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RFPA0133 Typical Performance for a 698MHz to 794MHz Application Circuit

The RFPA0133 is a QFN, 16-Pin, 3mm x 3mm, 3V to 5V, high efficiency programmable gain amplifier manufactured on an advanced Gallium Arsenide Hetero-junction Bipolar Transistor (HBT) process. Ideal for analog communications systems, 900MHz spread spectrum systems, 400MHz industrial radios, high isolation buffers, and driver stages for higher power applications, it is also capable of operating in other bands such as 698MHz to 794MHz. Its external matching allows for use across various frequency platforms from 380MHz to 960MHz.

The following RFPA0133 performance data for 698MHz to 794MHz was collected under normal operating conditions (room temperature and supply voltage of 3.6V).

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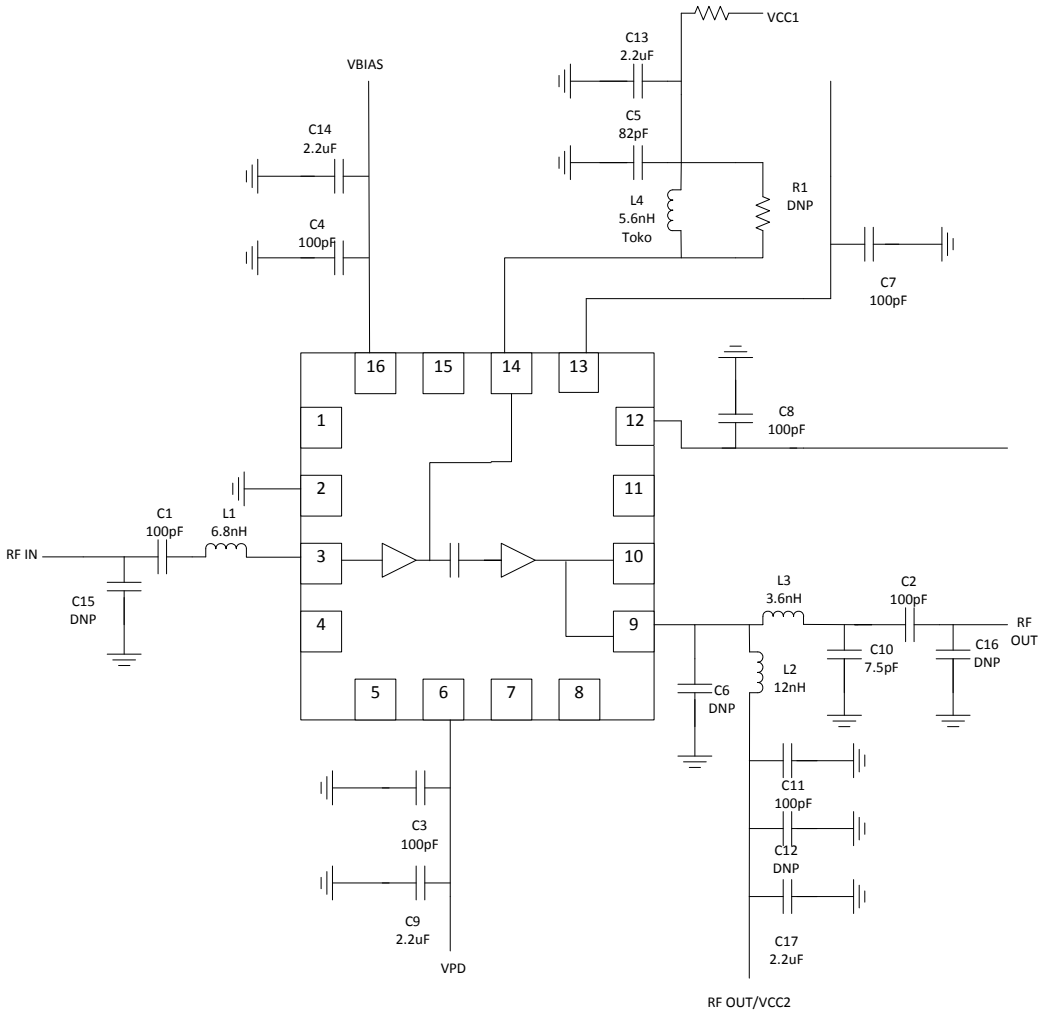

Figure 1. RFPA0133 Application Schematic

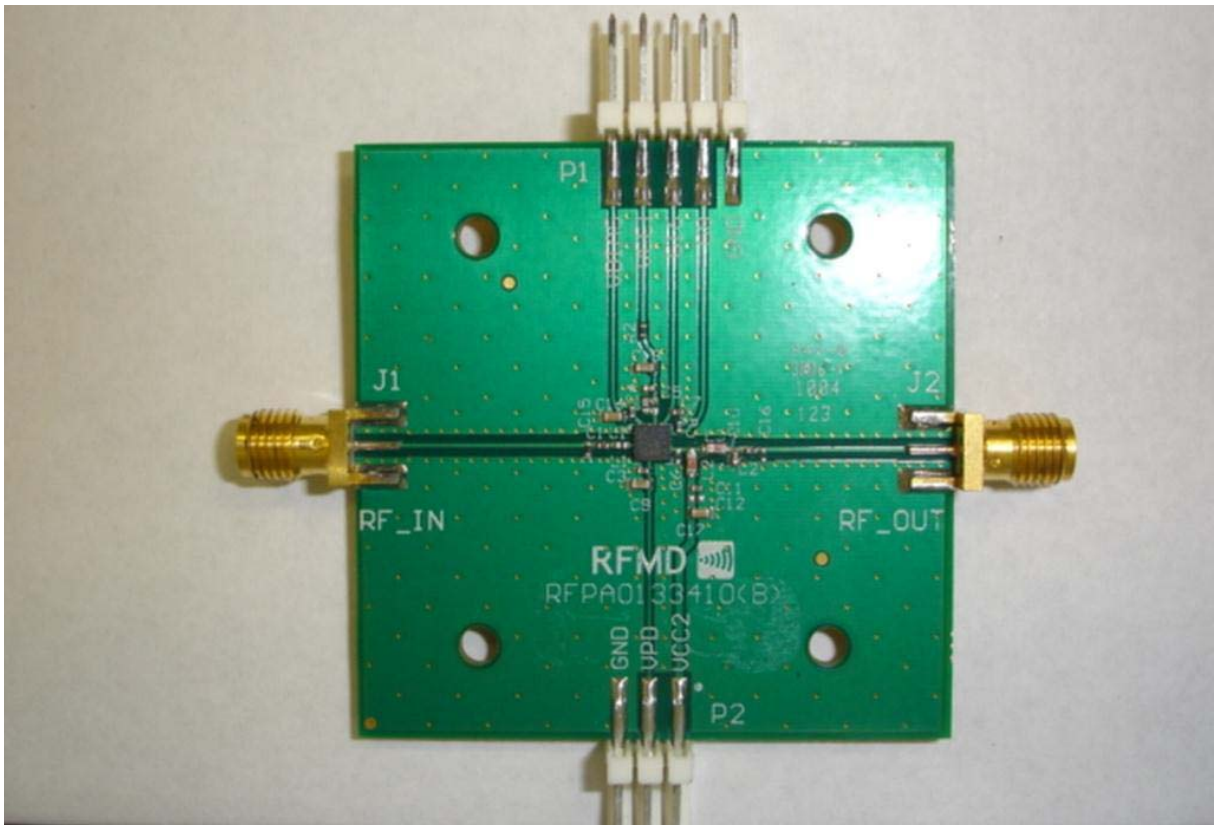

Figure 2. RFPA0133 Evaluation Board

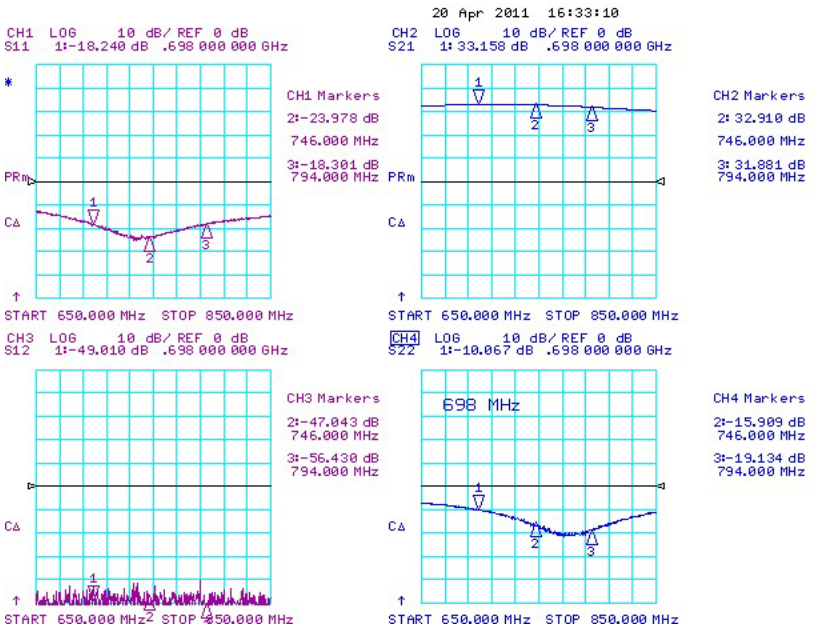

Figure 3. RFPA0133 S-Parameters

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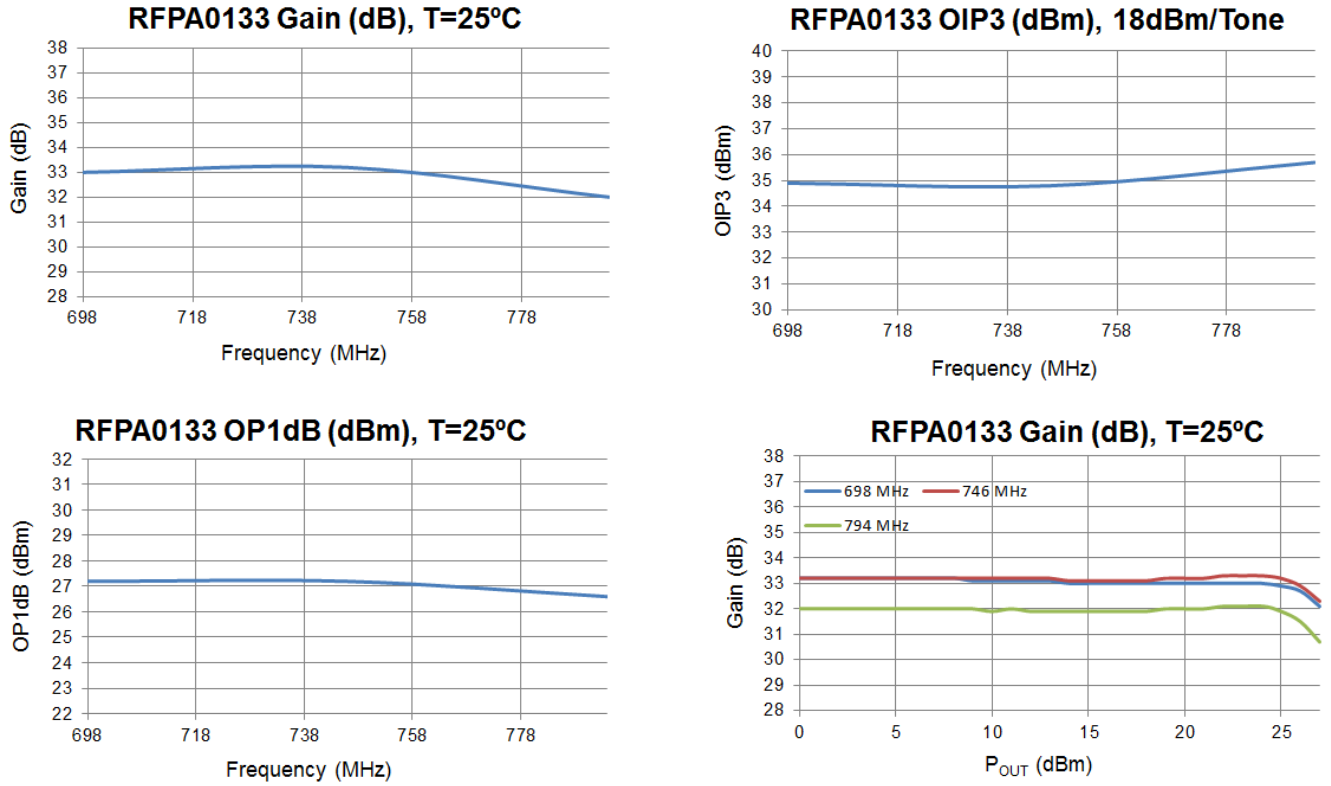

Figure 4. RFPA0133 Gain, OIP3, and OP1dB Performance

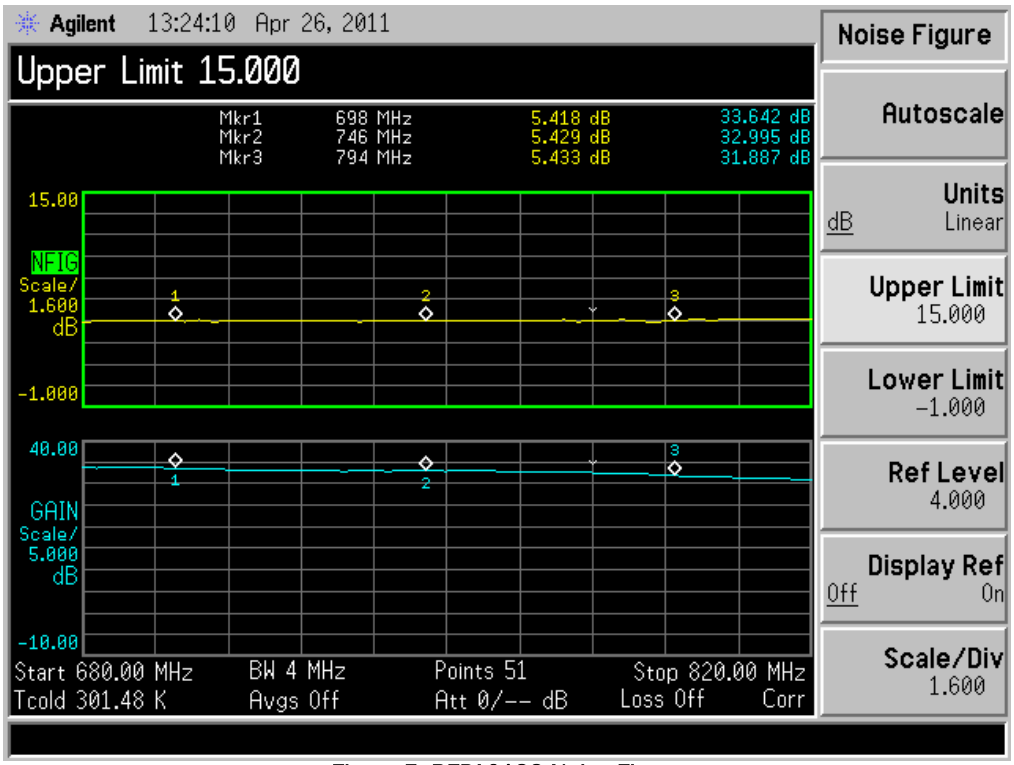

Figure 5. RFPA0133 Noise Figure

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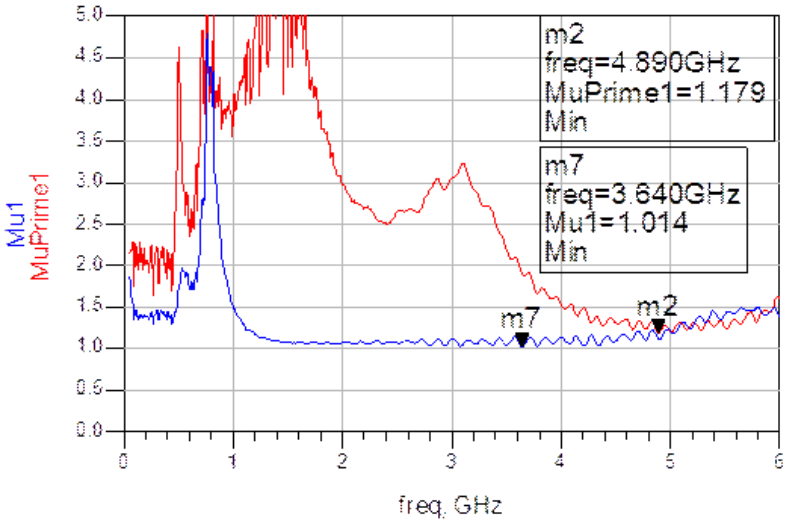

Figure 6. RFPA0133 Stability