Abstracts

A SAW Resonator Stabilized Oscillator for a CATV Set-Top Converter

S. McIntosh. "A SAW Resonator Stabilized Oscillator for a CATV Set-Top Converter." 1982 MTT-S International Microwave Symposium Digest 82.1 (1982 [MWSYM]): 43-45.

A SAW resonator stabilized oscillator for a CATV set-top converter has been designed and is in high volume production. The SAW oscillator, operating at one of four frequencies near 680 MHz with a long-term stability of ±10 kHz, is the 2nd LO in a dual conversion, 54-channel converter. The oscillator uses a 0°, two-port SAW resonator in conjunction with a dual-gate MOS Field Effect Transistor. Tuning to exact frequency is accomplished by compression or expansion of two air wound inductors. This oscillator has significant performance advantages over conventional L-C oscillators, and significant cost advantages over crystal multiplier, frequency synthesizer, and AFC designs.

❑ Return to main document.