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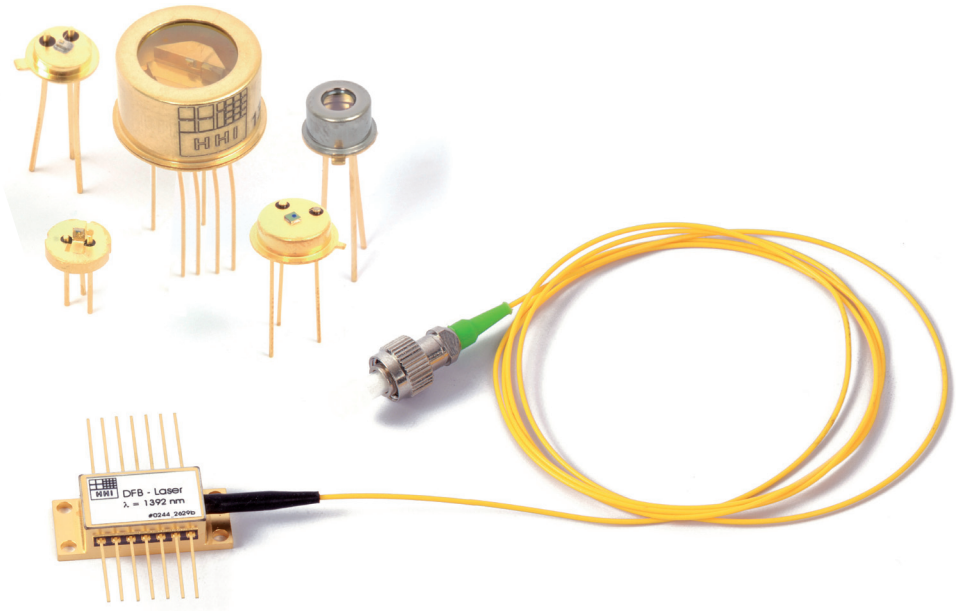
DFB LASERS FOR SPECTROSCOPY

AT A GLANCE

- Grating or gas filters replaced by laser diode
- Simplified measurement setup
- No moving parts



Features

- Excellent single wavelength optical sources for gas analysis or similar applications (1250 – 1700 nm)
- Laser diode with multi quantum well structure
- Proven reliability, ageing tests available
- RoHS compliance
- Mounted on compact hermetically sealable headers, cooled TO-cans or fibre-pigtailed modules
- Emission wavelengths > 1700 nm on request

Applications

- Detection of toxically gases
- Process control, e.g. in waste combustion
- Very demanding environment
- Humidity control
- CH_4 detection, etc. ...

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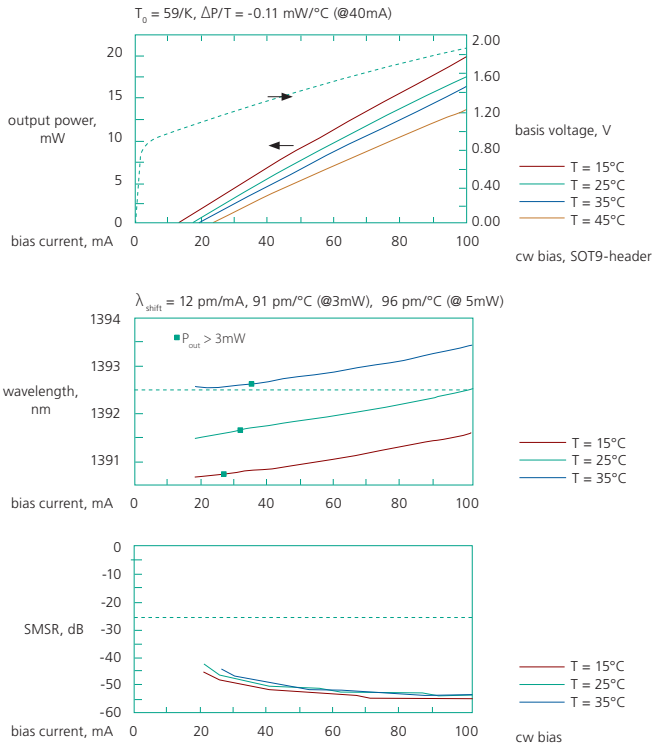
Available wavelenghts

- 1278, 1393, 1512, 1650 nm
- Additional wavelengths (1250–1750 nm) / higher optical output power on request

Specifications

	min.	typical	max.	unit
operation temperature	0	25	70	°C
operating current	–	100	200	mA
threshold current (at 20°)	–	25	45	mA
series resistance	–	4	8	Ω
optical output power	2	4	15	mW
side mode supression ratio (SMSR)	30	–	–	dB
emission wavelength	λ – 1.0	λ	λ + 1.0	nm
dλ/dT	–	90	150	pm/0 C
dλ/dI	8	–	15	pm/mA
linewidth	–	–	20	MHz

Typical Performance



The Fraunhofer HHI

One of the prime research and development foci of the Fraunhofer Heinrich Hertz Institute lies in photonic networks, components and systems and their application in fields such as digital media.

Contact

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