

Abstracts

A MMIC Subharmonically Pumped SSB Modulator (1993 Vol. I [MWSYM])

A. Pospishil, M. Russo and M. Singh. "A MMIC Subharmonically Pumped SSB Modulator (1993 Vol. I [MWSYM])." 1993 MTT-S International Microwave Symposium Digest 93.1 (1993 Vol. I [MWSYM]): 399-402.

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 ($f_{\text{sub}} c/2$). The typical measured performance of this device is excellent with > 40 dB carrier suppression, > 25 dB undesired sideband suppression and < 10 dB 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.](#)