

Abstracts

A fully integrated Ku-band Doherty amplifier MMIC

C.F. Campbell. "A fully integrated Ku-band Doherty amplifier MMIC." 1999 Microwave and Guided Wave Letters 9.3 (Mar. 1999 [MGWL]): 114-116.

The design and performance of a fully integrated Ku-band Doherty amplifier monolithic microwave integrated circuit (MMIC) is presented. The circuit is implemented in 0.25- μm pHEMT MMIC technology and demonstrates the feasibility of the Doherty approach at Ku-band frequencies. The fabricated devices achieved a two-tone power-added efficiency of 40% with a corresponding third-order C/I ratio of 24 dBc at 17 GHz. To the author's knowledge this is the first fully integrated pHEMT Doherty amplifier MMIC as well as the first experimental results for a Doherty amplifier at Ku-band reported to date.

 [Return to main document.](#)