

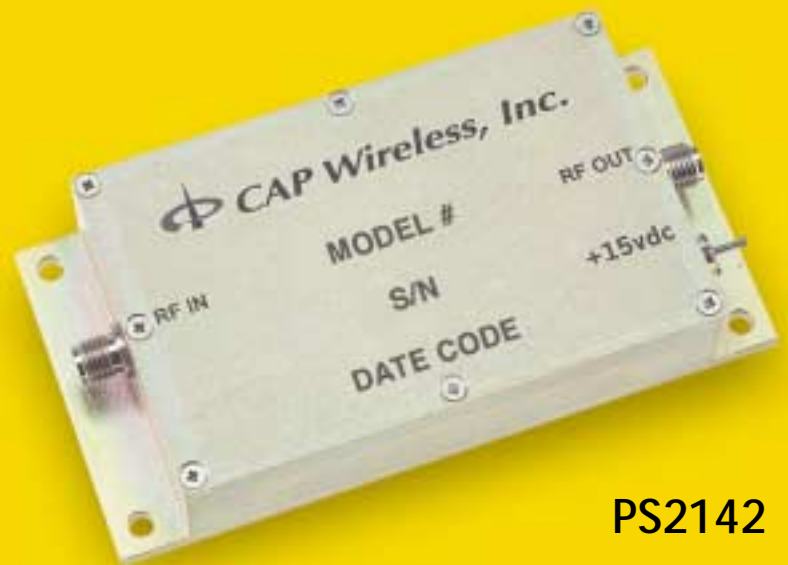
LOW NOISE AMPLIFIER

Features

- Low noise and high intercept point
- Internal bypass switch
- Balanced design
- Internal regulator/Active bias
- Unconditionally stable

Options

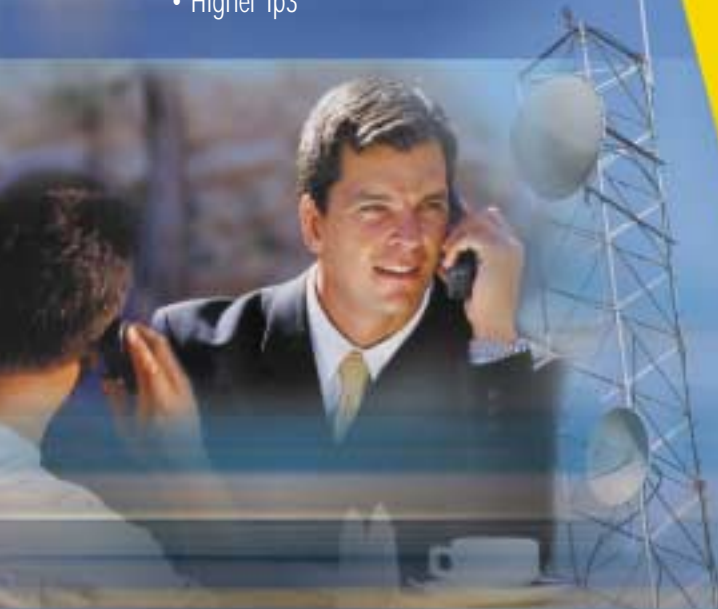
- Lower noise figure
- Other bandwidths
- Gain levels
- Higher Ip3



PS2142

Description

Designed for front end performance in the cellular band, this family of amplifiers utilizes GaAs FET devices to achieve low noise and high third order intercept point. The balanced design allows for graceful degradation while the internal bypass switch allows for continued operation under all conditions, making these units ideal in cellular tower top applications.



 **CAP Wireless, Inc**

Model	PS2142	Units
Frequency	800-960	MHz
Gain (min)	18	dB
Flatness p-p (max)	1.0	dB
NF (max)	1.0	dB
VSWR in (max)	1.4:1	
VSWR out (max)	1.4:1	
P1dB (min)	+16	dBm
Input IP3 (min)	+10	dBm
Rev Isolation (min)	25	dB
Bypass Insertion Loss(max)	1.0	dB
Dimensions	3.7x1.9x.8	inches
DC Current (typ)	120	mA

Specifications at T = +25°C and VDC = +10 to +15V

Operating temperature: -10 to +50°C.

Storage temperature: -30 to +70°C

Input/Output impedance: 50 Ω

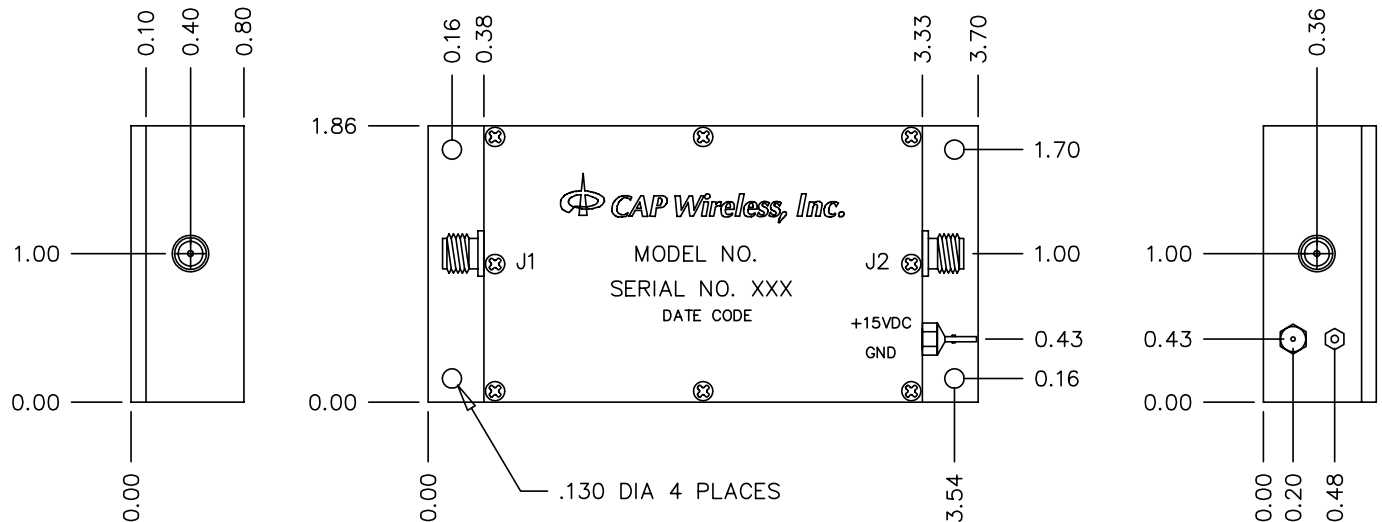
Input/Output connectors: SMA



LOW NOISE AMPLIFIER

PS2142

Outline Drawing B



Company Design Philosophy

Essential to the company's strategy is the use of the latest and most sophisticated design software available. These design tools include complete suites of Agilent-EEsof, and AWR- Microwave Office, circuit and system high frequency EDA tools. The company consistently achieves its goal of accurately creating "prototypes" in software, as evidenced by its ability to go directly from a simulated design to deliverable prototypes and rapidly ramp to fulfill volume requirements. A crucial element of the company's development philosophy is to "design for production" to drastically improve manufacturability by virtually eliminating tuning and adjustments as part of the manufacturing process. The result is lower cost, higher reliability products with predictable delivery times.

The products shown on these data sheets are merely a representation of the company's capabilities, where a library of designs is available to draw upon to meet specific customer performance requirements. If you have a unique requirement, contact the factory to explore the latest in technology.