Abstracts

A Fast Low-Loss Low-Drive 14-GHz Microstrip p-i-n Phase Shifter (Short Papers)

B. Glance. "A Fast Low-Loss Low-Drive 14-GHz Microstrip p-i-n Phase Shifter (Short Papers)." 1980 Transactions on Microwave Theory and Techniques 28.6 (Jun. 1980 [T-MTT]): 669-671.

A 14-GHz 4-bit p-i-n microstrip phase shifter with low RF attenuation, fast switching time, and low switching power requirements is described. The insertion loss for the 16 phase states is 1.4 dB±0.1 dB over the 14-14.5-GHz band. This insertion loss, obtained with a forward bias current of 2.5 mA/diode, is the lowest reported for comparable phase shifters. Switching time of each of the 4 cells is 1 ns. Driving power per cell is 15 mW for a switching repetition rate of 1 µs.

❑ Return to main document.