Title (en)

CIRCULAR WINDOW FOR A MICROWAVE WAVEGUIDE

Publication

EP 0153541 B1 19890920 (FR)

Application

EP 84402742 A 19841227

Priority

FR 8400664 A 19840117

Abstract (en)

[origin: US4684908A] The present invention relates to a circular window for an ultra-high frequency waveguide. This window is constituted by a circular plate or wafer made from a dielectric material mounted in a waveguide section, connected on either side of a waveguide operating in a frequency band centered around the central frequency. The diameter of the circular plate is chosen so as to reject the ghost modes outside the frequency band. The length of the circular guide section is chosen so that the reactance of the assembly constituted by the plate and the circular guide is cancelled out for the central frequency. It also comprises a half-wave impedance transformer, whose height is chosen so as to bring about the matching in the operating frequency band. The window associated with rectangular waveguides is more particularly used with tubes for telecommunications.

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H01J 23/36; H01P 1/08

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Cited by

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