Abstracts

New classes of microstrip resonators for HTS microwave filters applications

F. Rouchaud, V. Madrangeas, M. Aubourg, P. Guillon, B. Theron and M. Maignan. "New classes of microstrip resonators for HTS microwave filters applications." 1998 MTT-S International Microwave Symposium Digest 98.2 (1998 Vol. II [MWSYM]): 1023-1026.

The rapid growth of mobile communication means creates a great interest for the use of the superconducting technology, especially for base station and satellite communication systems. Planar devices with HTS films allow one to conceive narrowband filters with very low loss and small dimensions. A novel class of cross shaped planar resonators is proposed for superconducting applications. This includes dual-mode and single-mode resonators. A four pole elliptic function filter at 4 GHz is realized and measured at room temperature. Theoretical and experimental results are presented.

❑ Return to main document.