Abstracts

A direction sensitive, integrated, low cost Doppler radar sensor for automotive applications

R.H. Rasshofer and E.M. Biebl. "A direction sensitive, integrated, low cost Doppler radar sensor for automotive applications." 1998 MTT-S International Microwave Symposium Digest 98.2 (1998 Vol. II [MWSYM]): 1055-1058.

We fabricated and tested an integrated, low cost, W-band Doppler radar sensor, capable to provide direction sensitive velocity information. The front-end consists of an active integrated antenna in self-mixing operation and a surface-wave coupled, mixing rectenna, providing full homodyne I/Q-detection. In the front-end, we employed only low cost silicon monolithic millimeter wave integrated circuits (SIMMWIC). Measured results show excellent performance of the sensor.

❑ Return to main document.