Abstracts

Simulation and implementation of lightwave component characterization using a bilateral electro-optic network

B. Elamaran, R.D. Pollard and S. Iezekiel. "Simulation and implementation of lightwave component characterization using a bilateral electro-optic network." 1997 Transactions on Microwave Theory and Techniques 45.8 (Aug. 1997, Part II [T-MTT]): 1493-1496.

The simulation and implementation of a bilateral electro-optic network has been demonstrated. The advantage of the proposed network is that it can be used as a black box to convert a microwave network analyzer into a two-port lightwave network analyzer. Simulations have been carried out to determine the sensitivity of the bilateral network to optical reflections. Measurement results on one-port optical structures are more accurate than those obtained with commercial lightwave analyzers and indicate the viability of this approach for full two-port lightwave measurements.

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