一种应用于可定位射频标签中的接收强度指示器

作　者：孙美玲, 张世林, 毛陆虹, 谢生, 周晓秋

单　位：天津大学

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摘　要：

本文介绍了一种应用在可定位射频标签中的接收强度指示器。提出了一种低功耗、对温度、工艺变化不敏感的低功耗限幅放大器，分析了其增益误差、噪声和频率响应。分析了级联限幅放大器的级间干扰的原理，并提出了解决方法。经过流片测试，接收强度指示器实现了45dB的电压检测范围，电流消耗为1.1mA。

关键词：接收强度指示器；限幅放大器；CMOS

A Receiving Signal Strength Inductor Applied in Localization RF Responder

Author's Name:

Institution:

Abstract:

This paper introduced a receiving signal strength inductor (RSSI) applied in localization RF responder . A new topology of low power limiting amplifier with insensitivity to temperature and process variations was proposed. Analysis of gain error, noise and frequency responding of the amplifier was presented. The interferences between stages of cascade amplifiers were investigated and solved. Measurements showed the RSSI chip achieved 45dB input voltage dynamical range with 1.1mA current consuming.

Keywords: receiving signal strength inductor (RSSI) ; limiting amplifier ; CMOS

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