

High Performance Ku-Band Low Noise Amplifiers

General Information

Intended for either indoor or outdoor environments, the CPI Locus Microwave, Inc. L71 Ku-Band Low Noise Amplifier (LNA) provides a combination of superior performance, reliability and cost effectiveness.

Features

- Outdoor packaging
- Integral Fault Alarm



11562 DS Rev B

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L71 Series Low Noise Amplifiers



	Range		Units	Notes
Electrical Specifications				
Frequency	10.95-12.75	10.70-12.75	GHz	
Noise Temperature	60 or 65 max.	60 or 65 max.	K	@+23°C
Gain	50 or 60 min.	50 or 60 min.	dB	
Gain Flatness	+/-1.5 max.	+/-1.5 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 (14.0-14.5 GHz)	-30 max.	-30 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				
Input Voltage	+12 to +24	+12 to +24	VDC	110/220 VAC available
Current	350 nom.	350 nom.	mA	
Fault Alarm	contact closure	contact closure	Form 'C'	current sensing
Mechanical Specifications				
Outline	LMI Dwg #10132		inches	VAC LMI Dwg #11436
Weight	1.1 nom.		lbs.	
Finish	paint		white	other options available
Connectors				
RF Input	Cover		Flange	WR75 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 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.

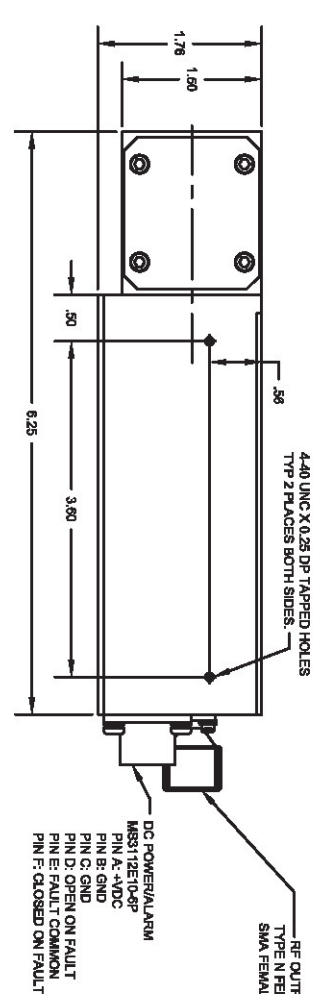
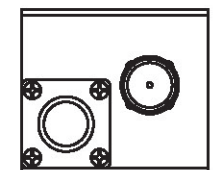
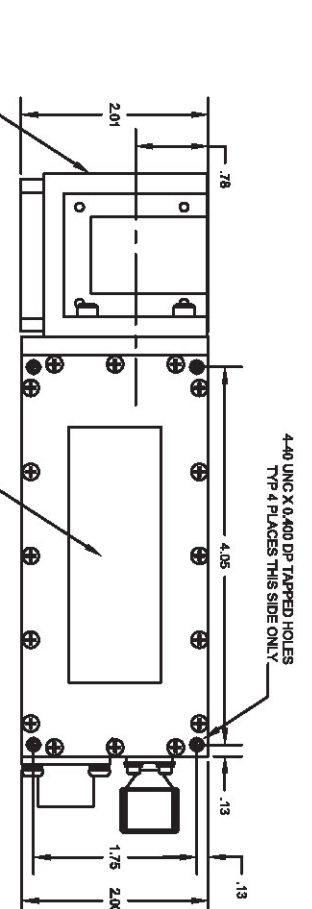
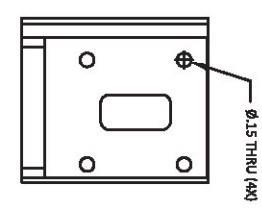
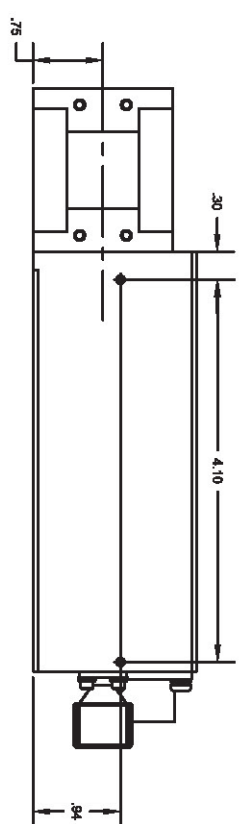
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REVISION HISTORY				DWN BY	APPR BY	DATE
ZONE	REV	CHANGE NO	DESCRIPTION			
-	-	-	ENGINEERING RELEASE	JPD	JPD	05/05/08
A	558		CHANGE ISOLATOR	JPD	JPD	09/08/27
B	804		ADD VIEWS, CHANGE FLANGE CALLOUT	SES	SES	11/02/24
C	997		ADD SIZE FOR ISOLATOR THRU MOUNTING HOLES	SES	SES	11/07/18



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		LOCUS MICROWAVE INC.	
FRACTIONS TO DECIMALS	DECIMALS TO FRACTIONS	OUTLINE, KU-BAND LNA	
2 1/4" = .01	1/16" = .001	SIZE	34TH3
1/8" = .001	1/32" = .0001	CODE IDENT	DWG NO. 10132
1/16" = .0001	1/64" = .00001	SCALE	1:1
1/32" = .00001	1/128" = .000001	PROJ.	
THIRD ANGLE PROJECTION		REV	C
		REV	C
		REV	C

A

B

C

D

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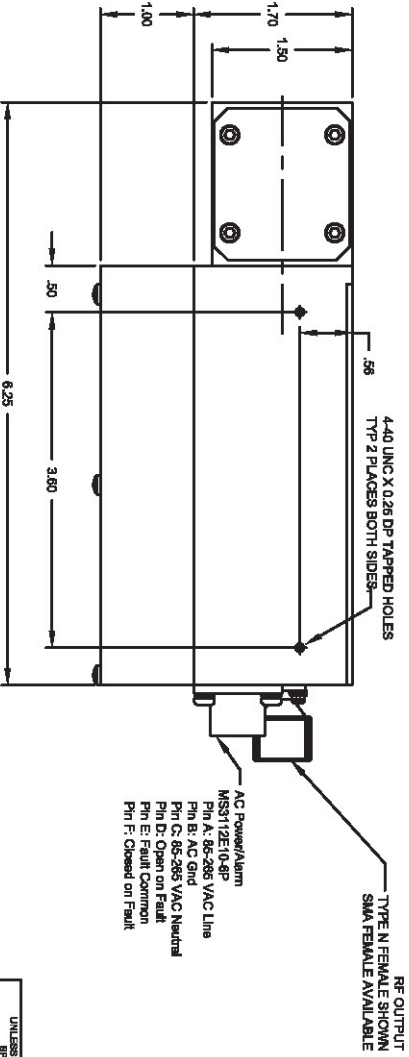
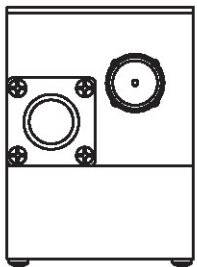
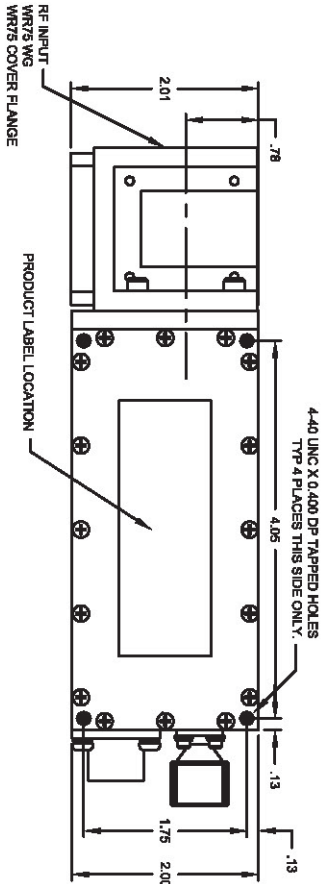
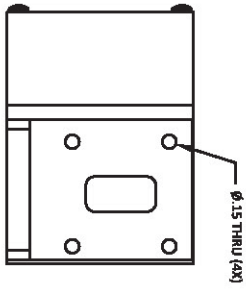
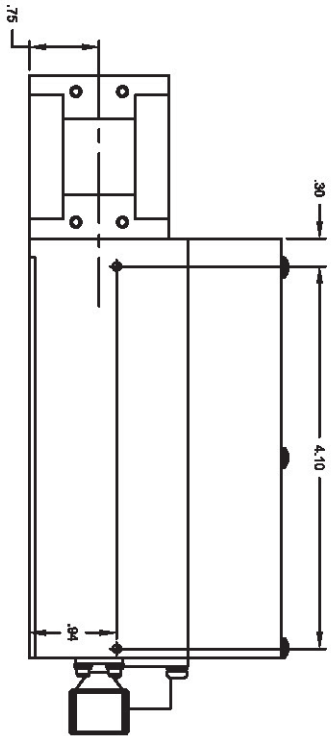
A

B

C

D

REVISION HISTORY				DWN BY	APPR BY	DATE
ZONE	REV	CHANGE NO	DESCRIPTION			
-	-	-	INITIAL RELEASE	SES	TDG	11/01/13
-	A	904	ADD VIEWS, CHANGE FLANGE CALLOUT	SES	SES	11/02/24
-	B	987	ADD SIZE FOR ISOLATOR THRU MOUNTING HOLES	SES	SES	11/07/18



RF OUTPUT
TYPE N FEMALE SHOWN
SMA FEMALE AVAILABLE

AC Power/Alarm
MSS112E10-8P
Pin A: 85-285 VAC Line
Pin B: AC Gnd
Pin C: 85-285 VAC Neutral
Pin D: Open on Fault
Pin E: Fault Common
Pin F: Closed on Fault

UNLESS OTHERWISE SPECIFIED		LOCUS MICROWAVE INC.	
DIMENSIONS	DECIMALS	SIZE	CODE IDENT
FRACTIONS	DECIMALS	C	34TH3
ANGLES	ANGLES	SCALE 1:1	PRD: 11436
THIRD ANGLE PROJECTION		REV B	

OUTLINE, KU-BAND LNA,
VAC POWER SUPPLY

SCALE 1:1

PRD: 11436

REV B

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L71 Series Low Noise Amplifiers



Model Number Configuration

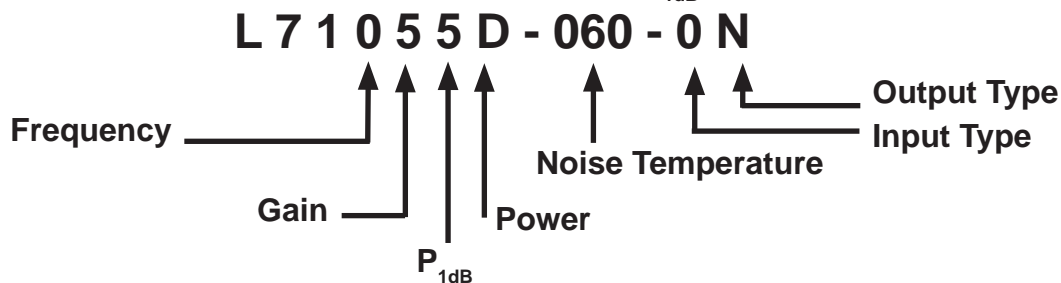
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L 7 1 x x x x - x x x - x x

1 Frequency	2 Gain	3 P_{1dB}	4 Power	5 Noise Temp
0 = 10.95-12.75 GHz	5 = 50 dB	1 = 10 dBm	D = 12-24 VDC *1	060 K
1 = 10.70-12.75 GHz	6 = 60 dB	5 = 20 dBm	A = 110/220 VAC	065 K

6 Input Type	7 Output Type	A Accessories	B Finish	Federal Standard
0 = WR75 Flange	S = SMA (F) *1 N = N (F)	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: LNAs ordered as components of a Redundancy system require DC Power and an SMA (F) output connector.

Example: 10.95-12.75 GHz, 50 dB Gain, +20 dBm P_{1dB}, DC Power, 60K Noise



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