



2Watts, 900MHz band Power Amplifier

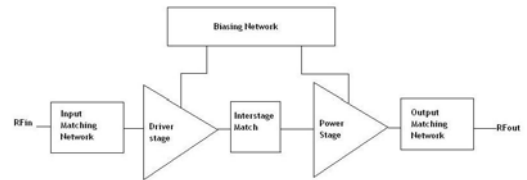
RPA15

Description

The **RPA15** is a 0.8 to 0.96 GHz high power, high efficiency GaAs Enhancement Mode pHEMT MMIC power amplifier. This MMIC power amplifier doesn't require any off chip components.

The device is designed for cellular system.

Functional Diagram



Applications

- Cellular System
- Base station
- ISM Band Systems

Key Features

- High Gain/Power
- High Performance
- Low Cost

Electrical Specification

Conditions: Vcc = 12 V & TA=25 °C

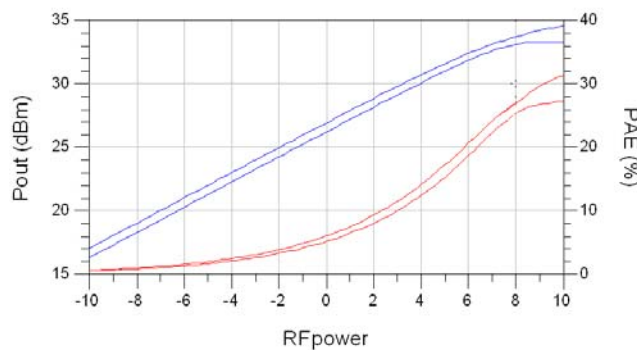
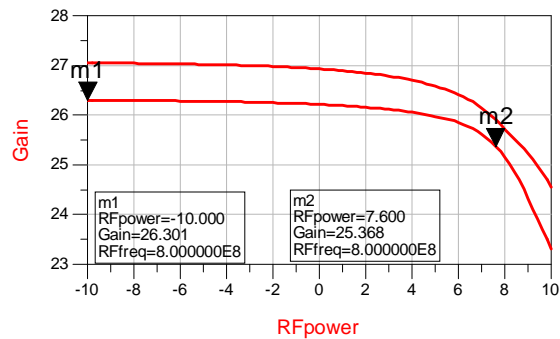
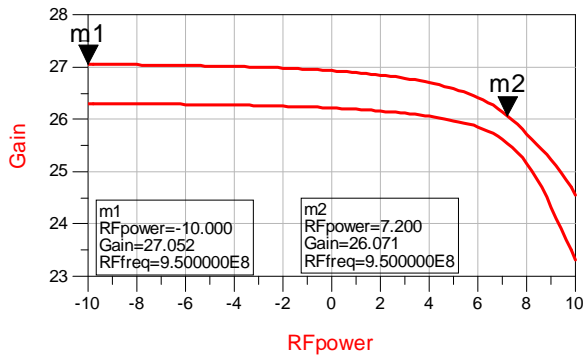
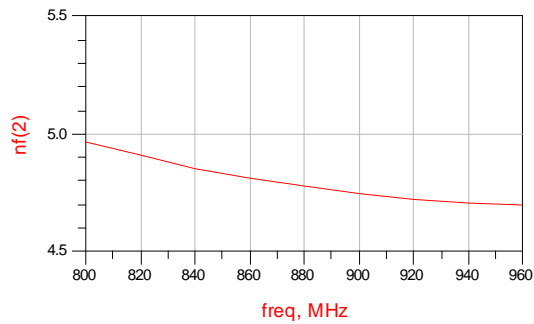
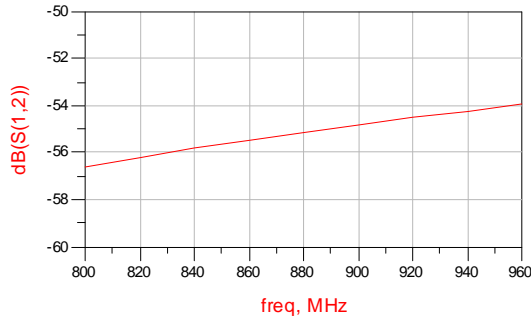
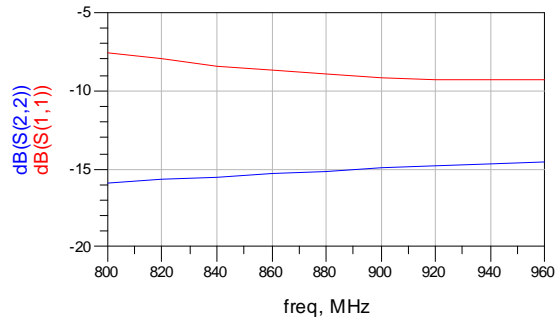
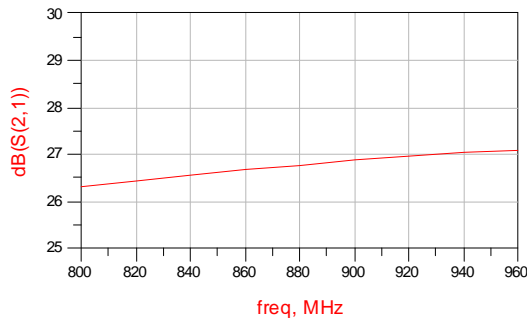
Parameter	Min	Typical	Max	Units
Frequency Range	0.8		0.96	GHz
Gain	26.3		27.1	dB
Power Output (P1dB)		33		dBm
Efficiency @ P1dB		25		%
OIP3		43		dBm
Input Return Loss		8		dB
Output Return Loss		10		dB
Supply Current		668		mA
DC Voltage		12		V



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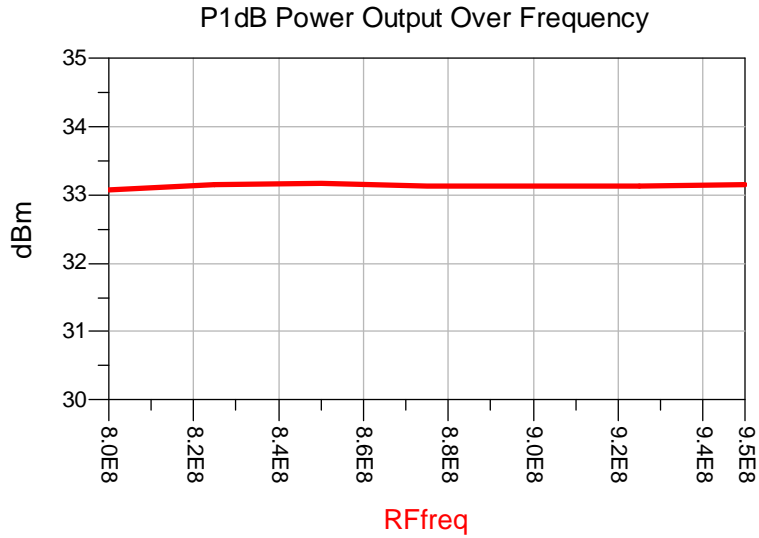
Simulated Results





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OIP3 over frequency at 30dBm output power tone, 1MHz spacing

