# Abstracts

## Excess Noise in Microwave Detector Diodes

*J.J. Faris and J.M. Richardson. "Excess Noise in Microwave Detector Diodes." 1961 Transactions on Microwave Theory and Techniques 9.4 (Jul. 1961 [T-MTT]): 312-314.*

The dependence of available excess noise in type microwave crystal-diode rectifiers on applied microwave power was measured. This may be approximated by a power law with stants characteristic of the particular crystal. As a consequence of the dependence of both excess noise and dc rectified power on power level, there is a level which minimizes the ratio of these tities. Similarly, in the case of a modulated microwave carrier there is an input level which minimizes the ratio of excess noise to power, and so provides optimum detection of small modulation.

❑ Return to main document.