Laser Diode FVLD-420-120S

FVLD-420-120S is a single mode laser diode with 120mW CW output power at 420nm. It is supplied in a 5.6mm TO can with Photo Diode and Zener Diode. The laser diode is suitable for the use in various opto-electronic applications.

Absolute Maximum Ratings:

Operating Parameters	Symbol	Rating	Unit
Optical Output Power	P_{out}	140	mW
Reverse Current	$I_{r(LD)}$	85	mA
PD Reverse Voltage	$V_{r(PD)}$	5	V
Storage Temperature	T_{stg}	-40 to +85	°C
Operating Temperature (Case)	T_c	-10 to +30	°C

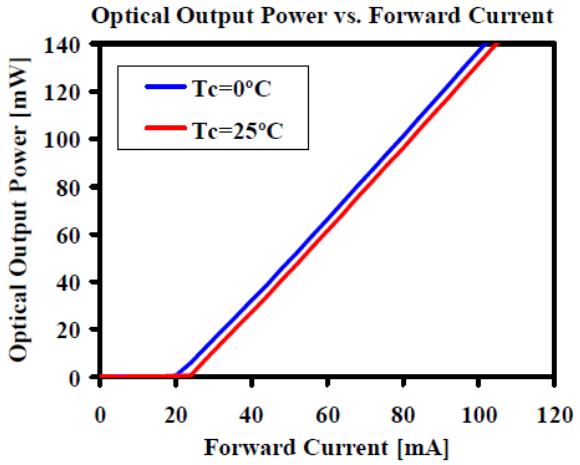
Optical and Electrical Characteristics:

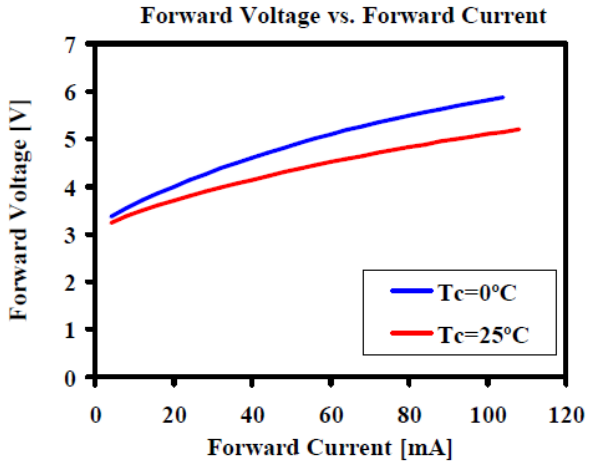
Operating Parameters	Symbol	Min	Typ	Max	Unit
Optical Output Power	P_{out}	-	-	120	mW
Wavelength	λ	420	-	425	nm
Threshold Current	I_{th}	-	24	50	mA
Forward Current	I_f	-	100	150	mA
Forward Voltage	V_f	-	5.2	6.0	V
Slope Efficiency	η	1.3	1.7	2.1	W/A
Beam Divergence Parallel*	$\Theta_{\parallel}$	7	-	12	deg.
Beam Divergence Perpendicular*	$\Theta_{\perp}$	13	-	28	deg.
Beam Pointing Accuracy $_{\parallel}$	$\theta_{\parallel}$	-	-	±2.0	deg.
Beam Pointing Accuracy $_{\perp}$	$\theta_{\perp}$	-	-	±2.5	deg.
Monitor Current	I_m	-	-	1.0	mA

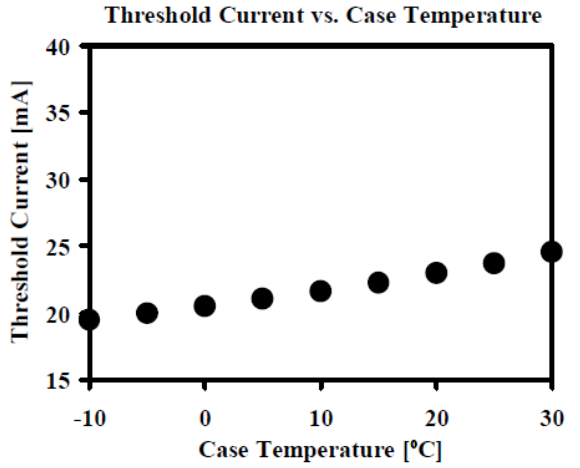
* Full Width Half Maximum

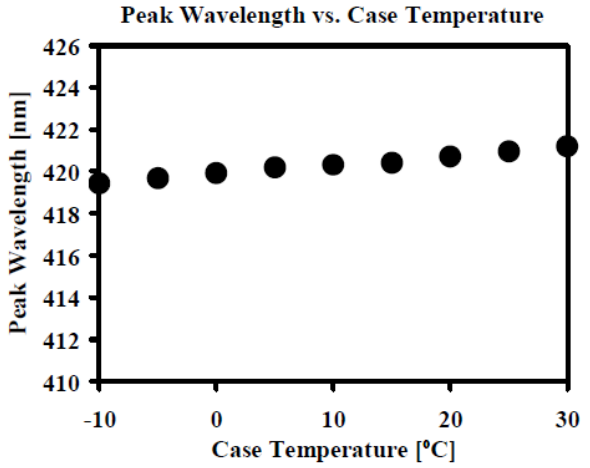
FRANKFURT LASER COMPANY
An den 30 Morgen 13, 61381 Friedrichsdorf, Germany
Tel.: +49(0)6172.27978-0 Fax: +49(0)6172.27978-10
E-mail: sales@frlaserco.com; Internet: **WWW.FRLASERCO.COM**

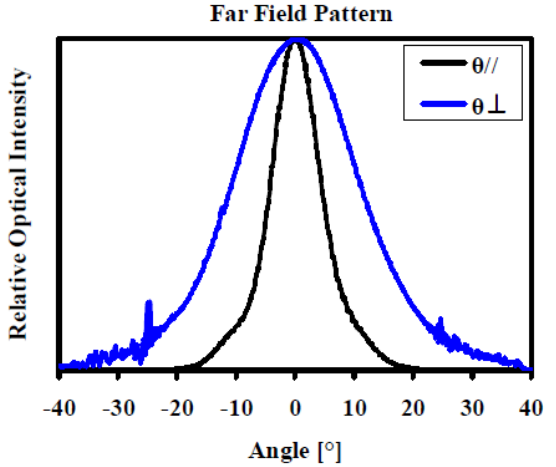
TYPICAL CHARACTERISTICS

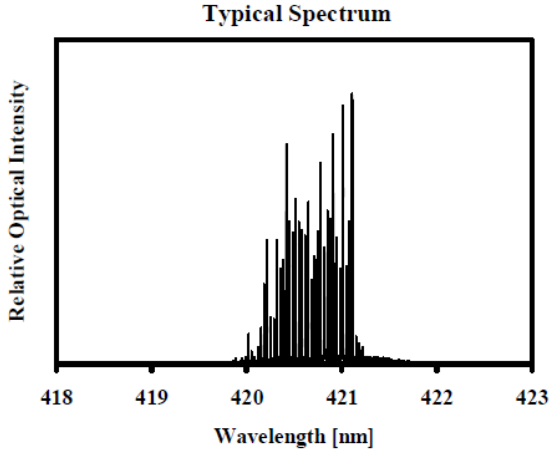








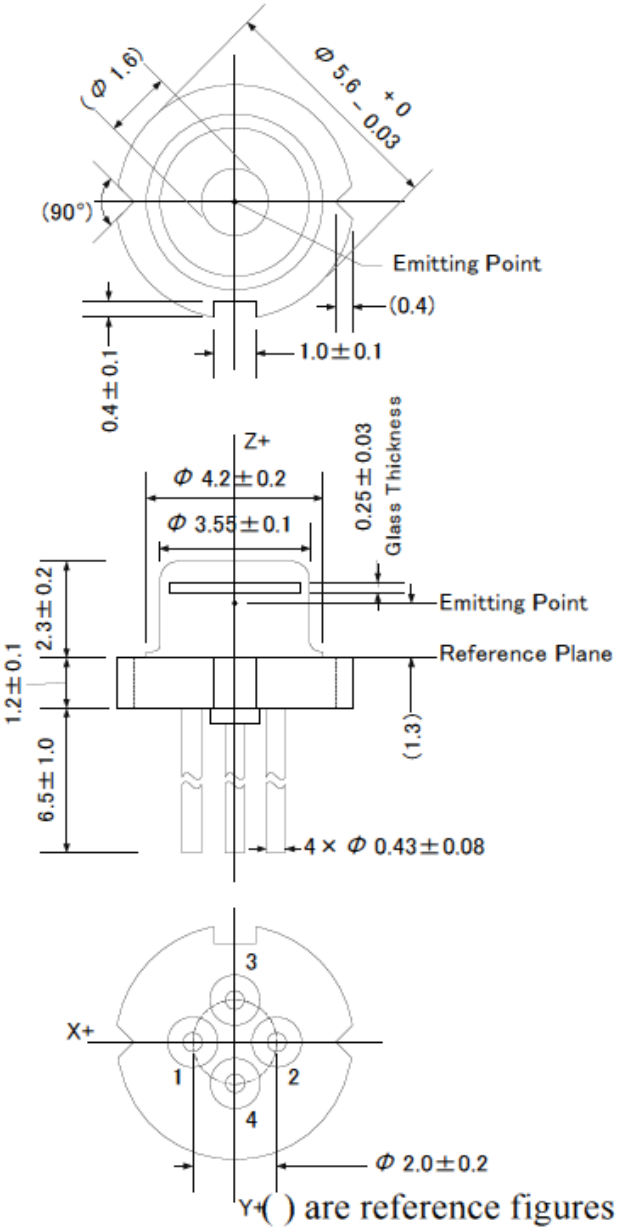




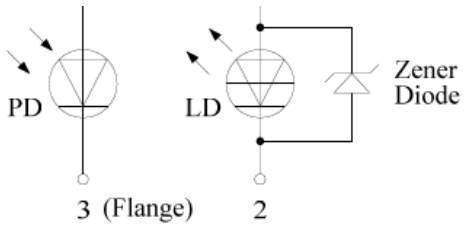
FRANKFURT LASER COMPANY
An den 30 Morgen 13, 61381 Friedrichsdorf, Germany
Tel.: +49(0)6172.27978-0 Fax: +49(0)6172.27978-10
E-mail: sales@frlaserco.com; Internet: **WWW.FRLASERCO.COM**

PACKAGING

Unit (mm)



Pin Connection



1. LD Anode 2. LD Cathode
3. PD Cathode 4. PD Anode

This model has a Zener Diode built in as a protection circuit against static electricity.

FRANKFURT LASER COMPANY
An den 30 Morgen 13, 61381 Friedrichsdorf, Germany
Tel.: +49(0)6172.27978-0 Fax: +49(0)6172.27978-10
E-mail: sales@frlaserco.com; Internet: **WWW.FRLASERCO.COM**