Abstracts

A MMIC Subharmonically Pumped SSB Modulator (1993 [MCS])

A. Pospishil, M. Russo and M. Singh. "A MMIC Subharmonically Pumped SSB Modulator (1993 [MCS])." 1993 Microwave and Millimeter-Wave Monolithic Circuits Symposium Digest 93.1 (1993 [MCS]): 137-139.

An innovative monolithic Single Sideband Modulator (SSBM), which utilizes balanced subharmonically pumped mixers, has been developed. This SSBM is pumped at one half of the carrier frequency (f/sub c/2). The typical measured performance of this device is excellent with > 40dB carrier suppression, > 25dB undesired sideband suppression and < 10dB conversion loss over a carrier bandwidth of 14 to 19GHz. Double sideband suppressed carrier (DSBSC) and unsuppressed carrier operation is also achievable with the same device when appropriate modulation signals are applied.

❑ Return to main document.