



LDI H-FP-1550-50P

1550nm 50mW FP LASER DIODE MODULES

These laser diode modules are high stability FP laser-diode modules with single-mode fiber pigtailed, fan and built-in Peltier cooler, thermistor. These modules are optimal 1550nm 50mW (CW) light sources for measuring instruments.

Absolute maximum ratings

LD forward current, I_{f1}	320mA
LD reverse voltage, V_{r1}	2V
Operating case temperature, T_c :	-20 ÷ +50°C
Storage temperature, T_{stg}	-30 ÷ +60°C

Electrical / optical characteristics (SM, T=25°C)

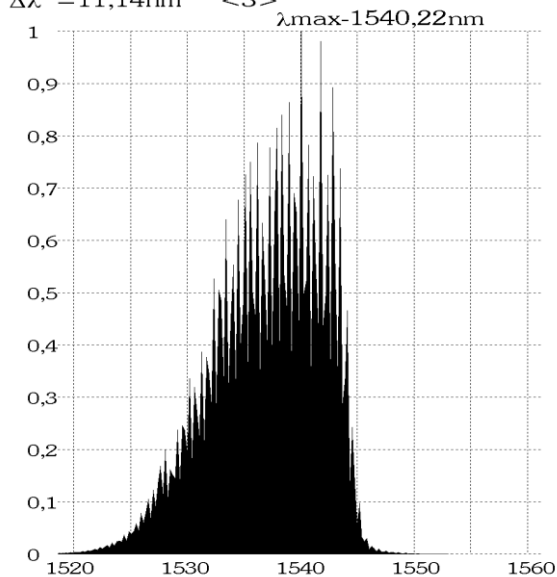
Parameter		Min.	Typ.	Max.	Unit	Test conditions
Wavelength	λ	1520	1550	1580	1520	CW, P=50mW
Threshold current	I_{th}		30	50		CW
Operating current	I_{op}		250	300		CW, P=50mW
Operating voltage	V_{op}		3	4.5		CW, P=50mW
Slope efficiency	η	0.15	0.2	0.25	0.15	CW, P=50mW
Spectral width	$\Delta\lambda$		12	18		CW, P=50mW, FWHM

Ordering information

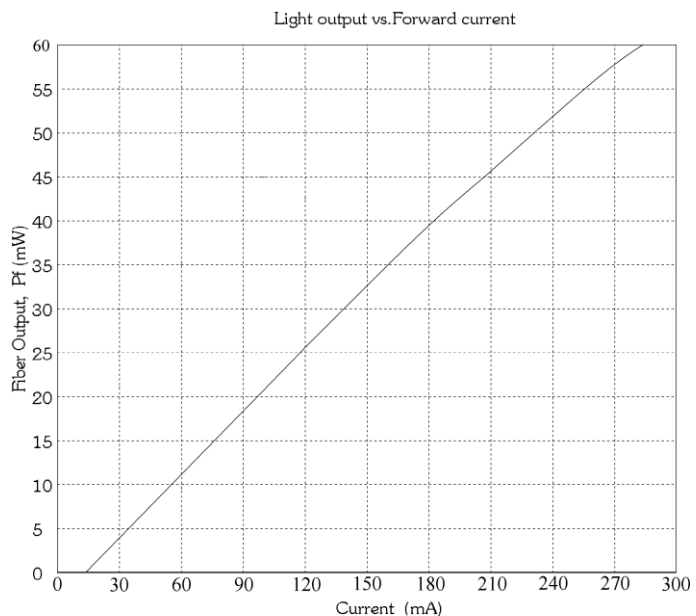
LDI H-FP-1550-50P-T2- SM - X

Connector type: **FC/UPC, FC/APC, N** – without connector

$\Sigma\lambda=1537,21\text{nm}$ <1> $P_f=50\text{mW}$
 $\lambda_c=1538,08\text{nm}$ <2> $I_{op}=232\text{mA}$
 $\Delta\lambda=11,14\text{nm}$ <3>



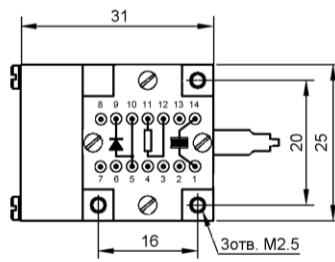
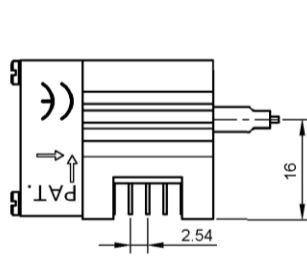
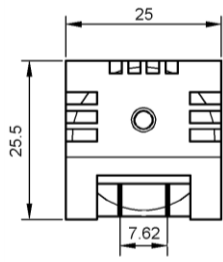
<1> -efficient wavelength
 <2> -central wavelength a rate of -3dB
 <3> -band width at rate of -3dB



ATTENTION: ELECTROSTATIC SENSITIVE DEVICES

PACKAGE DIMENSIONS (UNIT:mm)

T2



- 1.Cooler anode
- 2.
- 3.
- 4.
- 5.Laser anode
- 6.
- 7.
- 8.
- 9.Laser cathode
- 10.Laser anode
- 11.Thermistor
- 12.Thermistor
- 13.
- 14.Cooler cathode

Thermistor: $R_t = 10000 \text{EXP} \left(3450 \left(\frac{1}{T} - \frac{1}{298} \right) \right)$ Cooler: $I_{\text{max}} = 600 \text{mA}$ $V_{\text{max}} = 3.5 \text{V}$ Fan: $\text{DC } 12 \text{V} = 0.5 \text{W}$