RFMD®.

WLAN Power Amplifier MMIC Portfolio

RFMD® portfolio of linear, medium-power, high-efficiency, two-stage amplifier MMICs, including the RF5122, RF5622, RF5322, and RF5722, are designed for use as the final power amplifier in 2.4 GHz OFDM and other spread-spectrum transmitters. Designed to maintain linearity over a wide range of supply voltages and power outputs, these devices feature a built-in power detector and integrate both input and interstage matching components, thereby reducing external component count and facilitating incorporation into any design.

The medium-power, high-efficiency RF5355 and RF5616 PAs MMICs meet IEEE 802.11a/n, IEEE 802.16e (4.9 GHz to 5.850 GHz only) WiMAX, FCC, and ETSI requirements for operation in the 4.9 GHz to 5.85 GHz band. Designed for use as the final power amplifier in 5 GHz WiFi and other spread-spectrum transmitters, the RF5355 and RF5616 operate from a single supply voltage and are easily incorporated into WiFi and other designs while using minimal additional external components.

The RF5125 is a linear, medium-power PA, while the RF5373 is a low-power PA. Both are designed for battery-powered WiFi applications such as PC cards, mini-PCI, and compact flash applications. Designed for operation in the 2.4 to 2.5 GHz frequency range, these WiFi PA MMIC are manufactured using RFMD's state-of-the-art, high-efficiency InGaP HBT process.

RFMD's family of medium-power PA MMICs offer a combination of unmatched reliability, efficiency, and linearity tailored specifically to meet the demands of mobile computing device manufacturers.

APPLICATIONS

- Mobile devices
- Consumer electronics
- Gaming
- Computers

2.5 GHz PAs

RF5122
- 18 dBm at 2.2%
- 125 mA
- 2.2 x 2.2 x 0.6 mm

RF5622
- 18 dBm at 3.5%
- 95 mA
- 2.2 x 2.2 x 0.5 mm

RF5322
- 18 dBm at 2.5%
- 125 mA
- 2.2 x 2.2 x 0.4 mm

RF5722
- 18 dBm at 2.5%
- 125 mA
- 2Fo filter
- 2.2 x 2.2 x 0.5 mm

RF5373
- 12 dBm at 3.8%
- 55 mA
- 2.2 x 2.2 x 0.5 mm

RF5125
- 21 dBm at 4%, 3.3 V
- 23 dBm at 4%, 5.0 V
- 3.0 x 3.0 x 0.6 mm

5 GHz PAs

RF5355
- 17 dBm at 3%
- 28 dB gain
- 2.2 x 2.2 x 0.5 mm

RF5616
- 20 dBm at 3%
- 28 dB gain
- 3.0 x 3.0 x 0.5 mm

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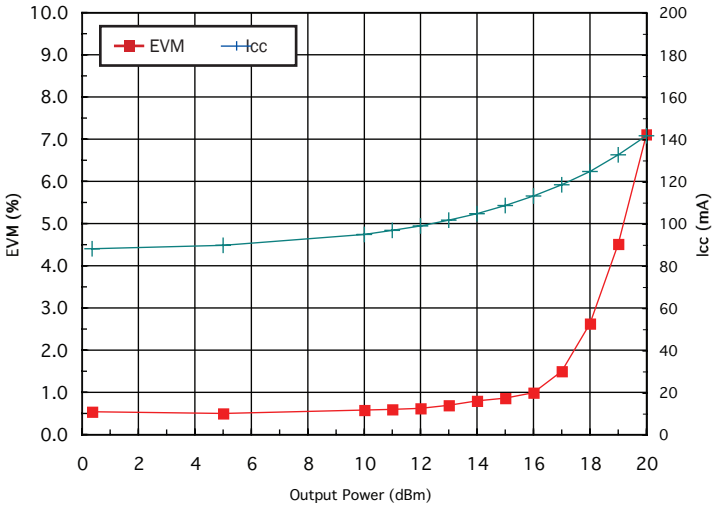
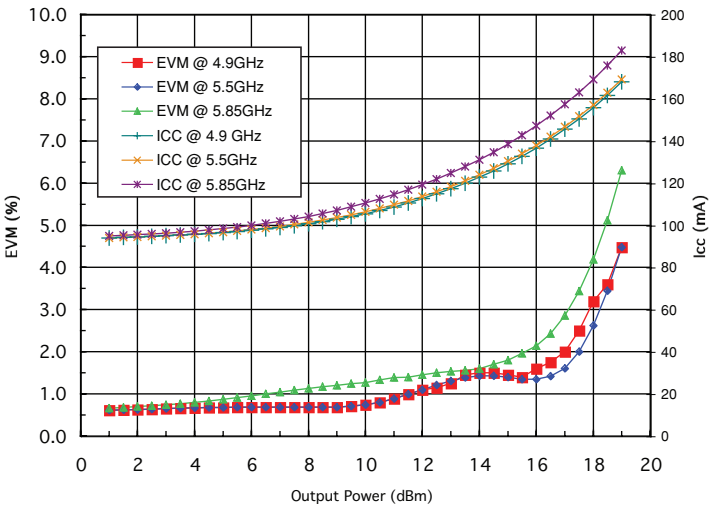
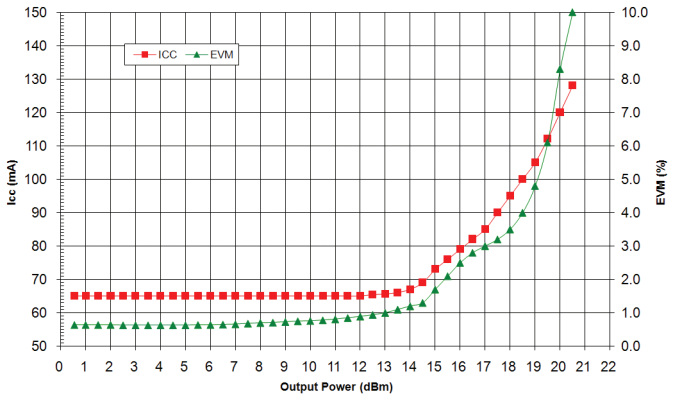
RF5122/RF5722/RF5322 EVM & Icc vs P_{OUT} (54 Mbps)



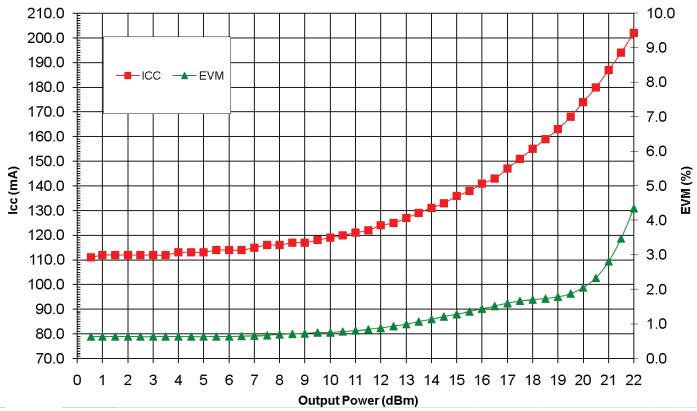
RF5355/RF5616 EVM & Icc vs P_{OUT} (54 Mbps)



RF5622 EVM & Icc vs P_{OUT} (54 Mbps)



RF5125 EVM & Icc vs P_{OUT} (54 Mbps)



POWER AMPLIFIERS

Part Number		Freq (GHz)	Gain (dB)	Avg P_{OUT} (dBm)	EVM %	V_{CC} (V)	Current at Po (mA)	Package Style	RoHS Comp Pb Free
RF5122	InGaP GaAS HBT	2.4 to 2.5	25.5	18	2.5	3.0 to 3.6	120	QFN 2.2 x 2.2 x 0.6	Y
RF5125	InGaP GaAS HBT	2.4 to 2.5	28	21	3.0	3.0 to 5.0	190	QFN 3.0 x 3.0 x 0.6	Y
RF5322	InGaP GaAS HBT	2.4 to 2.5	25.5	18	2.5	3.0 to 3.6	120	QFN 2.2 x 2.2 x 0.4	Y
RF5373	InGaP GaAS HBT	2.4 to 2.5	28	12	3.5	1.7 to 3.6	55	QFN 2.2 x 2.2 x 0.5	Y
RF5622	InGaP GaAs HBT	2.4 to 2.5	30	18	3.3	3.0 to 3.6	95	QFN 2.2 x 2.2 x 0.5	Y
RF5722	InGaP GaAs HBT	2.4 to 2.5	25.5	18	2.5	3.0 to 3.6	120	QFN 2.2 x 2.2 x 0.5	Y
RF5355	InGaP GaAs HBT	4.9 to 5.85	26	17	4.0	3.0 to 5.0	140	QFN 2.2 x 2.2 x 0.5	Y
RF5616	InGaP GaAs HBT	4.9 to 5.85	26	20	3.3	3.0 to 5.0	190	QFN 3.0 x 3.0 x 0.5	Y