Abstracts

A wide-band microwave photonic phase and frequency shifter

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Advanced radar deception systems require wide-band devices which perform microwave processing of frequency and phase information. A wide-band microwave photonic phase shifter was constructed which is capable of imposing greater than 2/spl pi/ phase shift to microwave signals in the 2-18-GHz frequency range. The maximum standard deviation from the phase setting was 10/spl deg/ (7/spl deg/ typical). The phase shifter was then incorporated into a frequency translation architecture. The carrier suppression obtained was 50 dB with a spurious harmonic suppression of 23 dB.

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