Abstracts

Broad-Band Reactive Matching of High-Speed Directly Modulated Laser Diodes

C.L. Goldsmith and B. Kanack. "Broad-Band Reactive Matching of High-Speed Directly Modulated Laser Diodes." 1993 Microwave and Guided Wave Letters 3.9 (Sep. 1993 [MGWL]): 336-338.

The design and demonstration of an octave bandwidth impedance matching network for directly modulated diode lasers is focused upon. Compact semi-lumped matching structures have been designed and fabricated at microwave frequencies with near theoretical peformance. The laser was matched to 50 Omega over the 2--4-GHz band, achieving greater than 13-dB return loss and a dramatic 10-dB improvement in fiber link insertion loss and sensitivity. Excellent agreement was obtained between measured and simulated fiber link performance.

❑ Return to main document.