

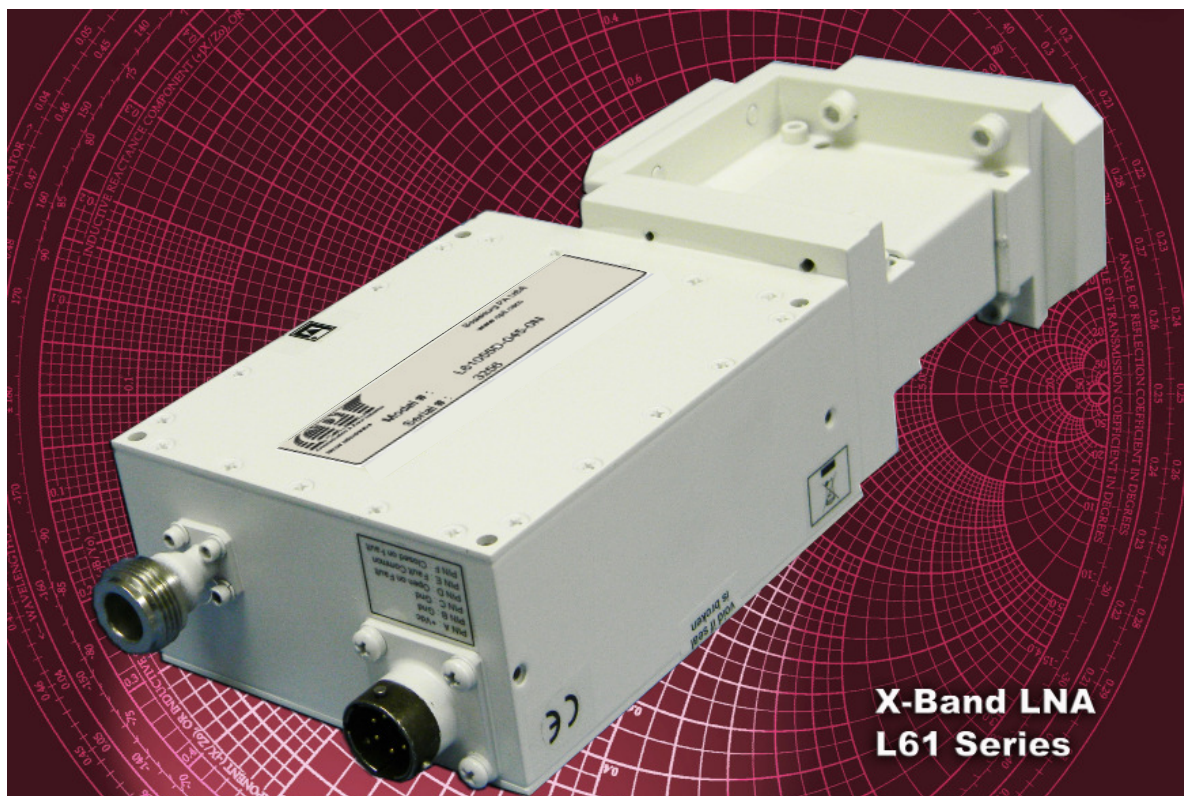
High Performance X-Band Low Noise Amplifiers

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

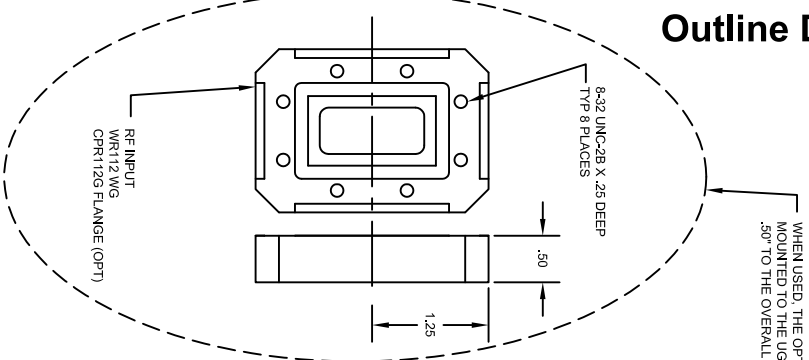
Notes: *1 -30 dBm max. with optional 60dB gain.

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.

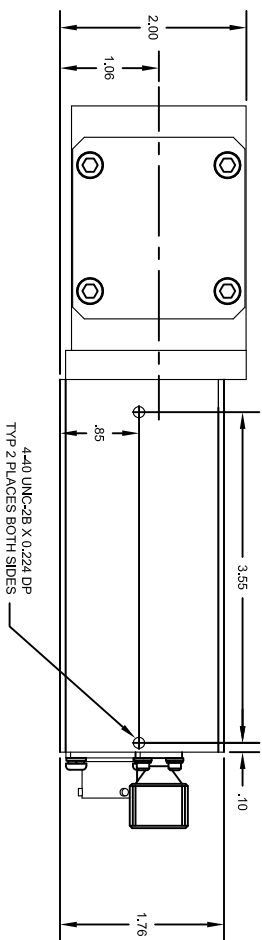
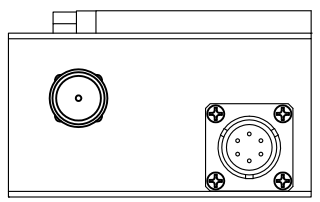
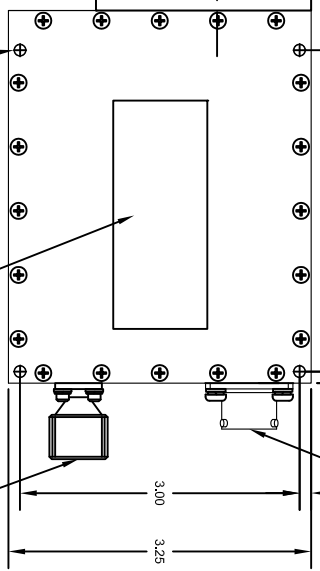
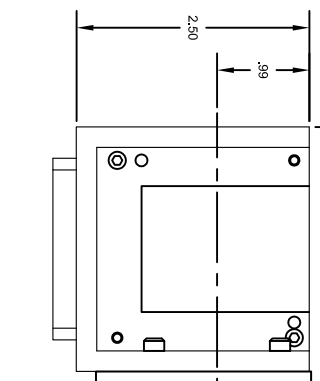
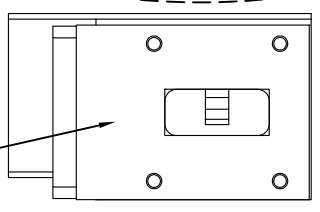
Specifications are subject to change at the discretion of CPI Locus Microwave, Inc.

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

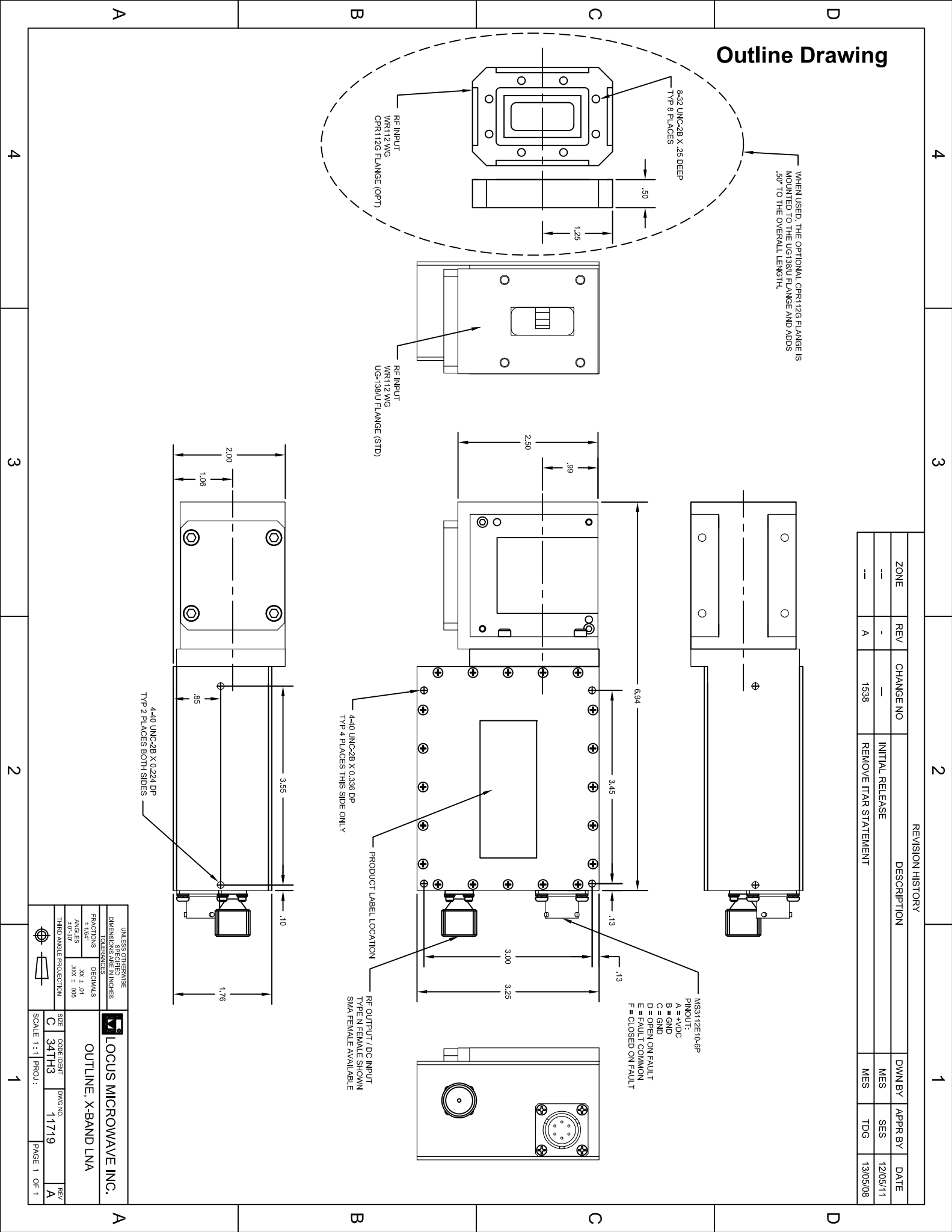
Outline Drawing



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

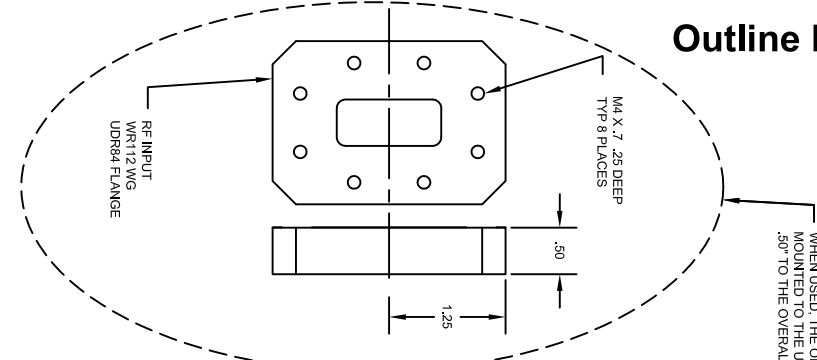


UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		LOCUS MICROWAVE INC.	
FRACTIONS TO DECIMALS	3/16" = .1875"	1/8" = .125"	1/4" = .25"
ANGLES	XXX ± .005	XXX ± .005	XXX ± .005
THIRD ANGLE PROJECTION			
SIZE	C	34TH3	11719
SCALE	1:1	PROJ:	REV: A
PAGE 1 OF 1		PAGE 1 OF 1	

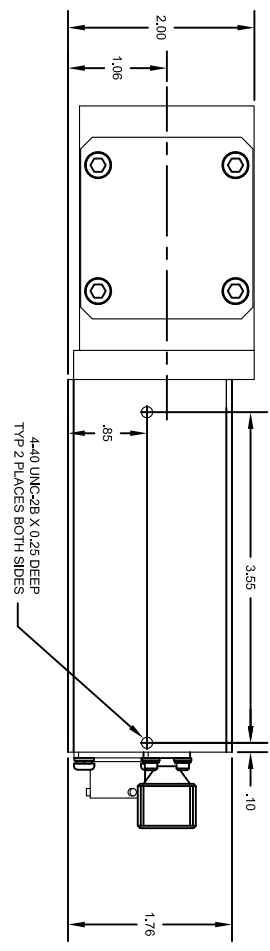
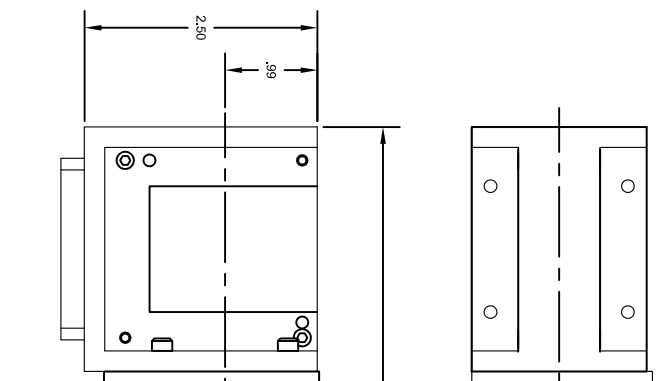
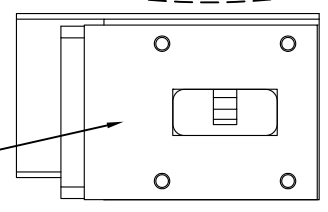


REVISION HISTORY				DWN BY	APPR BY	DATE
ZONE	REV	CHANGE NO	DESCRIPTION	SES	TDG	13/06/04
--	-	--	INITIAL RELEASE			

Outline Drawing

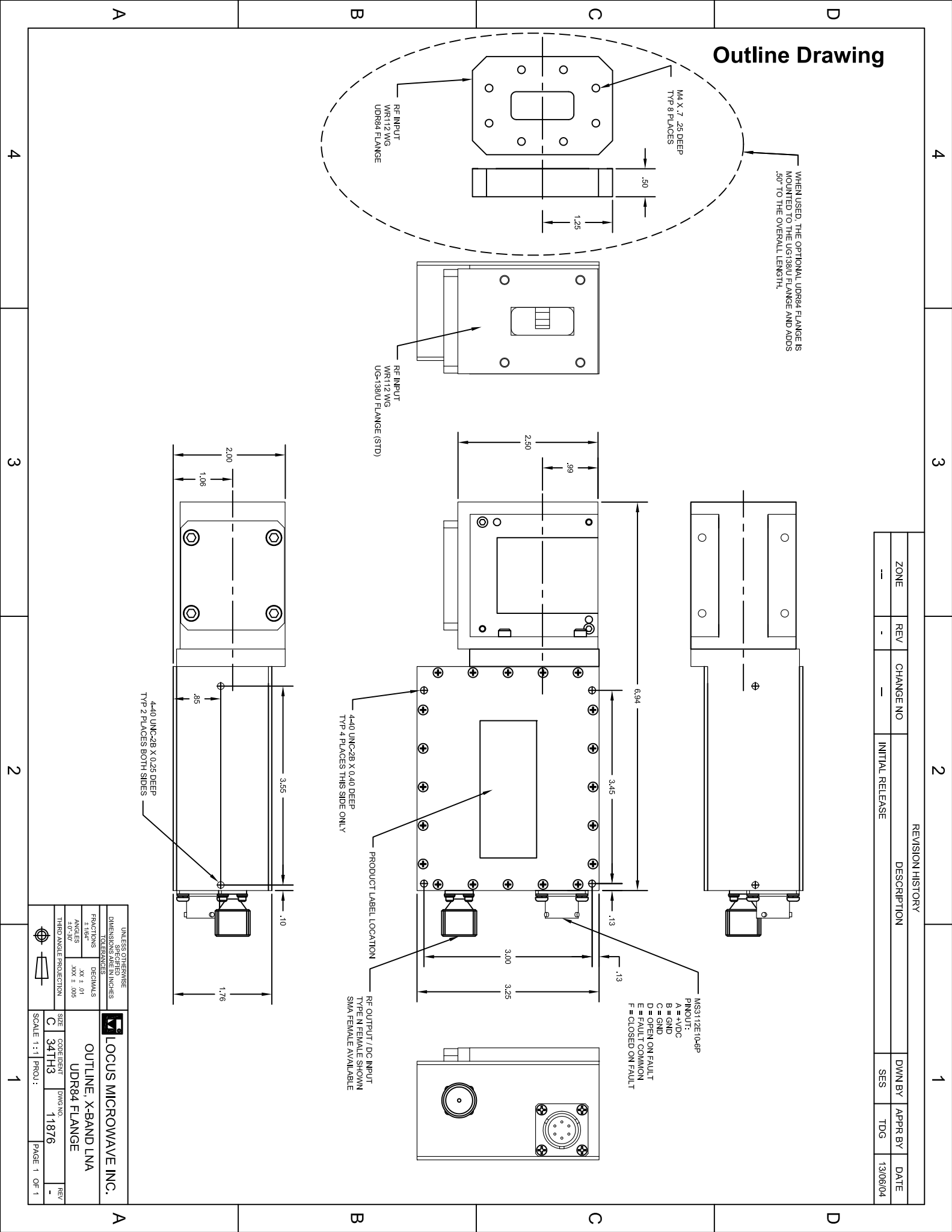


WHEN USED, THE OPTIONAL UDR84 FLANGE IS MOUNTED TO THE UG138IU FLANGE AND ADDS .50" TO THE OVERALL LENGTH.

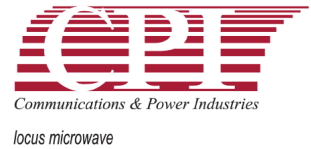


- MS312E10-6P
- PNOUT
- DC
- A = GND
- C = GND
- D = OPEN ON FAULT
- E = FAULT COMMON
- F = CLOSED ON FAULT

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		LOCUS MICROWAVE INC.	
FRACTIONS TO DECIMALS	3/16" = .1875	1/8" = .125	1/4" = .25
ANGLES	XXX ± .005	30° ± .30	
THIRD ANGLE PROJECTION		SIZE C	CODE IDENT 34TH3
		SCALE 1:1	PROJ: 11876
			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

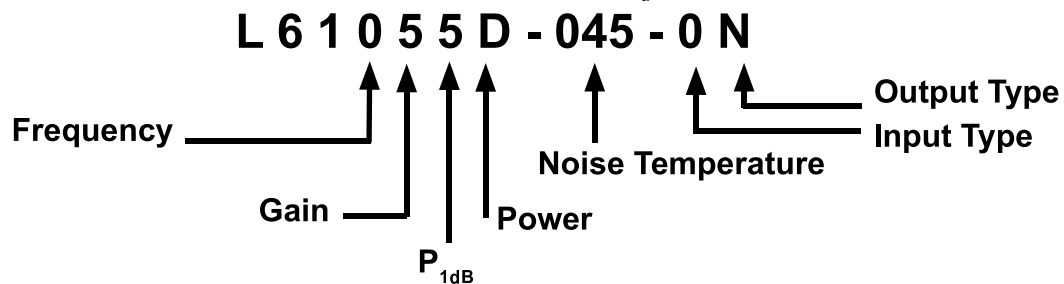
6 Input Type	7 Output Type	A Accessories	B Finish	Federal Standard
0 = UG-138/U Flange 1 = CPR112G Flange *1 2 = UDR84 Flange	S = SMA (F) N = N (F) *2	0 = None 1 = 6 Pin Mate 2 = 6 Pin Pigtail DC Only 3 = 6 Pin Pigtail AC Only	0 = White 1 = Dark Green 2 = Desert Tan 3 = Beige 4 = Sand 5 = Forest Green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