

New Product Announcement!
Ultra Low Noise, High IP3

Monolithic Amplifier

CMA-162LN+

50Ω 0.7 to 1.6 GHz

The Big Deal

- Ceramic, Hermetically Sealed, Nitrogen filled
- Low profile case, .045" high
- Ultra Low Noise Figure, 0.5 dB
- High Gain, High IP3
- Class 1B HBM ESD (500V)



CASE STYLE: DL1721

Pricing: \$4.95 (QTY 20)

Product Overview

Mini-Circuits CMA-162LN+ is a E-PHEMT based Ultra-Low Noise MMIC Amplifier with a unique combination of low noise and high IP3 making this amplifier ideal for sensitive high dynamic range receiver applications. This design operates on a single 4V supply. The MMIC amplifier is bonded to a multilayer integrated LTCC substrate and then hermetically sealed under a controlled nitrogen atmosphere with gold-plated covers and eutectic AuSn solder. These amplifiers have been tested to MIL requirements for gross leak, fine leak, thermal shock, vibration, acceleration, mechanical shock, and HTOL.

Key Features

Feature	Advantages
Ultra Low Noise, 0.5 dB at 1.0 GHz	Outstanding world class noise figure performance.
High IP3, +30 dBm at 1.0 GHz	Combining Low Noise and High IP3 makes this MMIC amplifier ideal for use in Low Noise Receiver Front End (RFE) as it gives the user advantages at both ends of the dynamic range: sensitivity & two-tone IM performance.
Adjustable Gain	By changing feedback resistor R1, gain can be changed from 19.7 to 23.5 dB at 1GHz
Ceramic Hermetic Package	Low inductance, repeatable performance, excellent reliability
Max Input Power, +25 dBm	Ruggedized design operates up to high input powers often seen at Receiver inputs eliminating the need for an external resistor.
High Reliability	Low, small signal operating current of 55 mA nominal maintains junction temperatures typically below 100°C at 85°C ground lead temperature.
Class 1B ESD (500V HBM)	The CMA-162LN+ is a super low noise PHEMT based design. Mini-Circuits incorporates ESD protection on die to achieve industry leading ESD performance for a low noise amplifier.

