Abstracts

Novel superconducting ring filter

G. Tsuzuki, M. Suzuki, N. Sakakibara and Y. Ueno. "Novel superconducting ring filter." 1998 MTT-S International Microwave Symposium Digest 98.1 (1998 Vol. I [MWSYM]): 379-382.

A novel planar filter composed of ring resonators with open gaps is proposed. The coupling intensity between the adjacent resonators can be controlled by changing the relative direction of the gaps. Very weak coupling can be obtained so that the narrow bandwidth filter is realized in a compact size. A 5-pole filter at 3 GHz center frequency with 1% bandwidth and an 8-pole filter at 2 GHz with 0.25% bandwidth were demonstrated by using niobium films on 50 mm diameter MgO substrates.

❑ Return to main document.