### **New Product Announcement!**

Ultra Low Noise, High IP3

# **Monolithic Amplifier**

## **CMA-252LN+**

50Ω 1.5 to 2.5 GHz

#### **The Big Deal**

- · Ceramic, Hermetically Sealed, Nitrogen filled
- Low profile case, .045" high
- Ultra Low Noise Figure, 0.8 dB
- High Gain, High IP3, +30 dBm
- · Adjustable Current, 25 to 80 mA





CASE STYLE: DL1721

Pricing: \$4.95 (QTY 20)

#### **Product Overview**

Mini-Circuits CMA-252LN+ is a E-PHEMT based Ultra-Low Noise MMIC Amplifier with a unique combinations of low noise and high IP3 making this amplifier ideal for sensitive high dynamic range receiver applications. This design operates on a single 3 to 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, 0.8 dB at 1.8 GHz	Excellent noise figure performance. Increases signal to noise ratio.
High IP3, +29 dBm at 1.8 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 Current	Provides users ability to set current consumption over a wide range from 25 to 80 mA.
Ceramic Hermetic Package	Low inductance, repeatable performance, excellent reliability
Max Input Power, +27 dBm	Ruggedized design operates up to high input powers often seen at Receiver inputs eliminating the need for an external limiter.
High Reliability	Low, small signal operating current of 57 mA nominal maintains junction temperatures typically below 100°C at 85°C ground lead temperature.