Directional Coupler

Last Updated: August 2019

Description

The directional coupler is commonly used for splitting and combining light in photonics. It consists of two parallel waveguides where the coupling coefficient is influenced by the waveguide length and the distance between waveguides.

Model Name

ebeam_dc_te1550

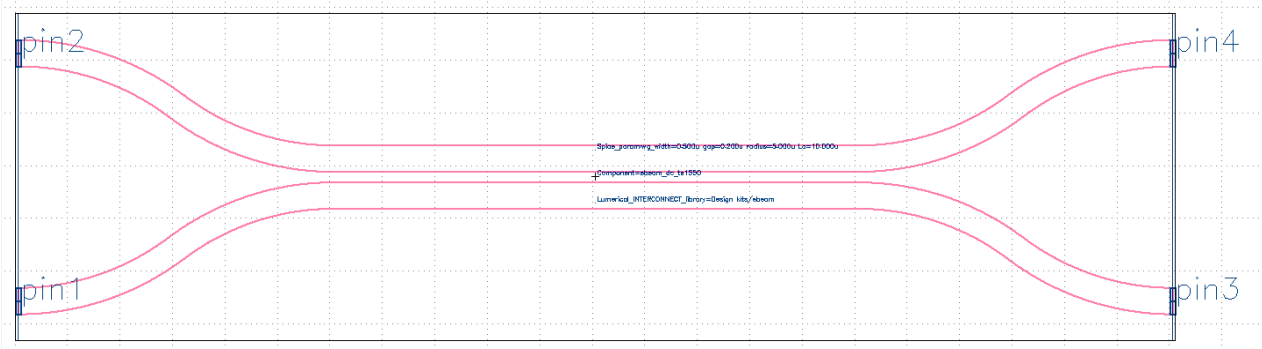

Fig. 1: Compact Model of a Directional Coupler

Compact Model Information

- Support for TE polarization
- Operating at 1550 nm wavelength
- Performance:
  - TE – TBD
  - TM - TBD

[Insert SEM Picture]

Fig. 2: SEM Picture of a Directional Coupler

Parameters

Parameter	Default Value	Notes
Coupler Length	10	

Simulation Results

From [Source]:

[Insert Simulation Results]

Fig. 3: Simulation Results for Directional Coupler

Experimental Results

From [Source]:

[Insert Experimental Results]

Fig. 4: Experimental Results for Directional Coupler

http://github.com/lukasc-ubc/SiEPIC_EBeam_PDK/

Additional Details

- Design tools & methodology:

Reference

1.