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Back-to-back transition of the waveguide to microstrip line transition model. In this model, the microstrip line is designed along with a quarter-wave transformer to match the impedance to 50 [ohm] on a RT/duroid® 6010LM laminate substrate, which is available in the RF Module material library of the COMSOL Multiphysics® software.. To easily set up the model

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[Waveguide Adapter](#) Application ID: 140 This is a model of an adapter for microwave propagation in the transition between a rectangular and an elliptical waveguide. Such waveguide adapters are designed to keep energy losses due to reflections at a minimum for the operating frequencies.

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In this step-by-step instructional video, you will learn how to model RF and microwave heating in a waveguide bend containing a dielectric block with COMSOL Multiphysics simulation software. Build the presented model yourself by visiting our Model Gallery.

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his guide describes the Wave Optics Module, an optional add-on package for COMSOL Multiphysics® designed to assist you to set

up and solve electromagnetic wave problems at optical frequencies. This chapter introduces you to the capabilities of this module.

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A dielectric slab waveguide has a small circular metallic object nearby that will interact with the fields, lead to some losses within the material, and cause scattering of light into all directions.