Abstract

Recently, the rising demand of Darlington products for the high data rate communication system. Darlington transistors are used in applications where a high gain is needed at a low frequency. Recently Darlington cell and Darlington topology have been reported high gain and good bandwidth for modern application. In modern communication Darlington amplifier is versatile used in low noise amplifier, distributed amplifier, broadband mixer, power amplifier and active balunes. Today technology required high speed transmission efficiency with less power consumption and less circuitry to used, Darlington amplifier satisfy all parameters so that review and future advancement required. In these papers designing, application, issues and recent trends of Darlington amplifier is reviewed; we have surveyed almost all the Possible Work Done in Darlington transistors in Past Decades.

References

- Chin-Wei Kuo, et. al, &quot;An 18 to 33 GHz Fully-Integrated Darlington Power Amplifier
with Guanella-Type transmission-Line Transformers in 0.18 CMOS Technology; IEEE Microwave and Wireless Components Letters, pp 1-3
- Sven Karsten Hampel, Member, IEEE, et. al, "9-GHz Wideband CMOS RX and TX Front-Ends for Universal Radio Applications; IEEE Transactions On Microwave Theory And Techniques, VOL. 60, NO. 4, APRIL 2012, 1105

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