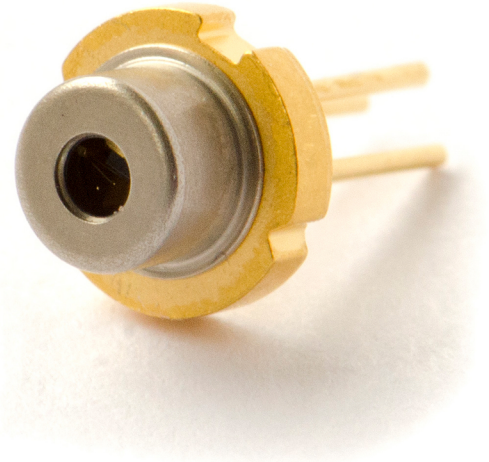


TG4xx series laser diodes

Optical power output: 50mW

Peak wavelength: typically 420-460@RT

Package: 5.6mm



Wavelength range available: 420-460 nm

Actual availability may vary, check the TopGaN's Store for current stock.

Absolute Maximum Ratings

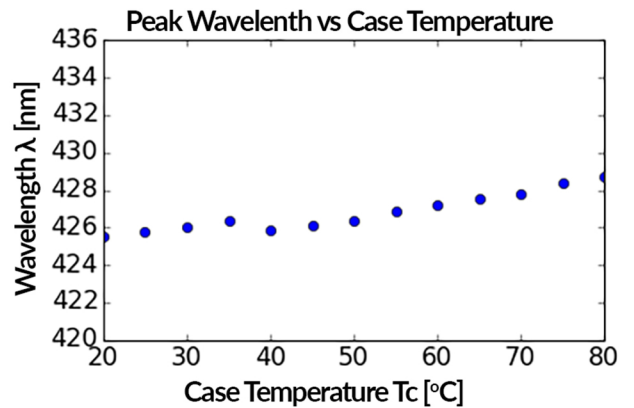
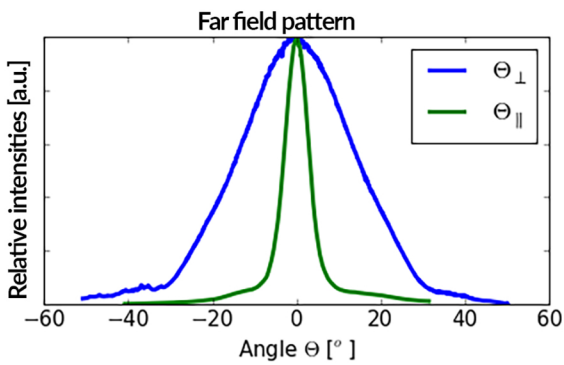
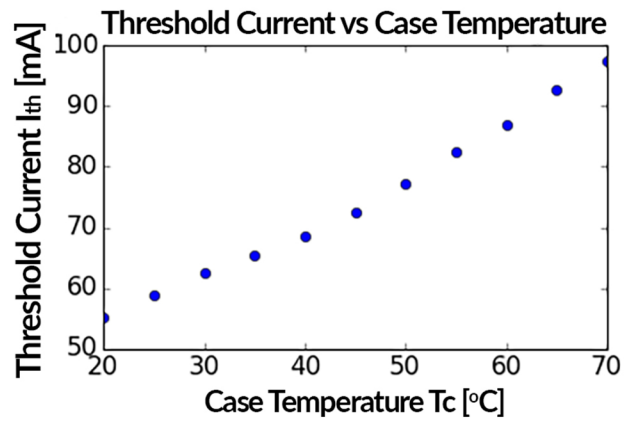
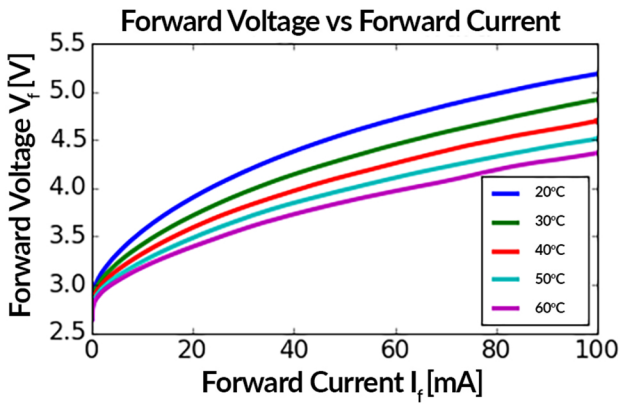
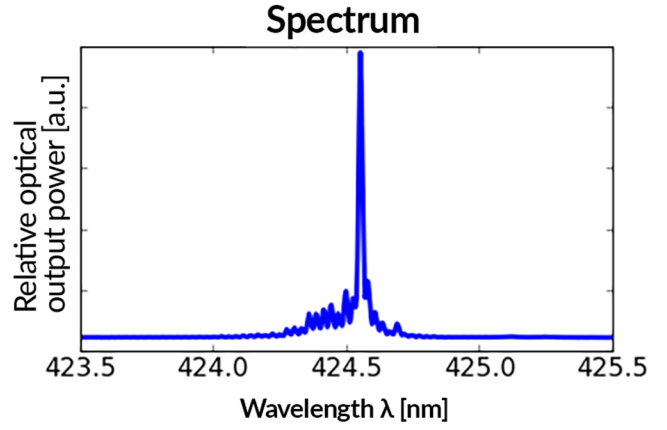
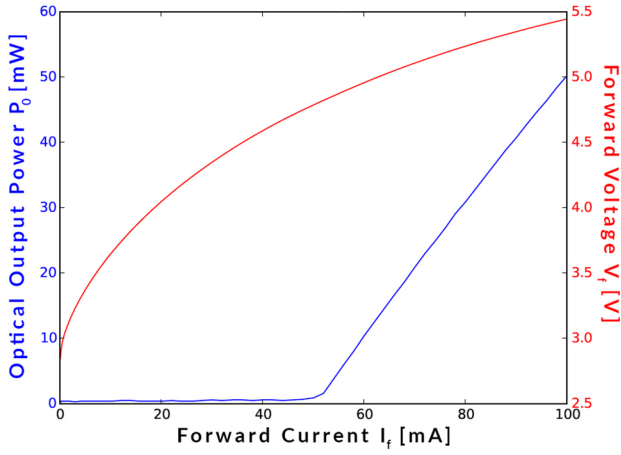
Item	Symbol	Absolute Maximum Ratings	Unit
Optical Output Power	P_o	100	[mW]
Allowable Reverse Current	I_r	1	[μ A]
PD Reverse Voltage	V_r	5	[V]
Storage Temperature	$T_{storage}$	-10 ~ 85	[$^{\circ}$ C]
Operating Case Temperature	T_c	0 ~ 60	[$^{\circ}$ C]

Typical, exemplary data, characteristic of all offered wavelengths. The actual data may vary and is available in the TopGaN's Store or upon request.

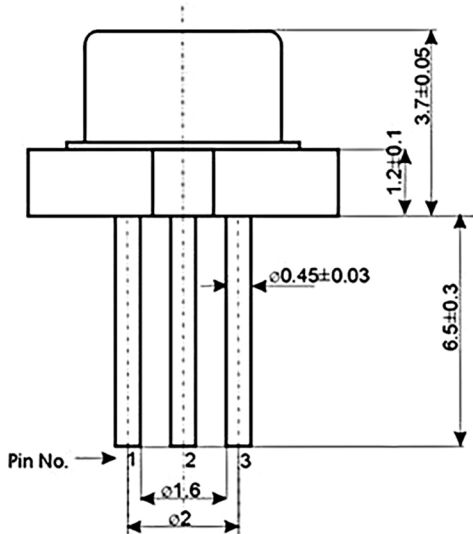
Initial electric and optical characteristics

Item	Condition	Symbol	Min.	Typ.	Max	Unit
Optical Output Power	CW	P_o			50	[mW]
Peak Wavelength	$P_o=50mW$	λ_p	$\lambda_p - 2$	λ_p	$\lambda_p + 2$	[nm]
Threshold Current	CW	I_{th}		60	96	[mA]
Operating Current	$P_o=50mW$	I_{op}		110	220	[mA]
Slope Efficiency	CW	η	0,5	0,7	1,2	[W/A]
Operating Voltage	$P_o=50mW$	V_{op}		5	5,5	[V]
Beam divergence:						
	Fast axis			32		deg
	Slow axis			7		deg

The laser diode is designated to operate at room temperature of about 20 $^{\circ}$ C. Temperature increase leads to shorter lifetime and lower output power.

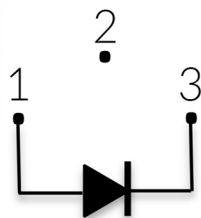
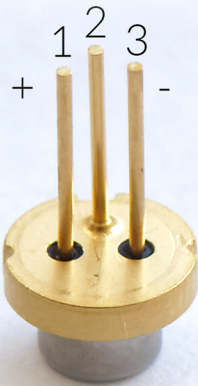


Physical dimensions



Electrical connections

Laser is connected to isolated pins "1" and "3". Pin "2" is connected with the case and not active.



- 1 LD Anode (+)
- 2 Case
- 3 LD Cathode (-)