

830 nm SAF Gain-chip

Product number: BST501068

Package: TO-9



Specifications

Physical properties

Cavity length	mm	1
Ridge width	μm	5
Emission angle with regard to the facet	deg (mrad)	5,5 (96)
AR coating	%	<0.1
HR coating	%	>95
Maximum beam pointing error	deg (mrad)	±1 (±17)

Electrical properties

Maximum operating current*	mA	400
Maximum operating voltage*	V	2,14

Optical properties

Peak output power	mW	17,17
Center wavelength**	nm	830
Mode		TE ₀₀
Peak output power Littrow (@835 nm)***	mW	150
Tuning range	nm	~50

***Exceeding maximum operating ratings can lead to permanent damage to the device! This can adversely affect device performance or lead to complete failure.**

**20 °C, Continuous-wave operation, 400 mA

*** External cavity configuration (Littrow) performance data is based on a concrete experimental setup and is for guidance only. In customer's application, the performance data might vary depending on the optical components and the setup used for experiment.



Performance plots

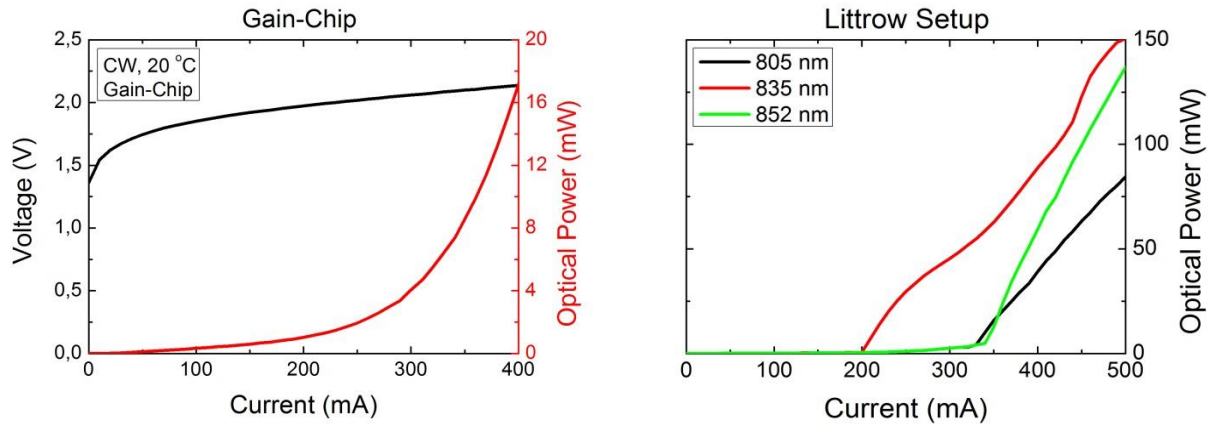


Fig.1. L-I-V plots for gain-chip (left) and Littrow configuration with the same gain-chip at different wavelengths (right)

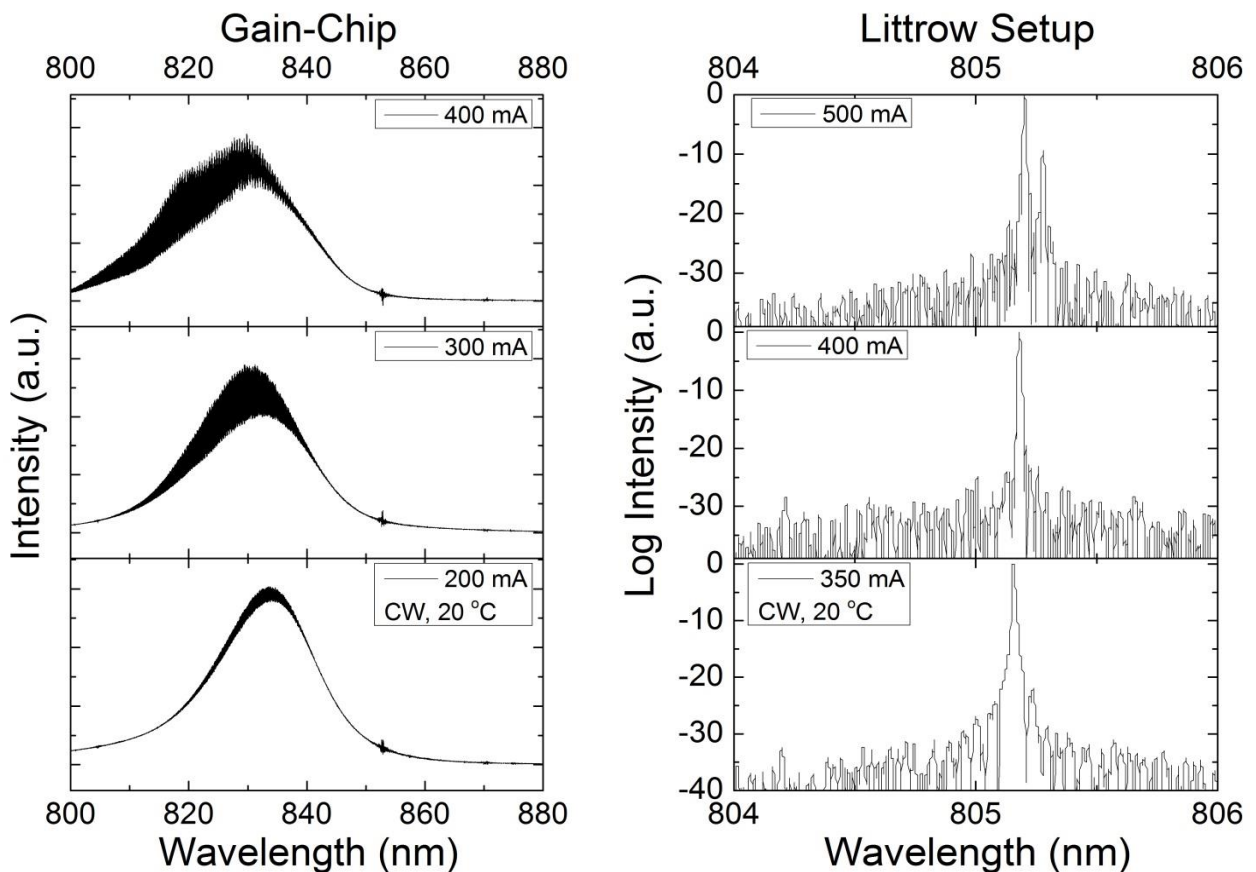


Fig.2. Emission spectra for gain-chip (left) and Littrow configuration with the same gain-chip at 805 nm emission wavelength (right)



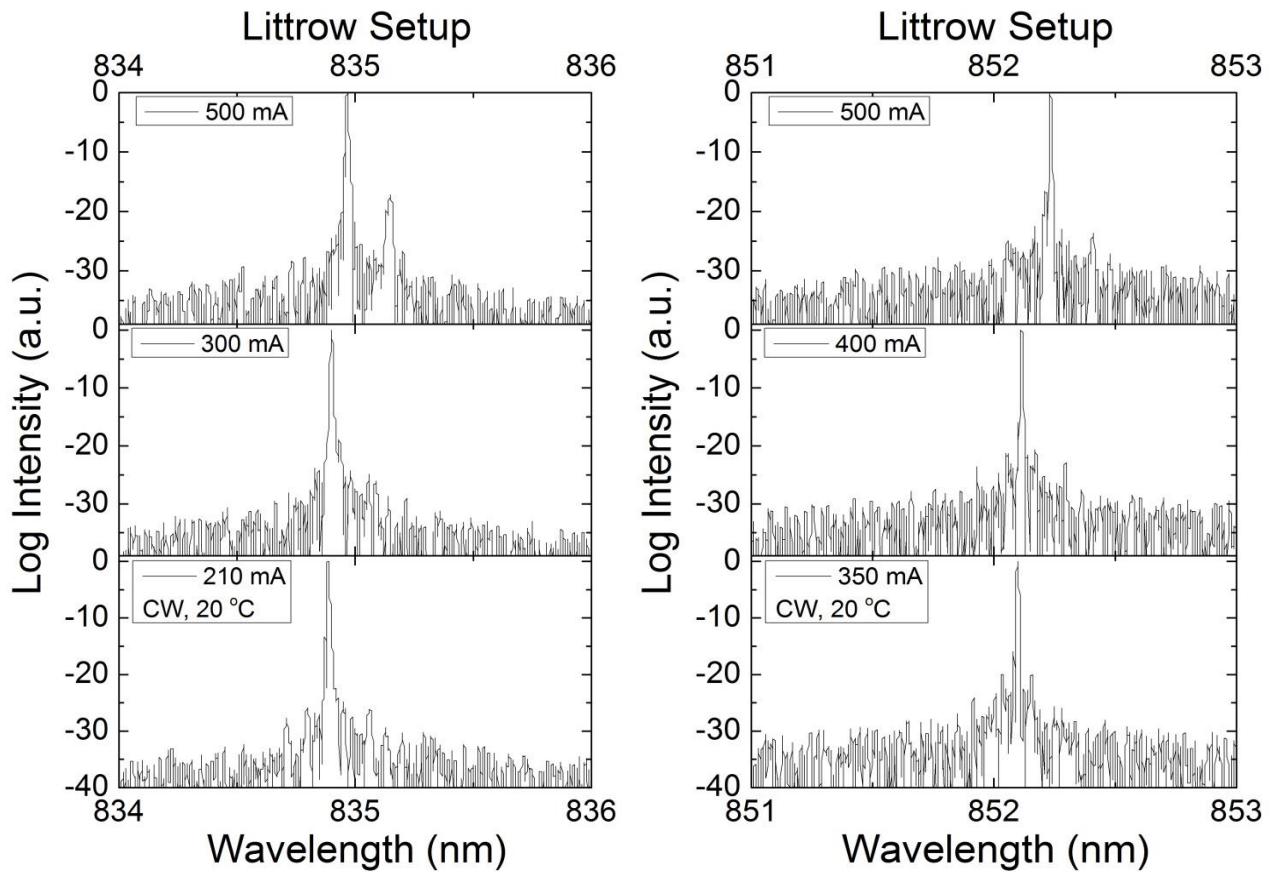


Fig.3. Emission spectra of Littrow configuration with this gain-chip at 835 nm (left) and 852 nm (right) emission wavelength

Beam profile

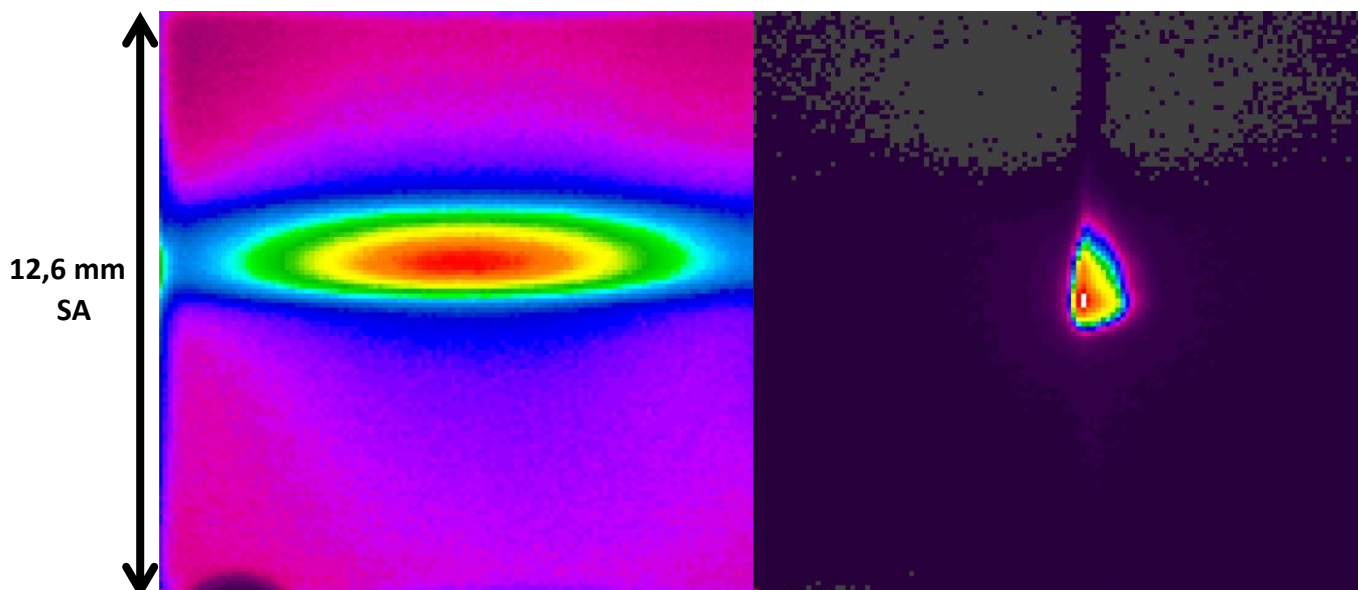


Fig.3. Beam profile for gain-chip (left) and Littrow configuration with the same gain-chip (right).



Drawings

