

# Abstracts

## Planar Lens Amplifier

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*J.S.H. Schoenberg and Z.B. Popovic. "Planar Lens Amplifier." 1994 MTT-S International Microwave Symposium Digest 94.1 (1994 Vol. 1 [MWSYM]): 429-432.*

A quasi-optical power combining transmission amplifier with a focal point feed has been developed for increasing the power level available from solid-state devices. The focal point feed improves power coupling efficiency over that of a plane-wave feed. Both the receive and transmit sections of the amplifier are fabricated on a single substrate, making monolithic millimeter-wave integration possible. A 7-PHEMT, 10 GHz amplifier is presented, demonstrating a 29 dB isolation figure and up to a  $\pm 30^\circ$  scan angle with less than 2.5 dB power variation.

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