### **New Product Announcement!**

# **Ultra Low Noise MMIC Amplifier**

PMA-5451+

 $50\Omega$ 0.05 to 6 GHz

## The Big Deal

- Ultra Low Noise Figure, 0.6 dB
- High IP3/Low Current, 30mA
- Wideband, up to 6 GHz





3mm x 3mm MCLP (EIA: QFN) Pkg

Pricing: \$1.49 (QTY 20)

#### **Product Overview**

Mini-Circuits PMA-5451+ is a E-PHEMT based Ultra-Low Noise MMIC Amplifier operating from 50 MHz to 6 GHz with a unique combination of low noise and high IP3 making this amplifier ideal for sensitive receiver applications. This design operates on a single 3V supply at only 30mA and is internally matched to 50 Ohms.

## **Kev Features**

Feature	Advantages
Ultra Low Noise,0.6 dB	Outstanding Noise Figure, measured in a 50 Ohm environment without any external matching
High IP3, 29 dBm	Combining Low Noise and High IP3 makes this MMIC amplifier ideal for Low Noise Receiver Front End (RFE) because it gives the user advantages at both ends of the dynamic range: sensitivity & two-tone spur-free dynamic range
Low Current, 30mA	At only 30mA, the PMA-5451+ is ideal for remote applications with limited available power or densely packed applications where thermal management is critical.
Broad Band	Operating over a broadband the PMA-5451+ covers the primary wireless communications bands: Cellular, PCS, LTE, WiMAX
Internally Matched	No external matching elements required to achieve the advertised noise and output power over the full band
MCLP Package	Low Inductance, repeatable transitions, excellent thermal pad
Max Input Power, +20dBm	Ruggedized design operates up to input powers of +20dBm without the need of an external limiter
High Reliability	Low, small signal operating current of 30 mA nominal maintains junction temperatures typically below 100°C at 85°C ground lead temperature



For detailed performance speci