

# Abstracts

## Optical Control of MMIC Oscillators and Model Parameter Analysis of an Illuminated FET at the Ka- and V-Band

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*S. Kawasaki, M. Kimura, H. Shiomi, T. Wakabayashi, M. Funabashi and K. Ohata. "Optical Control of MMIC Oscillators and Model Parameter Analysis of an Illuminated FET at the Ka- and V-Band." 1995 MTT-S International Microwave Symposium Digest 95.3 (1995 Vol. III [MWSYM]): 1287-1290.*

This paper reports experimental results of optical control of millimeter-wave HJFET MMIC oscillators and FET model parameter analysis with illumination. Using a noncoherent optical source, the maximum optical tuning ranges of 32 MHz around 30 GHz and 260 MHz around 51 GHz were obtained. By means of parameter extraction, variation on  $C_{gd}$  with 46.67% increase and  $C_{ds}$  with 19.1% decrease due to the illumination, and their frequency dependence were appreciated.

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