

## Design of Broadband Power Divider for 3G and 4G Applications

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**Abstract :** This paper presents a broadband power divider with equal power division ratio. Two sections of transmission line transformers based on coupled microstrip lines are applied to obtain broadband performance. In addition, design methodology is proposed for the novel structure. A prototype is designed, simulated to operate in the band from 2.1 to 3.8 GHz to fulfill the requirements of 3G and 4G applications. The proposed structure features reduced size and less resistors than other conventional techniques. Simulation verifies the proposed idea and design methodology.

**Keywords :** power dividers, coupled lines, microstrip, 4G applications

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