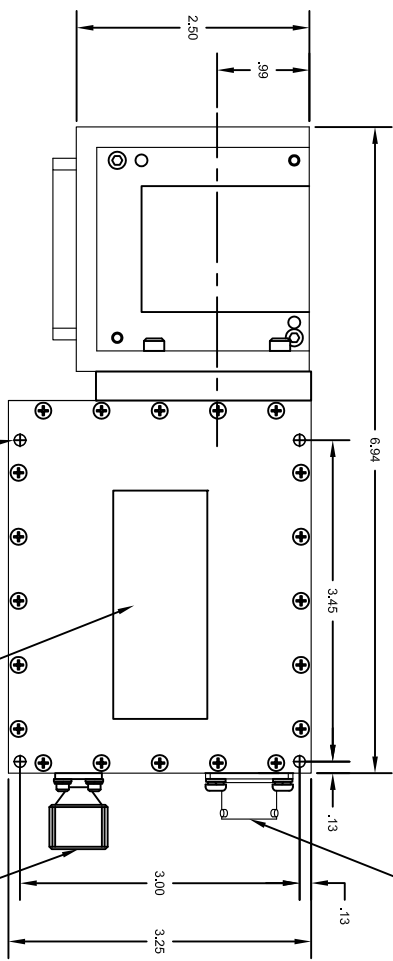
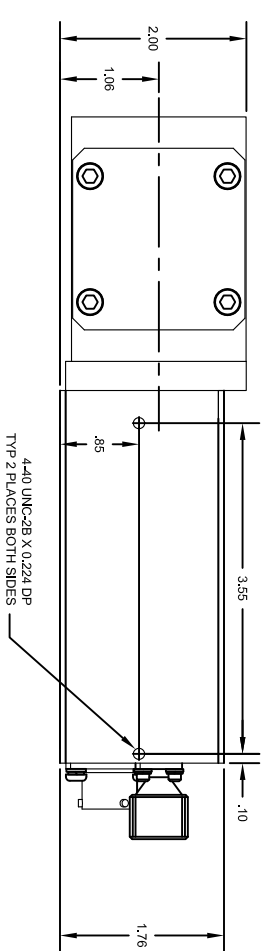
Outline Drawing



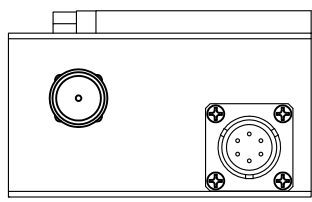
WHEN USED, THE OPTIONAL CRR112G FLANGE IS MOUNTED TO THE UG138U FLANGE AND ADDS .50" TO THE OVERALL LENGTH.



RF INPUT WR1112 WG UG-138U FLANGE (STD)



MSS112E10-6P
 PINOUT:
 A = GND
 C = GND
 D = OPEN ON FAULT
 E = FAULT COMMON
 F = CLOSED ON FAULT



RF OUTPUT /DC INPUT TYPE N FEMALE SHOWN SMA FEMALE AVAILABLE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

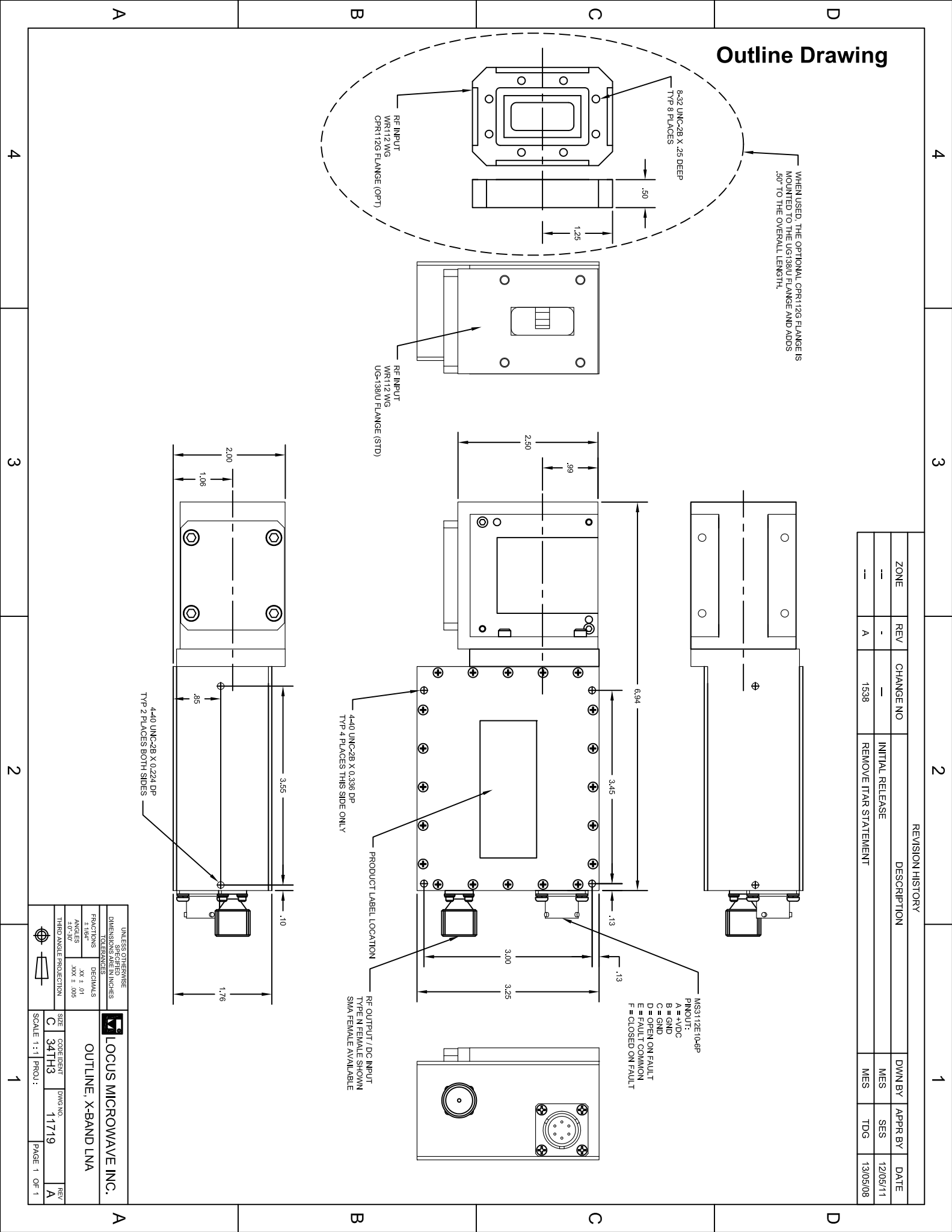
FRACTIONS	DECIMALS
3/16"	.015
1/8"	.005
1/32"	.0025
1/64"	.0015
ANGLES	XXX ± .005
3.0°-30°	

THIRD ANGLE PROJECTION

LOCUS MICROWAVE INC.
 OUTLINE, X-BAND LNA

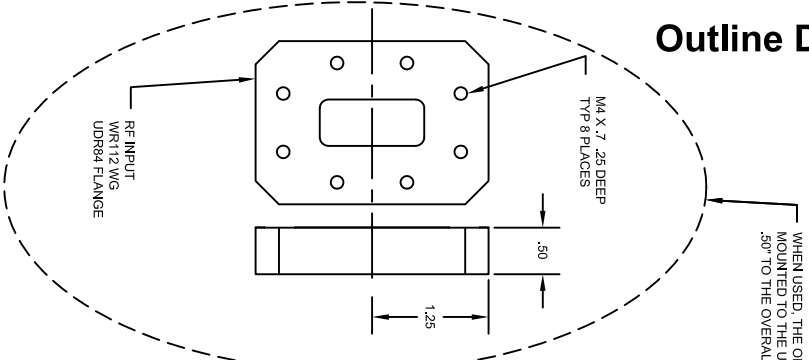
SIZE	CODE	DWG NO	REV
C	34TH3	11719	A

SCALE 1:1 PROJ: PAGE 1 OF 1

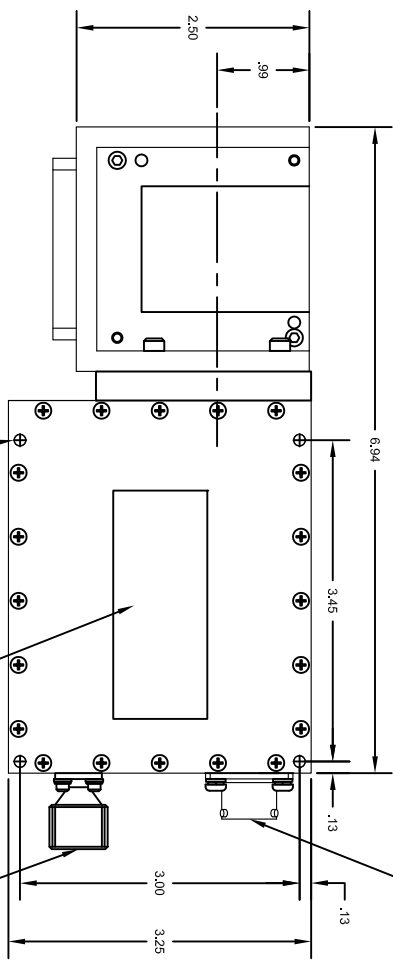
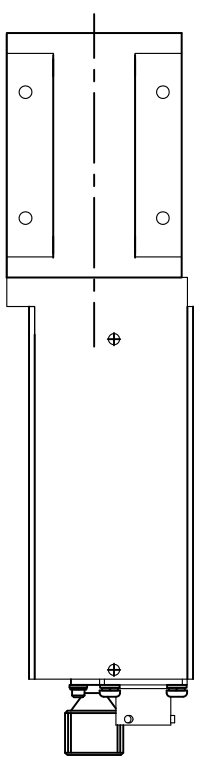
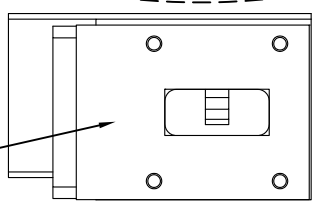


REVISION HISTORY				DWN BY	APPR BY	DATE
ZONE	REV	CHANGE NO	DESCRIPTION	SES	TDG	13/06/04
--	-	--	INITIAL RELEASE			

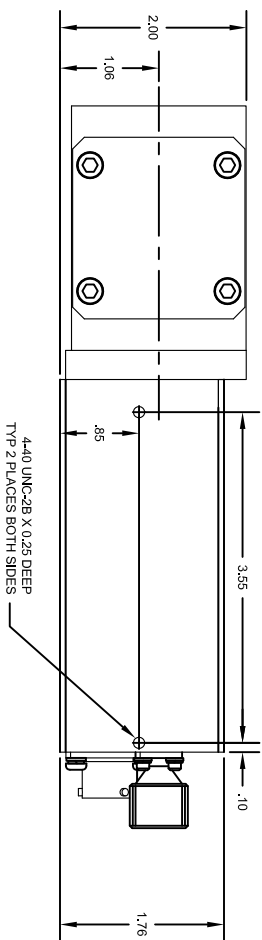
Outline Drawing



WHEN USED, THE OPTIONAL UDR84 FLANGE IS MOUNTED TO THE UG138IU FLANGE AND ADDS .50" TO THE OVERALL LENGTH.



- MS3112E10-6P
- PRODUCT
- A = GND
- C = GND
- D = OPEN ON FAULT
- E = FAULT COMMON
- F = CLOSED ON FAULT



4	3	2	1
A	B	C	D

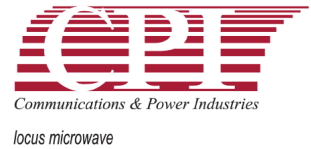
LOCUS MICROWAVE INC.

OUTLINE, X-BAND LNA
UDR84 FLANGE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	DECIMALS	XXX ± .005
FRACTIONS	1/16"	XX ± .01
ANGLES	30°-90°	
THIRD ANGLE PROJECTION		

SIZE: C 34TH3
CODE IDENT: 11876
SCALE: 1:1
PROJ: PAGE 1 OF 1

L61 Series Low Noise Amplifiers



Model Number Configuration

1 2 3 4 5 6 7

L 6 1 x x x x - x x x - x x

1 Frequency	2 Gain	3 P _{1dB}	4 Power	5 Noise Temp
0 = 7.25-7.75 GHz	5 = 50 dB 6 = 60 dB	3 = 15 dBm 5 = 20 dBm	D = 12-24 VDC *2 A = 110/220 VAC	040 K 045 K

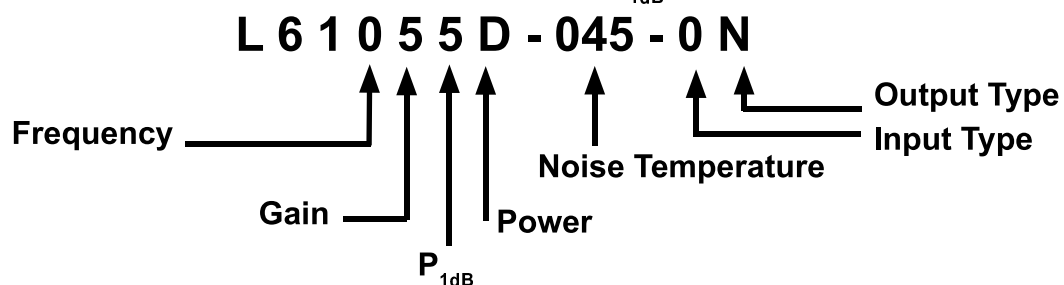
6 Input Type	7 Output Type	A Accessories	B Finish	Federal Standard
0 = UG-138/U Flange 1 = CPR112G Flange *1 2 = UDR84 Flange	S = SMA (F) N = N (F) *2	0 = None 1 = 6 Pin Mate 2 = 6 Pin Pigtail DC Only 3 = 6 Pin Pigtail AC Only	0 = White 1 = Dark Green 2 = Desert Tan 3 = Beige 4 = Sand 5 = Forest Green 6 = Metalast	37925 34094 33446 37722 33303 34083

*1 NOTE: CPR112G Flange includes gasket.

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

Selections shaded in gray will require Engineering review.

Example: 7.25-7.75 GHz, 50 dB Gain, +20 dBm P_{1dB}, DC Power, 45K Noise



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