

عنوان مقاله:

Wideband Directional Coupler for millimeter Wave Application based on Substrate Integrated Waveguide

محل انتشار:

كنفرانس بين المللي تحقيقات بنيادين در مهندسي برق (سال: 1396)

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خلاصه مقاله:

Recently, Substrate Integrated Waveguide (SIW) techniques have been noticed for millimeter wave devices in microwave applications. In this paper, we are developing a wide band directional 3 dB coupler with a phase of 90° phase delay in the range of 30-40 GHz based on periodic vias and multi hole structure. For achieving this wide bandwidth multi-section coupler is designed based on the theoretical modeling and the simulation result is compared with HFSS and CST with two different numerical methods show good performance with low insertion and return loss, .% broad operational bandwidth and high isolation. A fractional bandwidth is about 28.5

كلمات كليدى:

Substrate Integrated Waveguide, coupler, millimeter wave

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