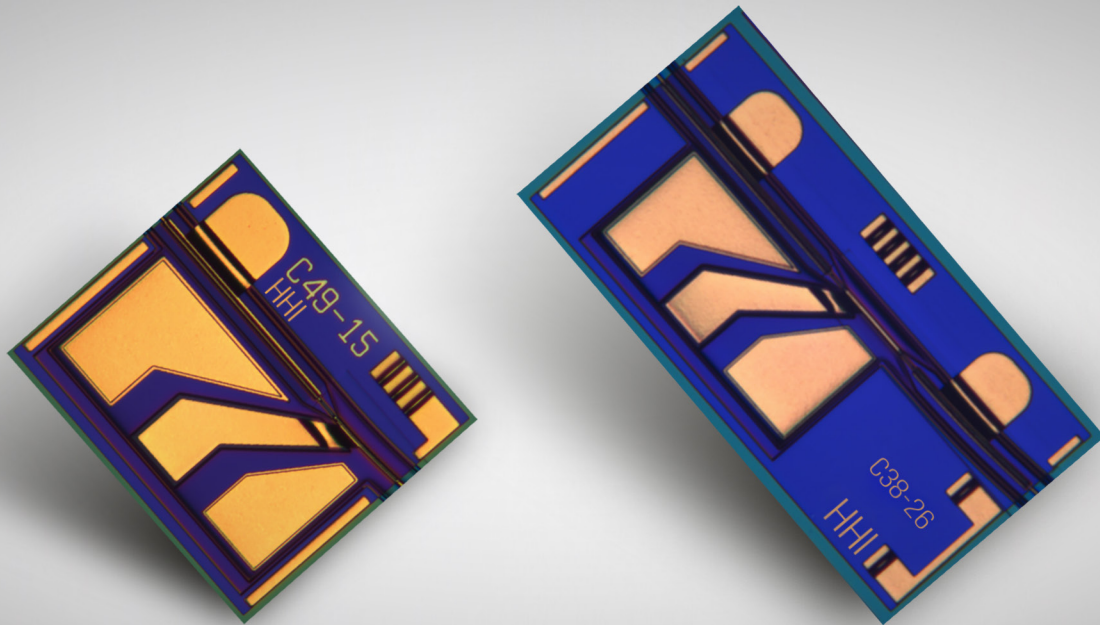


ELECTROABSORPTION-MODULATED LASERS (EML) FOR 100G/400G



AT A GLANCE

High speed EML transmitter chips for direct detection schemes

Features

- Wavelengths in O-, C-, L-Band
- Modulation bandwidth > 40 GHz
- Small footprint
- Single chips and 4-arrays, 8-arrays
- Monolithically integrated amplifier section as high power option
- Typical operation temperature: 50°C
- Extended operation temperature: 20°C to 70°C

Applications

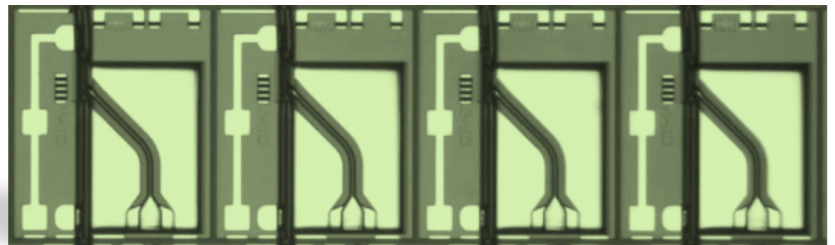
- Datacom/Telecom
- Analog photonic transmitter
- CATV

Technical Background

- Active layers based on InGaAlAs multi-quantum wells

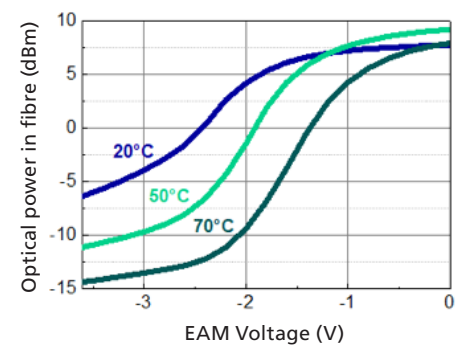
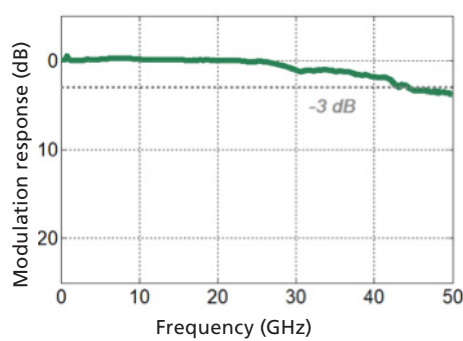
Device variants

- Standard chip size 320 μm x 370 μm
- Angled output waveguide
- Integrated semiconductor optical amplifiers (SOAs)
- 4-fold EML-arrays with RF waveguide on chip



Typical Performance

- > 10 mW facet output power
- > 40 GHz modulation bandwidth



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Example: 56 GBaud and 100 GBaud NRZ optical eyes

