



ORBITAL 692 Series Ka DRO LNB



Large range of frequencies, F, N or SMA Output Connector

How to order an Orbital 692 Series Ka DRO LNB

Frequencies (GHz):

LO	Input	Output	Bandwidth
17.25F	- 18.2 to 19.2	.95 to 1.95	1.000
18.25F	- 19.2 to 20.2	.95 to 1.95	1.000
19.25F	- 20.2 to 21.2	.95 to 1.95	1.000
20.25F	- 21.2 to 22.2	.95 to 1.95	1.000

Bandwidth in MHz

'D' Signifies DRO

LNB1925F-1000D-WN50

Input Connector
Ka LNB is WR-42

Output Connector
F - F, 75 ohm
N - N, 50 ohm
S - SMA, 50 ohm

Gain
50 - 50 dB
55 - 55dB (Nominal)

Orbital Flexibility:

Engineered using the highest quality components insures you from failure due to environmental extremes, such as arctic cold, Saharan heat, and rain-forest humidity. Our LNB is protected from man-made conditions such as shock, vibration, low power, over-voltage, surges, transients, and static discharge. Performance is consistent and replacements will match or exceed your original device.

"Mass-Custom" Solution

Orbital starts with a proven performance product that is extremely well engineered with the development costs amortized over thousands of units and the parts costs reduced by volume discounts. We then customize the mass produced LNB into what you want at 1/100 the cost of designing and building from scratch.

Orbital Features:

Custom Engineering

- Begin with the low noise figure of a proven quality LNB
- Modify LO frequencies preserving phase noise and stability
- Optimize Input and Output for superior VSWR
- Modify and tune RF & IF filters for optimum response
- Tune for very low bandpass ripple
- Optimize Gain distribution for your system parameters

Environmental

- O ring sealed connectors for weather resistant operation
- Preserve the environmental engineering of the original LNB

Options

- Special Dual DC option via output coax and ext DC port
- Custom IF amps capable of +17 dBm 3rd order intercept point
- Full test documentation available
- Custom design and labeling requirements welcomed

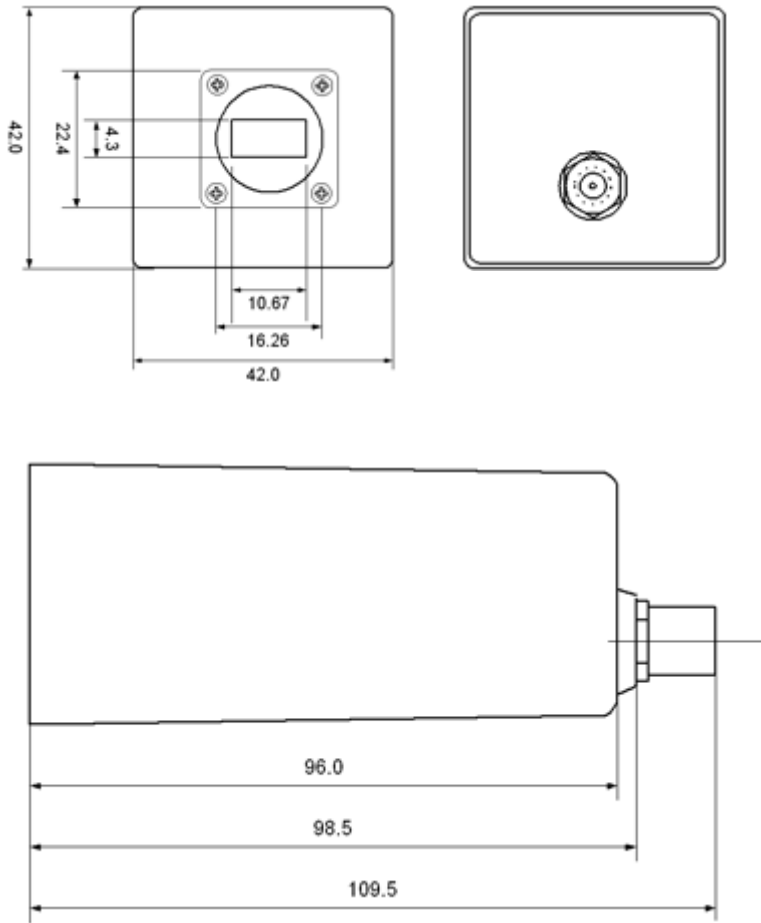
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Orbital 692 Series Ka DRO LNB Specifications

Mechanical Drawing



Electrical Specifications

Input

Frequency: Various, see first page
 Bandwidth: 1,000 MHz
 Input Stability: Unconditionally stable (no oscillation) for all possible input loads
 Input VSWR: 2.5 : 1 typical
 Noise Figure: 1.5 dB maximum @ 23°C
 1.2 dB typical

Output

Bandpass: 950 to 1950 MHz
 Output VSWR: 2.1 : 1 maximum @ 75Ω
 Output Stability: Unconditionally stable (no oscillation) for all possible input loads

Local Oscillator

Frequency: 17.25, 18.25, 19.25
 Stability: ±1.0 MHz
 Frequency: 20.25GHz
 Stability: ±500 kHz
 Leakage: -45 dBm maximum @ IF output & input

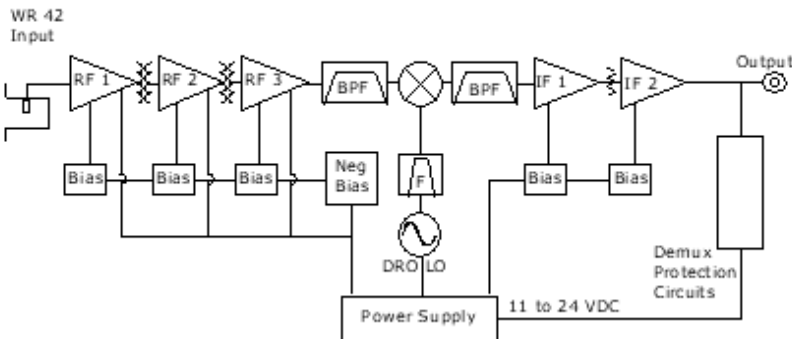
Gain

Nominal Gain: 55dB standard, 40, 50, 60dB optional
 Variation over Temperature & Frequency: ±2.0 dB maximum
 Gain Ripple: 1 dB p-p maximum over any 33 MHz segment
 1 dB Compression Point: +3 dBm minimum, up to +7 dBm (optional)
 3rd Order Intercept: +13 dBm minimum, up to +17 dBm (optional)

Power

DC Input: 14 - 24 VDC, 150 mA maximum
 Filtering: Transient, over and reverse voltage protected

Block Diagram



Mechanical Specifications

Size: 43 x 43 x 110 mm (with F connector)
 Weight: 400 grams
 Paint: Brilliant White Enamel

Environmental Specifications

Operating Temp: -40 to +60°C
 Relative Humidity: Up to 100% condensation and frost

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