

# Abstracts

## Octave Input, S-TO K/sub a/-Band Large-Signal Upper-Sideband Varactor Upconverter

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*H.C. Okean and L.J. Steffek. "Octave Input, S-TO K/sub a/-Band Large-Signal Upper-Sideband Varactor Upconverter." 1974 S-MTT International Microwave Symposium Digest of Technical Papers 74.1 (1974 [MWSYM]): 218-220.*

The S-to K/sub a/-band varactor upconverter described herein provides significantly greater power output/bandwidth capability than obtainable from a single-sideband resistive modulator, 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 (6-9 mW), 2 GHz-wide K/sub a/-band output power-frequency response with minimum K/sub a/-band pump power expenditure.

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