



# Power Amplifier Kit

## RFS P7022

### Power Amplifier Kit Description

The RFS P7022 is a Power Amplifier Kit containing the RFS P2010 and the RFS P5022, high-performance PAs designed for use in transmit applications in the 2.4 – 2.5 GHz frequency band and in the 4.9 – 5.9 GHz frequency band (respectively).

Below is a brief description of both PAs. Please refer to their individual data sheets for more information.

### RFS P2010

#### Product Description

The RFSP2010 power amplifier is a high-performance GaAs HBT IC designed for use in transmit applications in the 2.4 – 2.5 GHz frequency band. With a P1dB of 26 dBm, the device is ideal as a final stage for wireless LAN applications requiring high transmit linearity. Designed with propriety linearizing techniques, the part is operable closer to P-1dB, which enables the device to achieve a specific error vector magnitude (EVM) with less backoff. The PA exhibits unparalleled linearity and efficiency for both 802.11b- and 802.11g-based WLAN systems. The part operates off a single +3.3V supply.

#### Applications

- 802.11b/g WLAN
- 2.4 GHz ISMB and Wireless Equipment

#### Product Features

- 26 dBm P1dB@3.3V
- 22 dB Gain
- 2.5 % EVM; 110 mA @ P<sub>OUT</sub> = +19 dBm with 54 Mbps OFDM Signal
- Single +3.3V Supply Voltage
- PA Power On/Off Logic
- Input and Output Matched to 50 Ohms

### RFS P5022

#### Product Description

The RFSP5022 power amplifier is a high-performance GaAs HBT IC designed for use in transmit applications in the 4.9 – 5.9 GHz frequency band. With a P1dB of 25 dBm, the device is ideal as a final stage for wireless LAN applications requiring high transmit linearity. The part demonstrates very low error vector magnitude (EVM) at the full 54 Mbps data rate for 802.11a. The input of the PA is matched to 50 ohms and the output can be easily matched for optimum linearity and power performance at the desired frequency of operation between 4.9 and 5.9 GHz. The part operates off a single +3.3V supply.

#### Applications

- 802.11a WLAN
- HiperLAN/2 WLAN
- U-NII Fixed Wireless Equipment

#### Product Features

- 25 dBm P1dB@3.3V
- 23 dB Gain
- 2.5% EVM; 180 mA @ P<sub>OUT</sub> = +19 dBm with 54 Mbps OFDM Signal
- Single +3.3V Supply Voltage
- Input Matched to 50 Ohms
- PA Power On/Off Logic



**ANADIGICS, Inc.**  
141 Mount Bethel Road  
Warren, New Jersey 07059, U.S.A.  
Tel: +1(908)668-5000  
Fax: +1(908)668-5132

URL: <http://www.anadigics.com>  
E-mail: [Mktg@anadigics.com](mailto:Mktg@anadigics.com)

**IMPORTANT NOTICE**

ANADIGICS, Inc. reserves the right to make changes to its products or to discontinue any product at any time without notice. The product specifications contained in Advanced Product Information sheets and Preliminary Data Sheets are subject to change prior to a product's formal introduction. Information in Data Sheets have been carefully checked and are assumed to be reliable; however, ANADIGICS assumes no responsibilities for inaccuracies. ANADIGICS strongly urges customers to verify that the information they are using is current before placing orders.

**WARNING**

ANADIGICS products are not intended for use in life support appliances, devices or systems. Use of an ANADIGICS product in any such application without written consent is prohibited.