

Abstracts

Novel MIC Bipolar Frequency Doublers Having High Gain, Wide Bandwidth and Good Spectral Performance (Dec. 1991 [T-MTT])

M. Borg and G.R. Branner. "Novel MIC Bipolar Frequency Doublers Having High Gain, Wide Bandwidth and Good Spectral Performance (Dec. 1991 [T-MTT])." 1991 Transactions on Microwave Theory and Techniques 39.12 (Dec. 1991 [T-MTT] (1991 Symposium Issue)): 1936-1946.

New high efficiency Bipolar microwave frequency multipliers have been developed having wideband performance, high conversion gain and good spectral properties. Experimental conversion gains of up to 7 dB have been attained for narrow bandwidths ($\pm 8\%$) and approximately 0 dB for wide-band designs (40%) at C band. Corresponding fundamental and 3rd harmonic rejections are greater than 40 dBc. Extensive modeling and computer-oriented design have been employed utilizing harmonic balance.

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