

# Abstracts

## Wave Propagation in a Rectangular Waveguide Inhomogeneously Filled with Semiconductors (Correspondence)

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*R.H. Sheikh and M.W. Gunn. "Wave Propagation in a Rectangular Waveguide Inhomogeneously Filled with Semiconductors (Correspondence)." 1968 Transactions on Microwave Theory and Techniques 19.2 (Feb. 1968 [T-MTT]): 117-121.*

A comparison of exact and approximate calculations of the propagation constant of a rectangular waveguide containing a centrally placed piece of semiconducting material has been made. The results show that the approximate solutions are subject to considerable error and also indicate a linear relationship between attenuation constant and conductivity that may be useful for the measurement of the semiconductor properties.

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