Abstracts

8-pole superconducting quasi-elliptic function filter for mobile communications application

J.S. Hong, M.J. Lancaster, D. Jedamzik and R.B. Greed. "8-pole superconducting quasi-elliptic function filter for mobile communications application." 1998 MTT-S International Microwave Symposium Digest 98.1 (1998 Vol. I [MWSYM]): 367-370.

This paper presents recent developments of an 8-pole planar high temperature superconductor bandpass filter with a quasi-elliptic function response. A novel planar filter configuration that allows a pair of transmission zeros to be placed at the band edges is described. The miniature filter has a bandwidth of 15 MHz at a centre frequency of 1777.5 MHz it is designed for mobile communication base station applications. The filter is fabricated using double sided YBCO thin film on an MgO substrate of size 0.3/spl times/22.5/spl times/39 mm. The preliminary results are presented.

❑ Return to main document.