Abstracts

K-band 3-bit low-loss distributed MEMS phase shifter

Yu Liu, A. Borgioli, A.S. Nagra and R.A. York. "K-band 3-bit low-loss distributed MEMS phase shifter." 2000 Microwave and Guided Wave Letters 10.10 (Oct. 2000 [MGWL]): 415-417.

In this work, we present a 3-bit K-band distributed phase shifter circuit that employs microelectromechanical systems (MEMS) capacitive switches. The measured results demonstrate an average 1.7 dB insertion loss at 26 GHz with return loss better than -7 dB. Insertion phase shifts of all switching states are measured and show phase error less than 8.50 for all states. The low loss K-band 3-bit phase shifter demonstrated here can potentially be extended to more-bit-controlled phase shifter applications.

❑ Return to main document.