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Design of Output Coaxial Coupler

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Abstract: *There is an emerging need of very high-power microwave devices. These sources have wide applications in radars, telecommunication, remote sensing, and also for numerous industrial, scientific, and medical applications including material technology, bio-medical diagnosis, and chemical spectroscopy. High power microwave devices are vacuum electronic devices which are widely used as amplifiers and oscillators for military radars and satellite communication systems for industrial heating, drying and baking for medical diagnosis & treatment. Waveguide adapters are frequently used to provide transmission between microwave devices & a coaxial component such as an attenuator, switch or coupler. They are commonly used in satellite & terrestrial communication equipment. A proper emphasis has given to minimise the insertion loss and improve the return loss of the adapter. A model has been developed by using Computer Simulation Technology Microwave Studio (CST MWS). The paper presents the results of modelling & simulation of Waveguide adapter in CST MWS system*

Keywords: Microwave, Waveguide, Attenuator

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