Abstracts

Grid oscillators with photonic-crystal reflectors

Qi Sun, K.W. Miyashiro, J.B. Horiuchi and W.A. Shiroma. "Grid oscillators with photonic-crystal reflectors." 1998 MTT-S International Microwave Symposium Digest 98.3 (1998 Vol. III [MWSYM]): 1887-1890.

The frequency-, polarization-, and reflectivity-dependent properties of photonic crystals are exploited to improve the performance of a grid oscillator. The metal reflector of a C-band grid is replaced with a photonic-crystal reflector, resulting in a higher cross-polarization ratio, higher radiated power, lower harmonic content, and improved start-up conditions.

❑ Return to main document.