Abstracts

Coplanar integrated mixers for 77-GHz automotive applications

L. Verweyen, H. Massler, M. Neumann, U. Schaper and W.H. Haydl. "Coplanar integrated mixers for 77-GHz automotive applications." 1998 Microwave and Guided Wave Letters 8.1 (Jan. 1998 [MGWL]): 38-40.

For integration in receivers at 77 GHz, three passive mixers, a balanced diode mixer, a single ended and a balanced resistive mixer, as well as an active single-ended gate mixer have been realized in coplanar 0.15-/spl mu/m PM-HEMT technology on GaAs. The passive mixers achieved conversion losses of about 9 dB. The resistive mixers required an LO power of only 3 dBm and the diode mixer 10 dBm for optimum conversion. The gate mixer obtained a conversion gain of 1 dB for an LO power of 6 dBm, but showed higher sensitivity to the IF load.

❑ Return to main document.