

# Abstracts

## Integrated Diode Phase Shifters and Performance in a 502-Element X-Band Array

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*M.E. Davis. "Integrated Diode Phase Shifters and Performance in a 502-Element X-Band Array." 1975 MTT-S International Microwave Symposium Digest of Technical Papers 75.1 (1975 [MWSYM]): 164-166.*

The results of fabricating 502 integrated 3-bit PIN diode phase shifters and dipole radiators will be discussed. These phase shifters consist of chip PIN diodes mounted on 25-mil alumina microstrip. A horizontally polarized dipole has been printed on the same structure, giving a complete phased array element. Considerations in the program were given for diode and circuit variations and their effects on phased array performance. A transmissive phased array has been fabricated with these elements and the performance will be discussed in terms of the phase shifter manufacturing tolerances.

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