Abstracts

The Tungsten - P Type Silicon Point Contact Diode

A.J. Kerecman. "The Tungsten - P Type Silicon Point Contact Diode." 1973 G-MTT International Microwave Symposium Digest of Technical Papers 73.1 (1973 [MWSYM]): 30-34.

Video detection at 90 GHz, 890 GHz, 28.3 THz, and 474 THz is examined with respect to whisker advancement. Reproducible behavior of I-V curves is obtained and correlated with the RF data. A significant thermal effect is shown to compete with conventional barrier rectification. Micrographic analysis coupled with microhardness measurements clearly demonstrates that the tungsten whisker exerts sufficient pressure to deform the silicon surface of the diodes.

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