Abstracts

A Cooled MIC Parametric Upconverter

G.V. Kopcsay, R.A. Lange, E.W. Sard and J.J. Taub. "A Cooled MIC Parametric Upconverter." 1974 S-MTT International Microwave Symposium Digest of Technical Papers 74.1 (1974 [MWSYM]): 215-217.

A parametric upconverter, suitable for cryogenic cooling in a low-noise receiver system, has been developed using microstrip circuit techniques. The prototype upconverter provides 2.4 to 3.0 dB of gain for input signals from 1.35 to 1.73 GHz with an output in the 4.6 to 4.98 GHz band. Less than 26 mW of pump power at 3.25 GHz is required for its operation. The cooled noise temperature of the upconverter is less than 7 K.

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