عنوان مقاله:

Microstrip Low-pass Filter with Sharp Roll off and Wide Stop-band Using Multiple Cascaded Modified Radial Stubs Resonators

محل انتشار:

دوفصلنامه مهندسی مخابرات, دوره 5, شماره 2 (سال: 1395)

تعداد صفحات اصل مقاله: 12

نویسندگان:

Hamid Radmanesh - *Aeronautical University of Science and Technology, Tehran, Iran*

A. Zhaleh - *Department of Electrical Engineering, Ashtian Branch, Islamic Azad University, Ashtian, Iran*

خلاصه مقاله:

This paper presents a novel microstrip low-pass filter with good performance. A complete detailed theoretical analysis for the proposed filter is given using equivalent circuit models. The proposed filter applying multiple cascaded modified radial stubs resonators provides a sharp cut off frequency response that has a 185 dB/GHz roll off rate. Also, U-shaped attenuators provide a wide stop-band about 14fc with more than -20 dB rejection. The filter has an insertion loss less than 0.027 dB from dc to 1.31 GHz. The proposed filter has a high figure of merit, equal to 32317. The .experimental results are in fair agreement with the simulated results

کلمات کلیدی:

Low-pass filter, Microstrip, Radial stub, Sharp roll, Wide stop-band