Abstracts

Linear Power Responses of an Optical Fiber

C. Vassallo. "Linear Power Responses of an Optical Fiber." 1977 Transactions on Microwave Theory and Techniques 25.7 (Jul. 1977 [T-MTT]): 572-576.

It is known that an optical fiber behaves linearly in terms of power when the modulation frequency is smaller than the spectrum width of the light source. In order to calculate the impulse or frequency power responses with a modal calculation, it is shown that the powers carried by the different modes are independent in usual cases. Different formulas are proposed for the linear responses when there is no mode coupling, and the corresponding validity conditions are given.

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