

# Abstracts

## Electrical Characteristics of Metal-Semiconductor Junctions

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*M.V. Schneider. "Electrical Characteristics of Metal-Semiconductor Junctions." 1980 Transactions on Microwave Theory and Techniques 28.11 (Nov. 1980, Part I [T-MTT]): 1169-1173.*

The current-voltage characteristic of metal-semiconductor junctions is described by a simple equation which is the product of an exponential and a hyperbolic sine function if one includes the effect of tunneling. In the case of equal current flow via tunneling and via thermionic emission the conductance becomes a hyperbolic cosine function of the applied voltage. Devices displaying such characteristics appear attractive for use in harmonic frequency converters

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