

# Abstracts

## Design and realization of a four pole elliptic microwave filter using low dielectric loaded cavities

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The aim to increase the electrical properties of high power narrow band width filters required for space applications leads us to propose an alternative to classical circular metallic cavities. The introduction of dielectric media in metallic cavities permits to obtain high unloaded quality factor in devices of reduced sizes. An experimental four pole dual mode elliptic filter is constructed using these resonators. The test results are in excellent agreement with the filtering objective.

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