



Agilent Technologies MGA-6x563 Current Adjustable Low Noise Amplifier in SOT-363 Package

Product Brief



About Agilent Technologies

Agilent Technologies is a leading supplier of high performance GaAs and Silicon transistors and RFICs with a broad line of devices in multiple surface mount package styles.

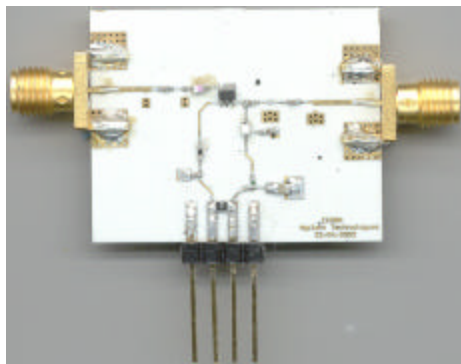
About the Product

The MGA-6x563 family is a 3-5V current adjustable high linearity, low noise amplifier housed in a 6-lead SOT-363 package.

The **MGA-61563** offers excellent linearity and low noise figure for applications from 0.1 to 6GHz. At 2GHz, the device delivers OIP3 28.5dBm, P1dB of 15.8dBm, Gain of 16.6dB and low NF of 1.2dB requiring only 3V/41mA DC biasing. With a single external bias resistor, device current can be adjusted from 20mA to 80mA, with a corresponding OIP3 from 23dBm to 32dBm at 3V bias.

The **MGA-62563** offers an excellent linearity and low noise figure for application from 0.1 to 3GHz. At 500MHz, the device delivers OIP3 32.9dBm, P1dB of 17.8dBm, Gain of 22dB and low NF of 0.9dB, requiring only 3V/60mA DC biasing. With a single external bias resistor, device current can be adjusted from 15mA to 80mA, with a corresponding OIP3 from 20dBm to 36dBm at 3V bias.

Populated demoboard, as shown below, can be applied from PL47 marketing for qualified customers. Blank demoboard can be applied for free from E-Sample (PN: DEMO-MGA-6x563)



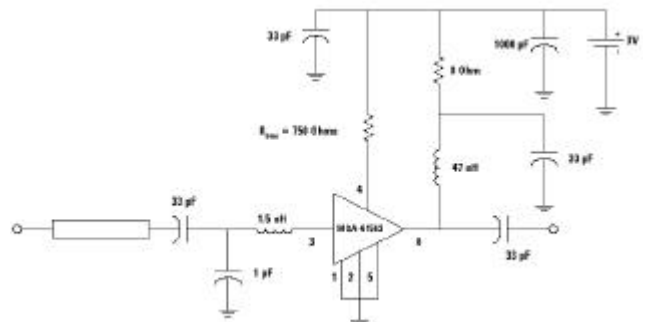
Product Features and Benefits

- Combination of high linearity and low noise figure
- Smart Bias Function
- Output 50 ohm match, input partial match
- Small Form Factor
- 3 to 5 Voltage operation

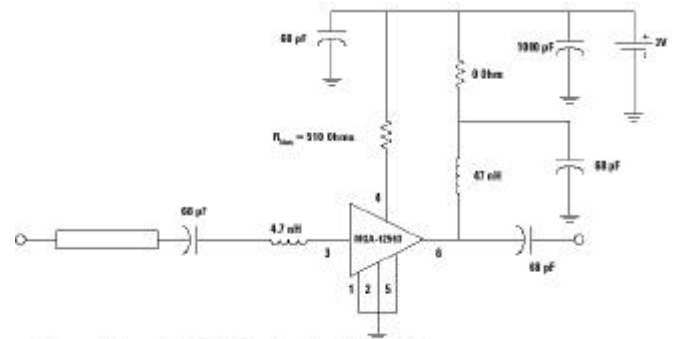
Typical Applications

LNA or driver amplifier for:

- Cellular/PCS/WCDMA base station
- Wireless Local Loop
- Wireless LAN
- Fixed Wireless Access
- Other wireless application from 0.1 to 6GHz frequency range.



Schematic diagram of a typical MGA-61563 amplifier.



Schematic of a typical 500 MHz application of MGA-62563.