Abstracts

A Diode Phase Shifter for Array Antennas

J.F. White. "A Diode Phase Shifter for Array Antennas." 1964 PTGMTT International Symposium Program and Digest 64.1 (1964 [MWSYM]): 181-185.

The appeal of a phased array antenna is well recognized in the search for a radiator whose power is not limited by the finite capacity of its component subradiators--only their number--and whose beam may be steered at high speeds and even subdivided into multibeams. Numerous methods are proposed to control the phase of the coherently energized subradiators and thus steer their resultant beam. Microwave, two-port, electronically switchable phase shifters used in series with one or more radiator elements and using PIN switching diodes for control are frequently recommended. Previously, the problems in implementing such a device have been the achievement of high power capability and low insertion loss.

❑ Return to main document.