INP-TRANSMITTER CHIPS FOR HYBRID INTEGRATION

AT A GLANCE
InP light sources for application in photonic multi-chip approaches

Features
- flip-chip configuration
- horizontal and vertical integration (2D and 3D)
- integrated taper for low optical coupling loss & relaxed alignment tolerance
- lateral & vertical positioning
- etched facets on request
- flexible adaption of devices corresponding to customer’s photonic platforms

Application
- Telecom/Datacom
- Sensors

Photonic platforms
- Silicon on Insulator (SOI)
- Silicon-Nitride (SiN)
- Lithium Niobate-On-Insulator (LNOI)
- Glass
- Polymer
**Functionality**

- high power DFB-lasers
- high power gain chips
- high speed gain chips
- semiconductor optical amplifiers (SOAs)

**Configuration**

- horizontal and vertical emitters
- single chips and array

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Example: Tolerant low-loss-butt-joint coupling of InP chip to SOI-waveguide

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Power coupled to SiN-waveguide and optical spectra for flip-chip integrated DFB laser