



# LDI-FP-650-30P

## 650nm 30mW FP LASER DIODE MODULES

These laser diode modules are 650nm 30mW laser-diode modules with single-mode fiber pigtails.

### Absolute maximum ratings

LD forward current, $I_{fl}$	120mA
LD reverse voltage, $V_{rl}$	2V
PD reverse voltage, $V_{rd}$	30V
Operating case temperature, $T_c$	-20 ÷ +50°C
Storage temperature, $T_{stg}$	-30 ÷ +60°C

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

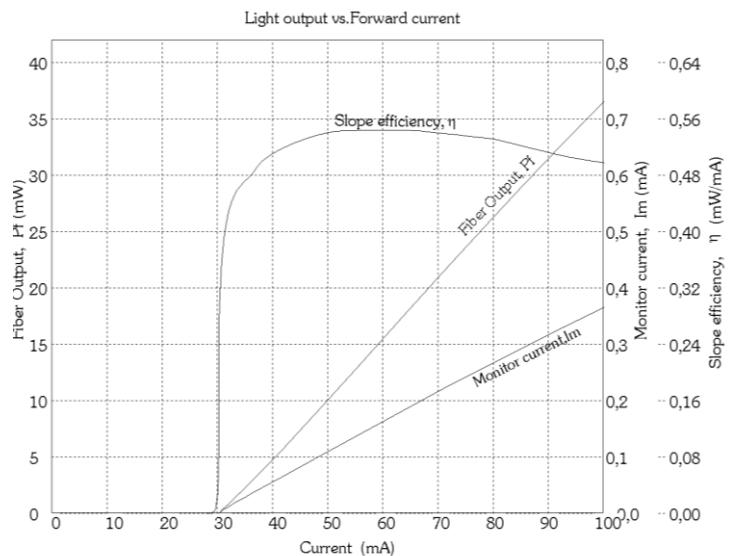
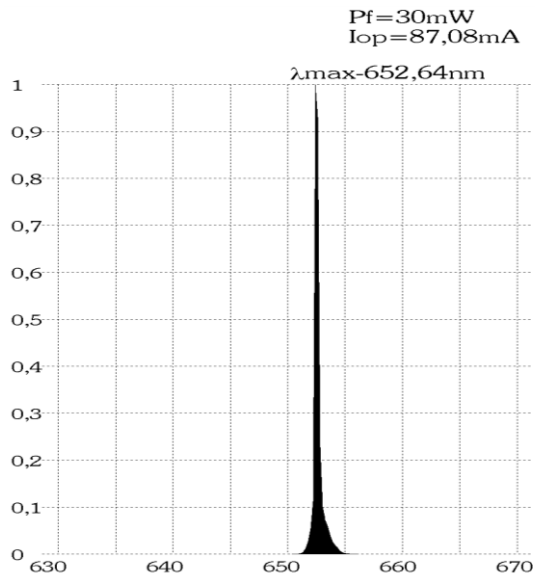
Parameter		Min.	Typ.	Max.	Unit	Test conditions
Wavelength	$\lambda$	650	658	665	nm	CW, P=30mW
Threshold current	$I_{th}$		40	52	mA	CW
Operating current	$I_{op}$		90	100	mA	CW, P=30mW
Operating voltage	$V_{op}$	2	2.5	3	V	CW, P=30mW
Slope efficiency	$\eta$	0.45	0.5	0.6	mW/mA	CW, P=30mW
Spectral width	$\Delta\lambda$		2	4	nm	CW, P=30mW, FWHM
Monitoring output current (PD)	$I_m$	0.05	0.3	0.5	mA	CW, P=30mW, $V_{rd}=5V$

### Ordering information

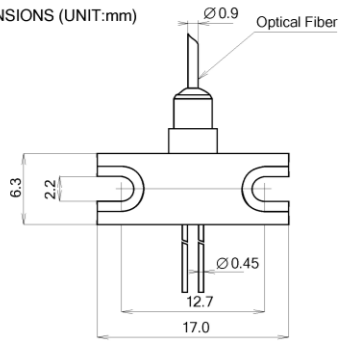
## LDI-FP-650-30P-X-SM-X

Case type: BH, T2

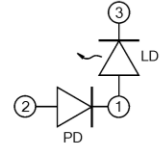
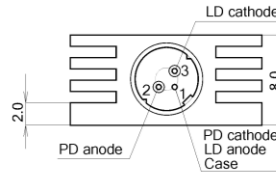
Connector type: FC/UPC, N – without connector



PACKAGE DIMENSIONS (UNIT:mm)

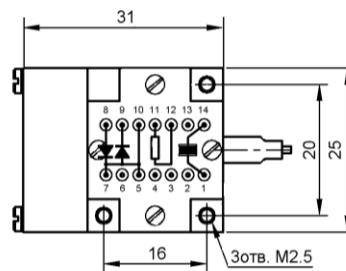
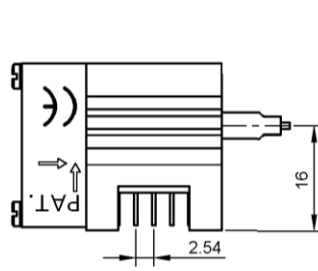
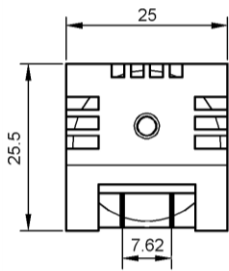


PIN Assignment (Bottom View)



**BH**

PACKAGE DIMENSIONS (UNIT:mm)



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

Thermistor:  $R_t = 10000 \exp\left(3450 \left(\frac{1}{T+273} - \frac{1}{298}\right)\right)$  Cooler:  $I_{max} = 600 \text{mA}$   $V_{max} = 3.5 \text{V}$  Fan: DC 12V=0.5W

**T2**