

Abstracts

Microwave Circuit Models of Semiconductor Injection Lasers (Mar. 1983 [T-MTT])

R.S. Tucker and D.J. Pope. "Microwave Circuit Models of Semiconductor Injection Lasers (Mar. 1983 [T-MTT])." 1983 Transactions on Microwave Theory and Techniques 31.3 (Mar. 1983 [T-MTT]): 289-294.

Small-signal two-port circuit models of packaged commercial broad-stripe and buried-heterojunction AlGaAs laser diodes are presented. The models are based on the single-mode rate equations, and include the heterojunction I-V and space-charge characteristics. Also included are package and substrate parasitic. The models agree well with measured reflection coefficient and modulation frequency response data, and can be incorporated in standard microwave circuit analysis programs.

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