# Abstracts

## Scattering Parameters of Semiconductor Microstrip Line Under Laser Spot Illumination

*Y. Horii and M. Tsutsumi. "Scattering Parameters of Semiconductor Microstrip Line Under Laser Spot Illumination." 1996 MTT-S International Microwave Symposium Digest 96.3 (1996 Vol. III [MWSYM]): 1675-1678.*

Scattering parameters of an optically controlled microstrip gap fabricated on the semiconductor substrate have been analyzed theoretically using the frequency-dependent finite-difference time-domain method. The transmission characteristics of interest have been shown as a function of arbitrary position of laser spot around an air gap. The results have been demonstrated experimentally using microstrip line with silicon substrate and semiconductor laser. And, it is also reported that the high-powered illumination of laser spot develops non-dispersive characteristics of S/sub21/ for the wide frequency range.

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