Abstracts

Superconducting filter for IMT-2000 band (2000 Vol. II [MWSYM])

G. Tsuzuki, M. Suzuki and N. Sakakibara. "Superconducting filter for IMT-2000 band (2000 Vol. II [MWSYM])." 2000 MTT-S International Microwave Symposium Digest 00.2 (2000 Vol. II [MWSYM]): 669-672.

This paper presents two superconducting filters for IMT-2000 band with a 20 MHz bandwidth and a 1930 MHz center frequency. One aimed at not only steep skirt but also low insertion loss and low group delay deviation by 16 resonators, while another focused on extreme steep skirt performance by 32 resonators. These filters were fabricated using YBCO films on a half area and on a full area of a 3-inch diameter MgO wafer respectively. An excellent insertion loss less than 0.4 dB for a 16-pole filter and an excellent attenuation more than 30 dB apart 420 KHz from lower band-edge for a 32-pole filter.

❑ Return to main document.