

Abstracts

Monolithic Voltage Controlled Oscillator for X- and Ku-Bands (Dec. 1982 [T-MTT])

B.N. Scott and G.E. Brehm. "Monolithic Voltage Controlled Oscillator for X- and Ku-Bands (Dec. 1982 [T-MTT])." 1982 Transactions on Microwave Theory and Techniques 30.12 (Dec. 1982 [T-MTT] (1982 Symposium Issue)): 2172-2177.

A GaAs voltage controlled oscillator circuit that tunes from 11.15 to 14.39 GHz and 16 to 18.74 GHz has been designed and fabricated. The 1.1 mm x 1.2-mm chip includes two varactors, a 300- μ m FET, bypass capacitors, tuning inductors, and isolation resistors. Wide-band circuit design techniques will be described. Varactor and circuit effects causing the noncontinuous bandwidth will be discussed showing the capability of continuous 11 to 18 GHz tuning using a single GaAs chip.

[Return to main document.](#)