

عنوان مقاله:

Design of a Mixer for Δ G applications

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خلاصه مقاله:

In this paper we are going to design an ultra wideband mixer for Δ G applications. In this paper we have designed a Δ G mixer that it has a noise figure (NF) between 9- 15dB and a gain of 20 dB in the operating frequency of 29 GHz. In this paper the proposed mixer is designed in TSMC 180nm. has a reversed Isolation of -10 dB in this frequency and it has a OP1dB of 25 dBm in the RF port of 20dBm. The IP3 of the proposed mixer is about 50dBm. The techniques that we have used for designing the proposed mixer is the current mirror PMOS transistors with inductive degeneration in current mirror transistors to increase the gain and improve linearity .and inductive source degeneration technique is used to improve the IP3.

کلمات کلیدی:

UWB mixer, Δ G applications, Noise Figure, Gain

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