Abstracts

A Wideband AlGaAs/GaAs Heterojunction Bipolar Transistor Amplifier Optimized for Low-Near-Carrier-Noise Applications Up to 18 GHz

D. Costa and A. Khatibzadeh. "A Wideband AlGaAs/GaAs Heterojunction Bipolar Transistor Amplifier Optimized for Low-Near-Carrier-Noise Applications Up to 18 GHz." 1994 MTT-S International Microwave Symposium Digest 94.3 (1994 Vol. III [MWSYM]): 1645-1648.

A wideband AIGaAs/GaAs HBT Darlington feedback amplifier has been optimized for low near-carrier noise. The amplifier has 10 dB gain and a 3 dB bandwidth of 18 GHz. The amplifier has a residual phase noise of -156 dBc/Hz at 1 KHz offset from the carrier (2.23 GHz). This near-carrier performance is superior to that of amplifiers realized with other device technologies capable of similar bandwidths.

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