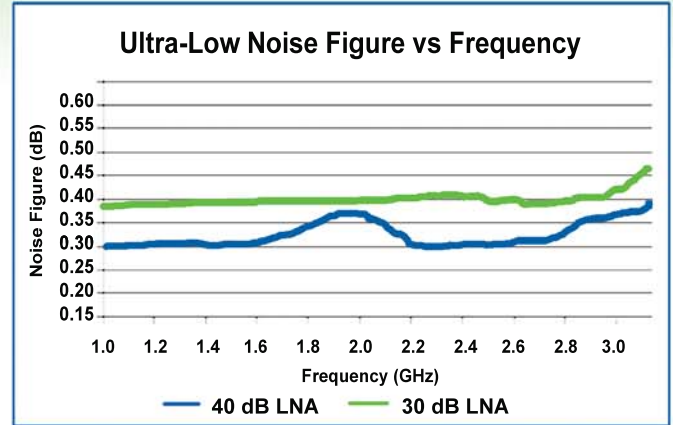




Ultra-Low Noise Amplifiers

Feature Noise Figures as low as 0.30dB

- Noise Figures as low as 0.30 dB
- Low Power Consumption & Compact Size
- Guaranteed Unconditional Stability
(Tested 100% by Ciao Wireless)
- Custom models offered
- Internal Voltage Regulator & Reverse Polarity Protection
- Options: Gain & Phase Matching/Tracking, BITE, TTL/RF Mute, Input Limiter Protection, Variable Gain Control and Bias T
- Competitively priced / Fast delivery for both Catalog & "Custom-Catalog" units



Ciao Wireless introduces its new line of Ultra-Low Noise Amplifiers with Noise Figures as low as 0.30 dB typical between 1.0 – 3.1 GHz with delivery in 1-2 WEEKS ARO. Ciao's designs feature multiple frequency and gain options while maintaining Ultra-Low Noise Figures between 0.3 dB to 0.4 dB. All models include internal voltage regulation and reverse polarity protection. The Ciao Ultra-Low Noise Amplifier Product line, like all of Ciao's RF & Microwave Amplifier Designs, are guaranteed to be 100% Unconditionally Stable. Ciao conducts 100% Unconditional Stability testing as a part of its normal Acceptance Test Procedure for every product shipped. Units can be customized with NO NRE to meet the customer's exact requirements if the standard catalog models do not "exactly" fit any particular need. "Custom or Special" models are usually still available within 1-2 weeks ARO.

All Ciao designs have been previously qualified for performance in High Reliability, Military and Space Applications. Environmental Screening is available as an option on any of Ciao's products. Ciao's products are also competitively priced for use in all applications, including Commercial, Military and other High Reliability uses. Because the Ciao Wireless designs can have options added such as Variable Gain Control, Input Limiter Protection, Integrated Bias-T, Detectors, RF Mute, TTL Control among others, it makes the Ciao Wireless Ultra-Low Noise Amplifier line a perfect fit for use in any Radar, Communications, or Testing Application

Model Number	Frequency Range GHz	Gain dB (min/typ)	Noise dB (max / typ)	Gain Flatness +/-dB	P-1dB dBm (min)	IP3 dBm (typ)	VSWR In/Out (Max)	+12 -/+15 VDC Current mA (typ)	Package Type
CA12-3901	1.0 -1.3	30 / 35	0.50 / 0.38	+/- 1.0	+10	+20	2.0:1	120	FB2
CA12-3903	1.2 - 1.5	30 / 35	0.50 / 0.38	+/- 1.0	+10	+20	2.0:1	120	FB2
CA12-3905	1.4 - 1.7	30 / 34	0.50 / 0.38	+/- 1.0	+10	+20	2.0:1	120	FB2
CA12-3907	1.6 - 1.9	30 / 34	0.50 / 0.38	+/- 1.0	+10	+20	2.0:1	120	FB2
CA12-4901	1.0 -1.3	40 / 45	0.40 / 0.30	+/- 1.0	+10	+20	2.0:1	120	FB2
CA12-4903	1.2 - 1.5	40 / 45	0.40 / 0.30	+/- 1.0	+10	+20	2.0:1	120	FB2
CA12-4905	1.4 - 1.7	40 / 44	0.40 / 0.30	+/- 1.0	+10	+20	2.0:1	120	FB2
CA12-4907	1.6 - 1.9	40 / 43	0.50 / 0.40	+/- 1.0	+10	+20	2.0:1	120	FB2
CA23-3901	2.0 - 2.2	30 / 32	0.50 / 0.38	+/- 1.0	+10	+20	2.0:1	120	FB2
CA23-3903	2.2 - 2.4	30 / 32	0.50 / 0.38	+/- 1.0	+10	+20	2.0:1	120	FB2
CA23-3905	2.7 - 2.9	30 / 34	0.50 / 0.38	+/- 1.0	+10	+20	2.0:1	120	FB2
CA23-4901	2.0 - 2.2	40 / 41	0.40 / 0.30	+/- 1.0	+10	+20	2.0:1	120	FB2
CA23-4903	2.2 - 2.4	40 / 41	0.40 / 0.30	+/- 1.0	+10	+20	2.0:1	120	FB2
CA23-4905	2.7 - 2.9	40 / 44	0.40 / 0.30	+/- 1.0	+10	+20	2.0:1	120	FB2
CA23-3909	2.9 - 3.1	32 / 34	0.55 / 0.48	+/- 1.0	+10	+20	2.0:1	120	FB2
CA23-3910	2.9 - 3.1	32 / 34	0.55 / 0.48	+/- 1.0	+10	+20	2.0:1	120	FB2
CA23-4909	2.9 - 3.1	44 / 46	0.45 / 0.38	+/- 1.0	+10	+20	2.0:1	120	FB2
CA23-4910	2.9 - 3.1	44 / 46	0.45 / 0.38	+/- 1.0	+10	+20	2.0:1	120	FB2
CA23-3911	2.7 - 3.1	32 / 34	0.55 / 0.48	+/- 1.0	+10	+20	2.0:1	120	FB2
CA23-3913	2.7 - 3.1	32 / 34	0.55 / 0.48	+/- 1.0	+10	+20	2.0:1	120	FB2
CA23-4911	2.7 - 3.1	44 / 46	0.45 / 0.38	+/- 1.0	+10	+20	2.0:1	120	FB2
CA23-4913	2.7 - 3.1	44 / 46	0.45 / 0.38	+/- 1.0	+10	+20	2.0:1	120	FB2

Operating Temp: -45 to +85 DEG C (Specs @ Room Temp)

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