

# Abstracts

## Octave Input, S- to Q-Band Large-Signal Upper-Sideband Varactor Upconverter

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*H.C. Okean, L.J. Steffek and H. DeGruyl. "Octave Input, S- to Q-Band Large-Signal Upper-Sideband Varactor Upconverter." 1979 MTT-S International Microwave Symposium Digest 79.1 (1979 [MWSYM]): 134-136.*

The S-to Q-band varactor upconverter described herein provides significantly greater power output/bandwidth capability than obtainable from a conventional single-sideband resistive upconverter, leading to significant potential simplification in high-modulation-rate millimeter wave transmitters. This upconverter uses high quality varactors and a unique design to provide octave (2-4 GHz) instantaneous input bandwidth, and a flat (16-22 mW), 2 GHz-wide Q-band output power-frequency response with minimum Q-band pump power expenditure.

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