



## RF386X Series—GaAs pHEMT Low-Noise Amplifiers (LNAs)

### Features:

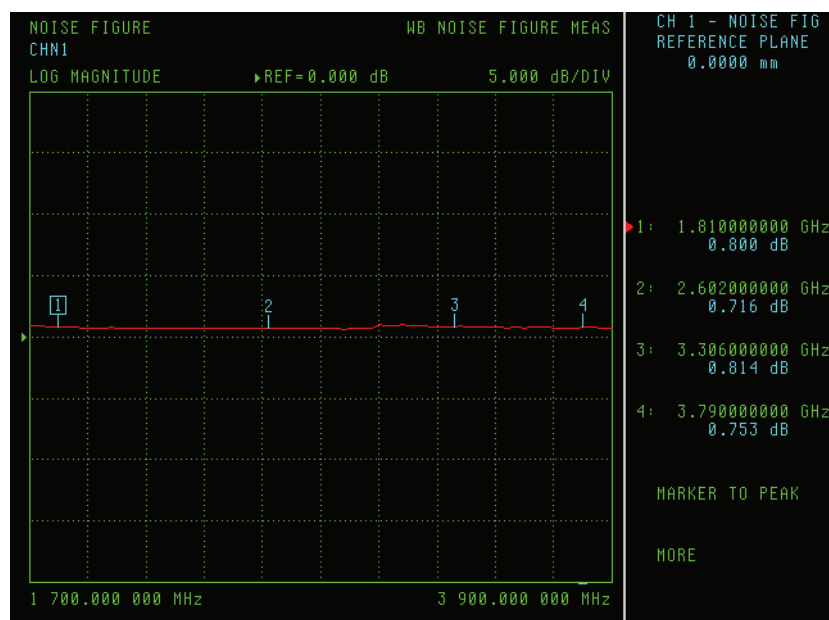
- Low noise (0.7dB) and high
- Intercept point (+36.0dBm)
- Single 3.0-6.0V power supply
- 700-3800 MHz operation
- Small, cost-effective QFN package
- RoHS and Pb-free

### Applications:

- First stage CDMA, PCS, DCS, UMTS LNA/linear driver
- First stage WLAN LNA/linear driver
- First stage WiMax LNA/linear driver
- General purpose amplification

Ideal for the wireless infrastructure and WiMax markets, this new family of GaAs pHEMT low-noise amplifiers from RFMD® offers broadband performance (700MHz-3800MHz). Provided in a variety of configurations (single-stage, dual-stage and dual-channel) the RF386X series of LNAs provides high gain, low-noise and excellent IP3 performance. These self-biased amplifiers operate with a single supply voltage, which may range from 3.0-6.0V. With impedances near 50 ohms, designers will need to implement minimal external matching to take full advantage of the extended frequency range of these versatile amplifiers. Assembled in a reliable and low-cost QFN package, RFMD provides both superior performance and competitive prices.

### RF3866 Noise Figure versus Frequency - 1.8 to 3.8 GHz Standard Tune.



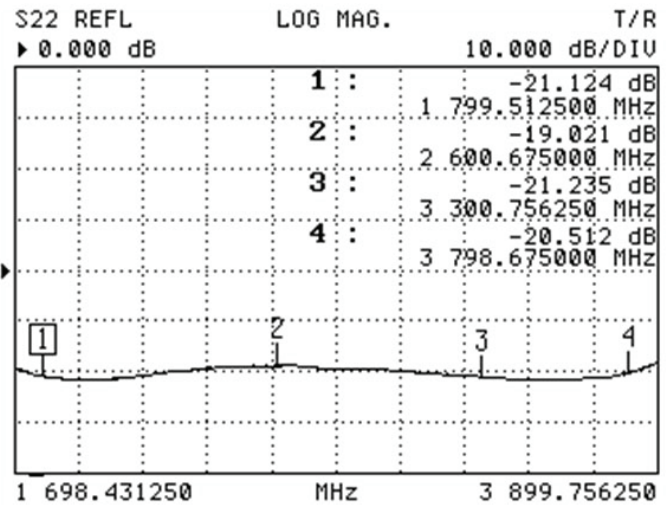
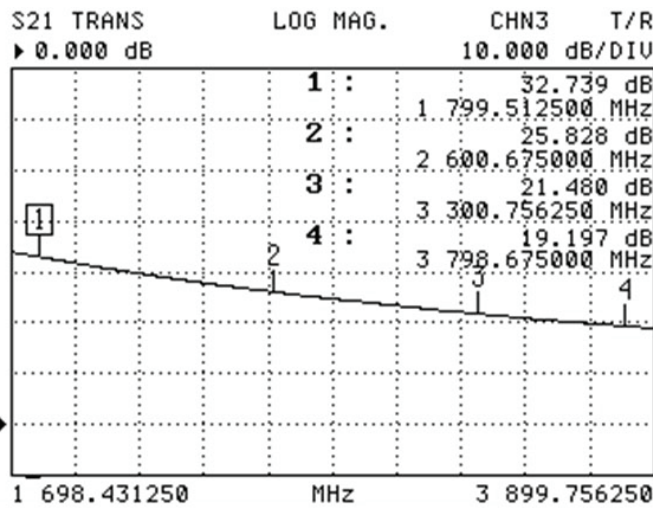
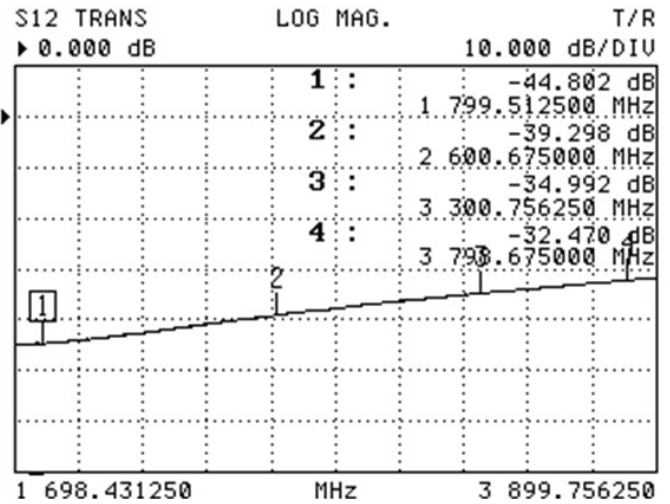
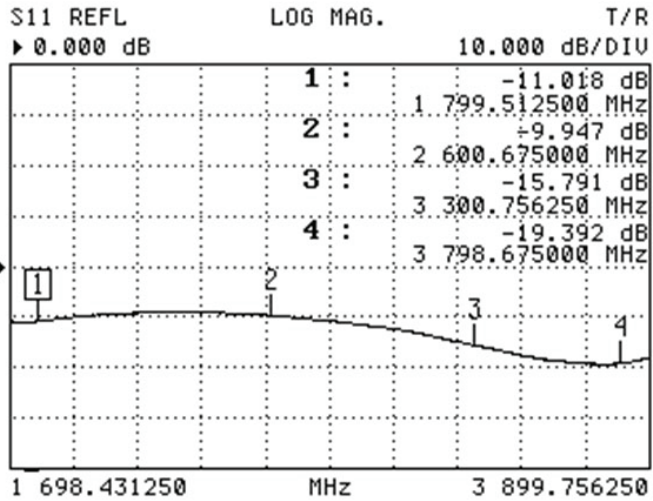
### Performance Table

Part	Frequency (MHz)	Gain (dB)	NF (dB)	P1dB (dBm)	OIP3 (dBm)	Vd (V)	Id (mA)	Package
†RF3861	700 - 3800	14.5	0.9	22.5	36.0	3.0 - 6.0	85	QFN
†RF3863	700 - 3800	15	0.7	22.5	36.0	3.0 - 6.0	85	QFN
†RF3865	700 - 3800	29.0	1.0	22.5	36.0	3.0 - 6.0	170	QFN
†RF3866	700 - 3800	30.0	0.8	22.5	36.0	3.0 - 6.0	170	QFN
†RF3867	700 - 3800	15	0.8	22.5	36.0	3.0 - 6.0	170 (85/channel)	QFN

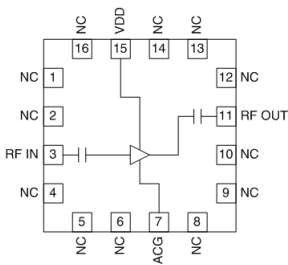
† Preliminary: Production release Q3 2006; typical data at 2000 MHz with Vd: 5.0 Volts.

## Configuration Overview

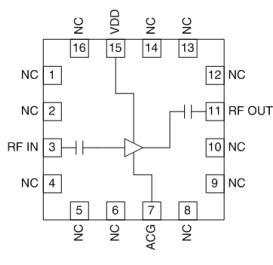
RF3866 S-Parameter Data for 1.8 to 3.8 GHz Standard Tune.



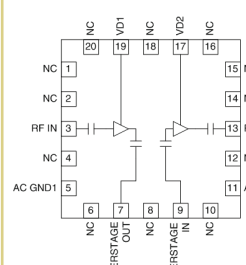
**RF3861**



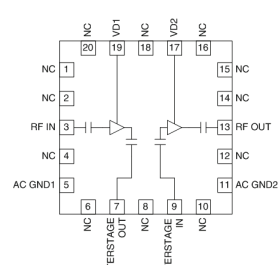
**RF3863**



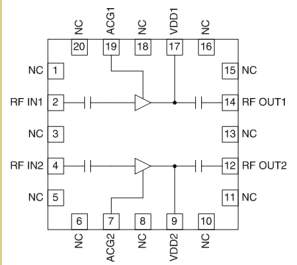
**RF3865**



**RF3866**



**RF3867**



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