

Fabry-Pérot Laser Diodes (FP): High-Power Option

WAVELENGTH

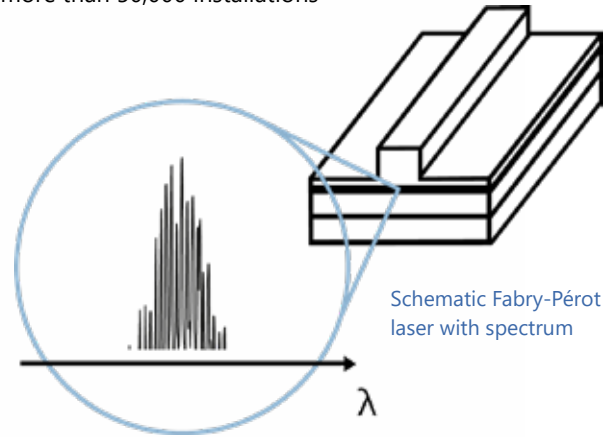
760–840 nm
840–1100 nm
1100–1700 nm
1700–2400 nm
2400–2900 nm
2800–6500 nm
6000–14000 nm

High-Power OPT

nanoplus Fabry-Pérot Lasers (**FP**) are specially designed and characterized to fit your requirements. For 25 years, nanoplus has been manufacturing DFB and FP lasers with excellent performance. Our devices **operate** reliably in more than 50,000 installations worldwide.

Key features:

- HIGH-POWER
- BROADBAND
- SMALL FOOTPRINT



Schematic Fabry-Pérot laser with spectrum

Any **custom wavelength** is possible: You tell us what you need! With our outstanding technology we design any wavelength **between 1950 nm and 2350 nm** with an accuracy of +/- 20 nm. Other wavelengths are available on request.

The **output power** of **up to 1 W** yields a strong signal and gives large flexibility to your application.

Long-term stability is one of the principal features customers value about our lasers!

Even in **harsh environments** nanoplus devices perform excellently – low maintenance warranted.

“Do not change your ideas, let us deliver the laser that fits your application.”

If you require **custom specifications**, please contact us. Nearly 80 % of our devices are more or less customer-specific.

As nanoplus is a **fully vertically integrated company**, we control the entire process chain from design to packaging.

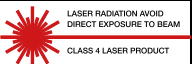
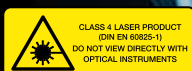
Both nanoplus production facilities are based in **Germany**. To guarantee consistent product quality we apply a strict and **ISO certified quality management system** at all levels.

Our sales and R&D teams have long-standing experience in developing lasers. They will advise you in your design and realization phase as well as after-sales:

We make market leaders!



nanoplus high-power Fabry-Pérot laser on submount with AlN carrier

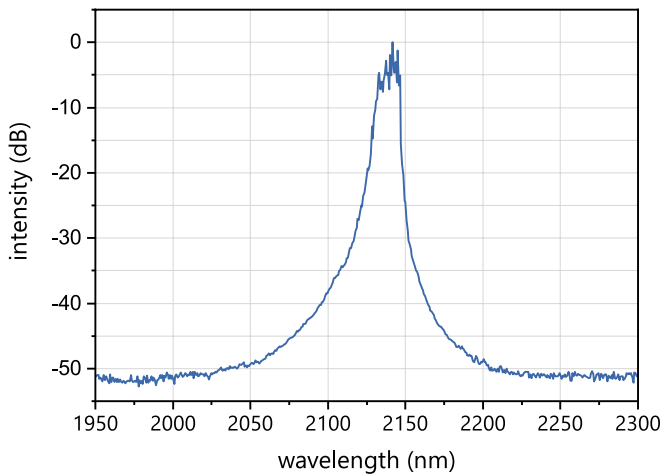


Typical Specifications: High-Power Option

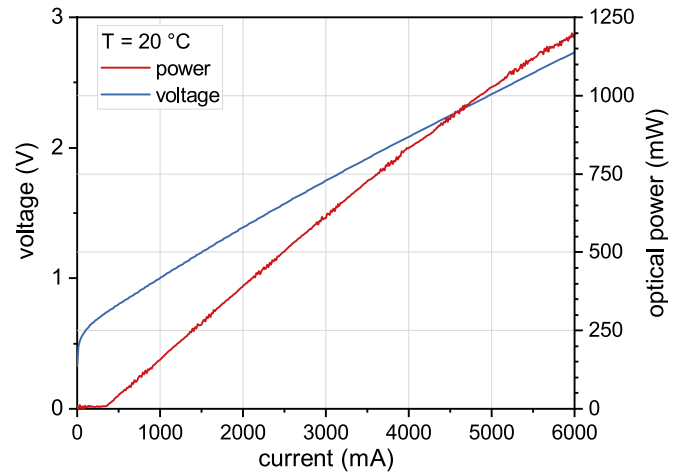
This data sheet reports performance data of a **sample High-Power Fabry Pérot Laser at 2145 nm**, which is representative for all wavelengths between 1950 nm and 2350 nm with **high-power option**.

For standard specifications with less power, please refer to our low power section:

nanoplus.com/FP/1700nm-2400nm.



Typical room temperature cw spectrum
of a nanoplus HPFP laser at 2145 nm



Typical PI and VI curve
of a nanoplus HPFP laser at 2145 nm

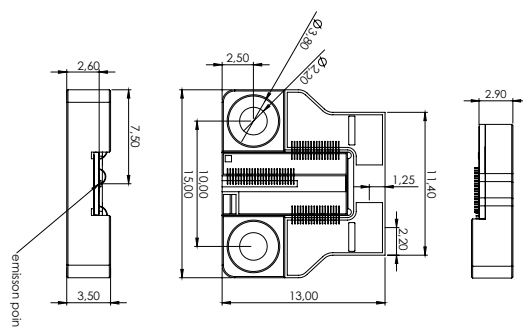
electro-optical characteristics	symbol	unit	min.	typical	max.
operating wavelength (at T_{op} , I_{op})	λ_{op}	nm	-20	please specify	+20
optical output power (at λ_{op})	P_{op}	mW		1000	
operating current	I_{op}	mA		5000	
operating voltage	V_{op}	V		2.5	
threshold current	I_{th}	mA		300	
operating chip temperature*	T_c	°C	+15	+20	+40
storage temperature*	T_s	°C	-40	+20	+80

* non condensing

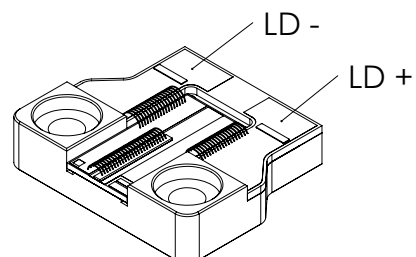
packaging

submount with AlN carrier, without TEC, without NTC

Technical drawings & accessories are available at: nanoplus.com/packaging



Technical drawing
of submount with
AlN carrier



Please contact sales@nanoplus.com for customized specifications, quotes and further questions.

Visit our website for technical notes, application samples or literature referrals.