

# Abstracts

## Design of a Channel Diplexer for Millimeter Wave Applications (1972 [MWSYM])

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C.-L. Ren. "Design of a Channel Diplexer for Millimeter Wave Applications (1972 [MWSYM])." 1972 G-MTT International Microwave Symposium Digest of Technical Papers 72.1 (1972 [MWSYM]): 166-168.

The design of millimeter wave filters is in principle no different from the design of conventional microwave filters. In practice, however, several factors impose limitations to the choice of the filter structure. As a result, new filter structures must be used requiring new techniques for their design. In this paper, a new channel diplexer structure is described and a technique for its design is given. The expected electrical performance and the design procedure were verified by measuring the performance of a scaled filter model centered at 3.95 GHz. The results of these measurements are given. Practical application of the filter at millimeter wave frequencies will require further effort in the areas of physical design and manufacturing techniques.

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