

## Superconducting microstrip line band-pass filter for mobile applications

---

*H. Kayano, H. Fuke, F. Aiga, Y. Terashima, H. Yoshino, R. Kato and Y. Suzuki.  
"Superconducting microstrip line band-pass filter for mobile applications." 2000 MTT-S  
International Microwave Symposium Digest 00.2 (2000 Vol. II [MWSYM]): 673-676.*

Two types of 2 GHz band superconducting microstrip line band-pass filters were developed: a 5-pole filter with good spurious and sharp skirt characteristics, and an electrically tunable filter. The 5-pole filter with center frequency of 1.95 GHz, insertion loss of 0.1 dB or less, 3 dB bandwidth of 25 MHz, transmission zeros on both sides of desirable band, and good spurious characteristic between 1 and 9 GHz was obtained. Also the tunable filter with a measured unloaded Q factor of 2100 and a frequency shift of approximately 15 MHz was obtained.

 [Return to main document.](#)