

Abstracts

Silicon Bipolar MMIC for Frequency-Conversion Applications Up to 20 GHz

I. Kipnis. "Silicon Bipolar MMIC for Frequency-Conversion Applications Up to 20 GHz." 1987 MTT-S International Microwave Symposium Digest 87.2 (1987 Vol. II [MWSYM]): 855-858.

A simple yet versatile silicon bipolar monolithic microwave integrated circuit (MMIC) is presented that can be utilized in a variety of frequency conversion applications. With an external feedback network the MMIC functions as a regenerative frequency divider for input signals up to 20GHz. It can also be used as an unbalanced active mixer with conversion gains up to 10dB at 10GHz. With an external resonator it functions as a self-oscillating mixer (SOM) with conversion gains up to 17dB at 5GHz.

[Return to main document.](#)