

Abstracts

A 94-GHz Planar Monopulse Receiver

C.C. Ling and G.M. Rebeiz. "A 94-GHz Planar Monopulse Receiver." 1993 *Microwave and Guided Wave Letters* 3.10 (Oct. 1993 [MGWL]): 358-360.

This letter presents the first results on a 94-GHz integrated monopulse receiver. The receiver is based on a 23-GHz local oscillator driving four separate phase-coherent 94-GHz subharmonic mixers, and performs monopulse processing on the IF signals. All circuits are integrated on a single wafer, and are realized using uniplanar coplanar-waveguide (CPW), slot lines and coplanar striplines (CPS). These features result in a compact, low-cost system suitable for tracking systems operating in poor visibility conditions, as well as in collision avoidance receivers for automotive applications.

[Return to main document.](#)