



ULTRA HIGH IP3 AMPLIFIER MODULE

The HXG-242+ (RoHS compliant) is an advanced amplifier module combining high dynamic range MMIC technology with integrated optimization circuits to provide industry-leading linearity over the optimized frequency range of 700 to 2400 MHz. It is packaged in a Mini-Circuits System-in-Package (MSiP) module ($6.4 \times 6.4 \times 2.4$ mm) using a sealed ceramic cover with gold-over-Ni metallization for excellent solderability.

The module offers industry-leading IP3 performance of +46.6 dBm at 1500 MHz relative to device size and DC power consumption of 146 mA at

1500 MHz. The combination of the design and E-PHEMT technology provides enhanced linearity as shown in the high IP3. It covers the primary wireless frequency bands for cellular, PCS and LTE. These features make this amplifier ideal for use in:

- Driver amplifiers for complex waveform up converter paths
- Drivers in linearized transmit systems
- Secondary amplifiers in ultra high dynamic range receivers.

A unique feature of the HXG-242+, which separates this design from all competitors, is the low noise figure of 2.4 dB (typical) in combi-

nation with the high dynamic range. Unlike competing products, Mini-Circuits HXG-242+ provides input and output return loss of 10 dB up to 1.5 GHz without the need for any external matching components. The HXG-242+ includes internal matching networks to offer an extremely high dynamic range module in a small package.

VENDORVIEW

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