

# Abstracts

## Microwave Detection Using the Resonant Tunneling Diode

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*J.M. Gering, T.J. Rudnick and P.D. Coleman. "Microwave Detection Using the Resonant Tunneling Diode." 1988 Transactions on Microwave Theory and Techniques 36.7 (Jul. 1988 [T-MTT]): 1145-1150.*

A detailed experimental and theoretical study in the use of a resonant tunneling diode (RTD) as a microwave detector based upon its small-signal equivalent circuit model is presented. It is shown that the rectified current from the diode can be accurately predicted and that the diode can be operated as a reactive microwave detector which absorbs no microwave power. For this detection mode, a matching network which maximizes the applied ac voltage can be used.

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