Abstracts

The Injection-Locked-Oscillator as a Microwave Amplifier of MSK Modulated Signals - Part II

S. Kumar, W.J. Chudobiak and J.S. Wight. "The Injection-Locked-Oscillator as a Microwave Amplifier of MSK Modulated Signals - Part II." 1979 MTT-S International Microwave Symposium Digest 79.1 (1979 [MWSYM]): 525-530.

Because of its phase continuous nature a Minimum-Shift-Keying (MSK) type of digitally modulated microwave signal may be amplified with an Injection-Locked-Oscillator Phase-Locked-Amplifier (ILO-PLA) Experimental bit-error-rate results for an ILO-PLA are presented in this paper for MSK modulated signals. The results show that for MSK signals an ILO-PLA does not display the large performance degradation previously reported for QPSK signals. Further a two sided locking bandwidth equal to 1.8 times the input signal bit-rate results in about .3 dB degradation in the bit-error-rate performance due to the ILO-PLA. A positive or negative frequency offset of about ten per cent of the locking bandwidth causes negligible further degradation of the performance.

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