

Abstracts

The Channel Waveguide (Correspondence)

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A waveguide propagating the TE₁₀ mode can carry more power than the normal rectangular waveguide if it has a symmetrically placed channel in the E-plane as shown in Fig. 1. The greater height of the channel in the center of the waveguide will allow a higher voltage to be applied before dielectric breakdown occurs. The TE₁₀ cutoff wavelength λ_c was investigated using the methods of Iashkin and Cohn to find out if the cutoff wavelength of the channel waveguide was equivalent to that of the rectangular waveguide λ_c .

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