Abstracts

A Four-Pole Dual Mode Elliptic Filter Realized in Circular Cavity without Screws (1996 Vol. II [MWSYM])

L. Accatino, G. Bertin and M. Mongiardo. "A Four-Pole Dual Mode Elliptic Filter Realized in Circular Cavity without Screws (1996 Vol. II [MWSYM])." 1996 MTT-S International Microwave Symposium Digest 96.2 (1996 Vol. II [MWSYM]): 627-630.

A 4-pole filter displaying an elliptic type response and implemented in circular cavity without tuning screws is presented. The cavity employs a novel arrangement, consisting in the insertion of a short length of inclined rectangular waveguide in the middle of the cavity body, in order to obtain the desired coupling and tuning actions. A full-wave model of the complete filter has been developed and specialized pretuning techniques are used. The measured response of a breadboard channel filter operating at Ku-Band shows good agreement with computed data and proves the proposed approach to be valid and viable.

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