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Design and Realisation of a Two Stage A Microwave Power Amplifier

ABSTRACT - Masterthesis

This master thesis describes the Design and Realization of two stage class A microwave Power Amplifier. The frequency for which the circuit is designed is 2.4 GHz and the output power achieved is approximately 0.5 watt.

The transistor used in the first stage is BFP540 while the output power of the first stage is the input of the second stage in which the ATF50189 transistor is used to for amplification. All the simulations and readings are taken by using AWR Microwave Office software. By using the load line R1 and the biasing points are achieved for both stages and starting from that point the whole circuit is designed for both stages. This thesis report also delivers the main idea to design a microwave power amplifier using AWR Microwave Office and its hardware as well.