Abstracts

Optical Response of the GaAs MESFET at Microwave Frequencies and Applications

A. Paolella, P.R. Herczfeld, A. Madjar and T. Higgins. "Optical Response of the GaAs MESFET at Microwave Frequencies and Applications." 1991 MTT-S International Microwave Symposium Digest 91.2 (1991 Vol. II [MWSYM]): 487-490.

This paper concerns the MESFET as an optical port on MMICs. It has three principal themes: to show quan-titatively how better optical coupling improves the photoresponse of the MESFET, to point out that by modest redesign its frequency response can be significantly extended up to 10 GHz, and finally to demonstrate how these can be converted to better optical control of MMIC circuits. A direct optical injection locking of a MESFET oscillator was performed.The measured optical injection locking bandwidth was 43.8 MHz.

❑ Return to main document.