## Potential characterization of free-space-wave drop demultiplexer using cavity-resonator-integrated grating input/output coupler

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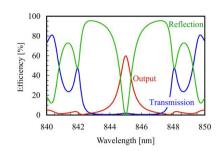


Fig. 3. Calculated wavelength dependences of output, transmission, and reflection efficiencies of the CRIGIC designed for TE1 mode.

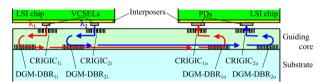


Fig. 1. Cross-sectional schematic view of WDM optical interconnection using free-space-wave ADMs with CRIGICs.

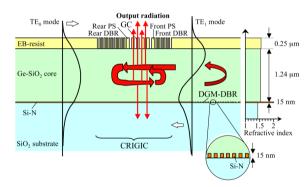


Fig. 2. Cross-sectional structure and refractive index profile of the designed waveguide device.

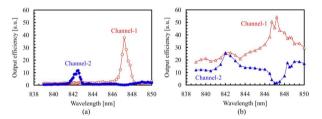


Fig. 6. Measured wavelength dependences of two-channel demultiplexers using (a) CRIGICs and (b) GCs.

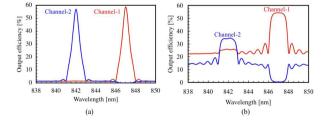


Fig. 4. Calculated wavelength dependences of two-channel drop demultiplexers using (a) CRIGICs and (b) GCs.

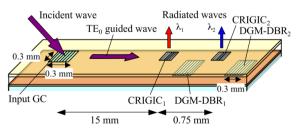


Fig. 5. Schematic view of the two-channel drop demultiplexer using CRIGICs.

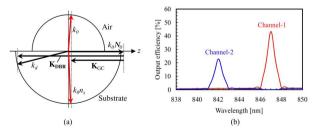


Fig. 7. (a) Wave vector diagram of CRIGIC that couples with TE0 mode. (b) Calculated wavelength dependence of tow-channel demultiplexer using CRIGICs with consideration for the substrate radiations by DBRs in CRIGICs.

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