

Intended for either indoor or outdoor environments, the CPI LB61 X-band low noise block down converter (LNB) includes an output waveguide isolator and interstage Tx reject filter. The LB61's exceptional design and performance provides a cost-effective solution and a history of proven reliability.

Configuration Flexibility

Specifications included are for a standard product. Please contact CPI for your custom or specific performance needs.



CPI X-band High Performance
Low Noise Amplifier, Model LB61

FEATURES:

- Input waveguide isolator
- Outdoor packaging
- Integral fault alarm
- Interstage Tx de-sense filter
- Input waveguide window

Quality Management
System - ISO 9001:2015



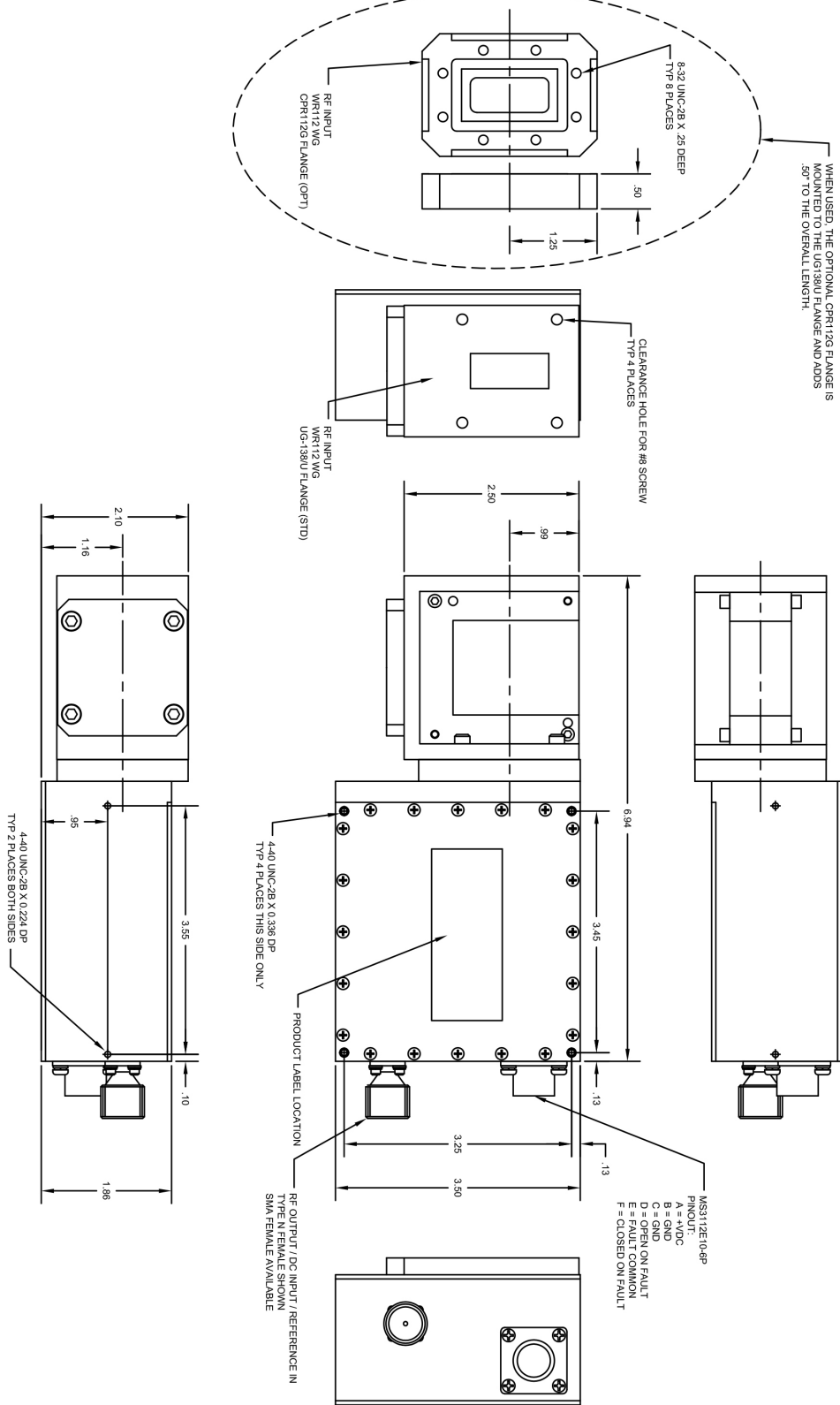
Specifications	CPI X-Band High Performance LNB, Model LB61
Input Frequency	7.25 to 7.75 GHz
Output Frequency	950 to 1450 MHz
Local Oscillator Frequency	6.30 GHz, phase locked to external reference
External Reference (Standard)	10 MHz frequency, level range 0 dBm \pm 5 dB
Phase Noise (SSB)	-72 dBc/Hz min. at 1 kHz offset, -76 dBc/Hz typ. -82 dBc/Hz min. at 10 kHz offset, -85 dBc/Hz typ. -92 dBc/Hz min. at 100 kHz offset, -100 dBc/Hz typ.
Noise Temperature	45 or 50 K max, at +23°C
Gain	50 or 60 dB min.
Gain Flatness	\pm 1.5 dB max, per full band, with Tx reject filter
Gain Slope	\pm 0.5 dB max. over 40 MHz
P1dB	+10 dBm min.
Input VSWR	1.20:1 typ; 1.25:1 max.
Output VSWR	1.5:1 typ; 2.0:1 max.
Overdrive	0 dBm max, non-damaging
LO Leakage at RF Input	-80 dBm max.
Signal Independent Spurious	-60 dBm max. in-band
Signal Related Spurious	-65 dBm min. (0 dBm max. output)
De-Sense Level (7.9 to 8.4 GHz)	-25 dBm max, with interstage transmit reject filter included (-30 dBm max. with 60 dB gain option)
Image Rejection	60 dB min.
Prime Power	Input voltage: +12 to +18 VDC Current: 600 mA nom.
Fault Alarm	Contact closure Form C
Outline Drawing	CPI Dwg. 10683
Weight	2.0 lbs nom.
Finish	White paint (others optional)
RF Input Connector	UG-138U or CPR112G with WR112 waveguide flange
RF Output Connector	Type N or Type SMA female
Pressure Test	5 psi
Operating Temperature	-40°C to +60°C
Humidity	100% condensing
NOTES	Seal all connectors using appropriate weatherproofing materials. Failure to seal connectors could result in downtime and repair expenses that are not covered by warranty.



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For more detailed information, please refer to the corresponding CPI technical description if one has been published, or contact CPI. Specifications may change without notice as a result of additional data or product refinement. Please contact CPI before using this information for system design.

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Construct Model Number

Base No. 1 2 3 4 5 6 7
 L B 6 1 x x x x - x x x - x x

1 Frequency

0 = 7.25 to 7.75 GHz

2 Gain

5 = 50 dB
 6 = 60 dB

3 P1dB

1 = 10 dBm

4 Power

D = 12 - 18 V DC

5 Noise Temp

045 K
 050 K

6 Input Type

0 = UG-138/U Flange
 1 = CPR112 Flange *1

7 Output Type

S = SMA
 N = N-Type, (F)

A Accessories

0 = None
 1 = 6 pin mate
 2 = 6 pin pigtail

B Finish Color (FED-STD)

0 = White (37925)
 1 = Dark Green (34094)
 2 = Desert Tan (33446)
 3 = Beige (37722)
 4 = Sand (33303)
 5 = Forest Green (34083)
 6 = Metalast

Notes:

*1 CPR112G flange includes a gasket.



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