

A NOVEL CMOS PRECISE FULL-WAVE RECTIFIER BY OPERATIONAL AMPLIFIER AND NEW STRUCTURE FOR DIODE

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ABSTRACT

A new precise full-wave Rectifier by using non-linear applications of operational Amplifier circuit is in this article presented. By using an appropriate design for proposed op-amp circuit, this circuit is designed as the output is not saturated. A precise full-wave rectifier can be designed for high frequencies. The objective of the proposed circuit is more focused on minimum input voltage. In the structure of this rectifier op-amp circuit proposed is used, and for ideal diode, connected diode is used. In this article presented a new structure for diode. Output voltage simulation has been done by using HSPICE software in 0.18 um technology.

KEYWORDS: Full-Wave Rectifier, Power Consumption, Minimum Voltage Input, Op- Amp Circui