

# Abstracts

## A W-band vector modulator and its application to software radar for automotive collision avoidance

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*D.S. McPherson, I.D. Robertson and S. Lucyszyn. "A W-band vector modulator and its application to software radar for automotive collision avoidance." 2000 MTT-S International Microwave Symposium Digest 00.3 (2000 Vol. III [MWSYM]): 1423-1426.*

A 76.5 GHz GaAs MMIC I-Q vector modulator employing two bi-phase reflection-type attenuators is presented. It exhibits a minimum measured insertion loss of 12 dB and occupies an area of  $2/\text{spl times/1.6 mm}^2$ . Using the vector modulator, we introduce the concept of software radar for automotive collision avoidance.

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