Abstracts

A balanced HEMT doubler for quasi-optical applications

M.J. DeVincentis, S. Ulker and R.M. Weikle, II. "A balanced HEMT doubler for quasi-optical applications." 1999 Microwave and Guided Wave Letters 9.6 (Jun. 1999 [MGWL]): 239-241.

A quasi-optical balanced doubler based on the dual-polarized sinuous antenna is presented. The input fundamental and output second harmonic signals are isolated by polarization and external wire-grid polarizers are used for impedance tuning. The doubler exhibits 1.6 dB of conversion gain at an input frequency of 5 GHz with a bandwidth of 10%.

❑ Return to main document.