Abstracts

Integrated MEM antenna system for wireless communications

B.A. Cetiner, L. Jofre, C.H. Chang, J.Y. Qian, M. Bachman, G.P. Li and F. De Flaviis. "Integrated MEM antenna system for wireless communications." 2002 MTT-S International Microwave Symposium Digest 02.2 (2002 Vol. II [MWSYM]): 1333-1336 vol.2.

This paper presents the results on the fabrication and testing of a compact broadband antenna integrated with RF MEMS switches for wireless communications. The system consists of two individual broadband CPW fed antennas (having 50% bandwidth) sequentially addressed using low-loss RF-MEMS switches. The antennas, as well as, the RF-MEMS switches are fabricated on a glass substrate using surface micromachining batch processing method. The design and fabrication process of the system are outlined. The results showing the circuit and radiation characteristics are discussed in terms of radiation pattern reconfigurability and spatial and angular diversity capabilities.

❑ Return to main document.