

NuWaves Engineering

Trusted RF Solutions.™

HILNA CF™ Low Noise Amplifier



P/N: HILNA-CF

NuWaves' HILNA CF is a broadband low noise amplifier that allows the user to define RF filtering in the form of bandpass, band-reject, low-pass, or highpass. This unit is designed to achieve high gain while maintaining low noise and a high third-order intercept point from VHF to microwave frequencies.

This high-performance module delivers 40 dB of gain across the frequency range of 50 MHz to 1000 MHz with an OIP3 of +32 dBm and P1dB of +18 dBm.

The HILNA CF's robust power supply also operates over a very broad range easily allowing the unit to be integrated into systems without regard to power supply precision.

Features

- Broadband Operation
- Custom Filtering (bandpass, band-reject, low-pass, or highpass)
- Low Noise and High Gain
- High Intercept Point
- Over-Voltage Protection
- Reverse-Voltage Protection
- Wide Input Voltage Range
- High Linearity
- Internal Regulator/Active Bias Devices for Stability

Applications

- Wideband RF Front Ends
- High Performance Receivers
- Broadband High Gain Block
- Low Noise Transmit Driver
- RF Preamplifier
- RF Repeater
- Base Station LNA
- University Research and Instruction
- Multi-Signal Environment Amplifier



HILNA CF™ Low Noise Amplifier



Specifications

Operational

Frequency Range	50 MHz to 1000 MHz
RF Gain	40 dB (typ)
Reverse Isolation	55 dB (typ)
Noise Figure	0.8 dB (typ)
OIP3	+32 dBm (typ)
P1dB	+18 dBm (typ)
Supply Voltage	+5 to +20 VDC
Current Consumption	140 mA @ 12 VDC (typ)
Power Connector	2 mm Circular
RF Connectors	SMA (Female)

Mechanical

Size	3.15" x 2.50" x 1.18" (L x W x H)
Weight	5 oz.

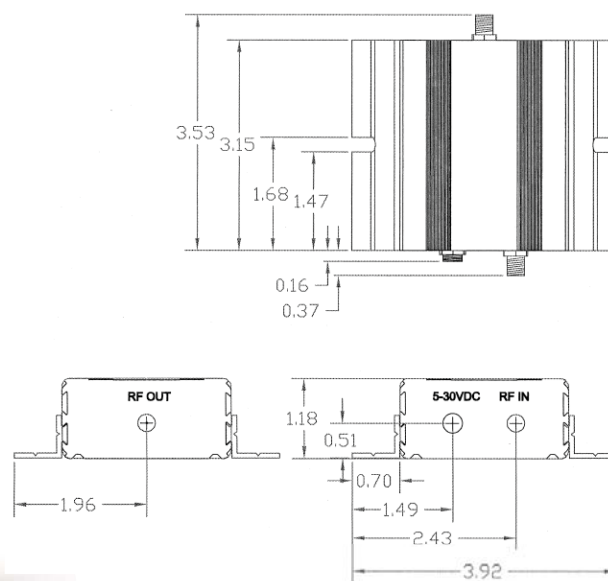
Environmental

Operating Temperature	-30 to +70 °C
Storage Temperature	-40 to +85 °C

Export

Classification	EAR99
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Mechanical Outline



Contact NuWaves



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