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.
with Guanella-Type transmission-Line Transformers in 0. 18 CMOS Technology\cite{1}.


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


K. W. Kobayashi, et. al \"GaAs HBT MMIC broadband amplifiers from dc to 20
- K. W. Kobayashi, et. al &quot;GaAs heterojunction bipolar transistor MMIC dc to 10 GHz direct-coupled feedback amplifier, &quot; in GaAs IC Symp., Oct. 1989, pp. 87–90.

Index Terms

Computer Science
Circuits And Systems

Keywords
Darlington cell  Heterojunction bipolar transistor (HBT)  high electron-mobility transistor (HEMT)  Analog
period  RF period