

Two Path Cutoff Waveguide Resonator Filters with Attenuation Poles

H. Shigesawa, M. Tsuji and K. Takiyama. "Two Path Cutoff Waveguide Resonator Filters with Attenuation Poles." 1986 MTT-S International Microwave Symposium Digest 86.1 (1986 [MWSYM]): 407-410.

We propose here a new idea to design filters which consist of low permittivity dielectric resonators placed in the two paths which are realized by a partial H-plane bifurcation in a rectangular waveguide. This type of filters is regarded as the parallel connection of two evanescent - mode waveguide filters. This paper will try to design such a filter with the Chebyshev's passband response and also with the stopband response with attenuation poles at desired frequencies, and practical performance aspects of this type of filters will be discussed from the view points of both analytical methods and experiments in the X-band.

 [Return to main document.](#)