Abstracts

10-Gb/s pulse-shaping distributed-based transversal filter front-end for optical soliton receivers

P. Monteiro, A. Borjak, F. da Rocha, J. O'Reilly and I. Darwazeh. "10-Gb/s pulse-shaping distributed-based transversal filter front-end for optical soliton receivers." 1998 Microwave and Guided Wave Letters 8.1 (Jan. 1998 [MGWL]): 4-6.

The design and performance of a microwave filter as a signal processor for a 10-Gb/s soliton receiver are described. The work reports, for the first time, a versatile transversal active filtering structure, implemented as a monolithic microwave integrated circuit (MMIC) and featuring an accurate, yet straightforward, response tuning facility based on DC bias variation and allowing for optimization of the received eye patterns and therefore error-rate minimization. Tests are reported for 10-Gb/s input optical solitons, showing the efficacy of receiver output eye shape variation using the techniques described.

❑ Return to main document.