



LDI H-FP-850-40P

850nm 40mW FP LASER DIODE MODULES

These laser diode modules are high stability FP laser-diode modules with single-mode and multi-mode fiber pigtails. These modules are optimal 850nm 40mW light sources for high-speed optical communication systems and measuring instruments.

Absolute maximum ratings

LD forward current, I_{fl}	80mA
LD reverse voltage, V_{rl}	3.5V
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	λ	830	845	850	nm	CW, P=40mW
Threshold current	I_{th}	4	15	25	mA	CW
Operating current	I_{op}		70	75	mA	CW, P=40mW
Operating voltage	V_{op}		1.8	2.4	V	CW, P=40mW
Slope efficiency	η	0.6	0.7	0.8	mW/mA	CW, P=40mW
Spectral width	$\Delta\lambda$		1	2	nm	CW, P=40mW, FWHM
Monitoring output current (PD)	I_m	0.2	0.4	0.8	mA	CW, P=40mW, $V_{rd}=5V$
Tracking error	E_r^*		0.6	0.8	dB	CW, P=40mW, $I_m=const$, $T_c=-20\div+50^\circ C$

$$^* E_r = \text{MAX} |10\log (P_f / P_{f,25^\circ c})|$$

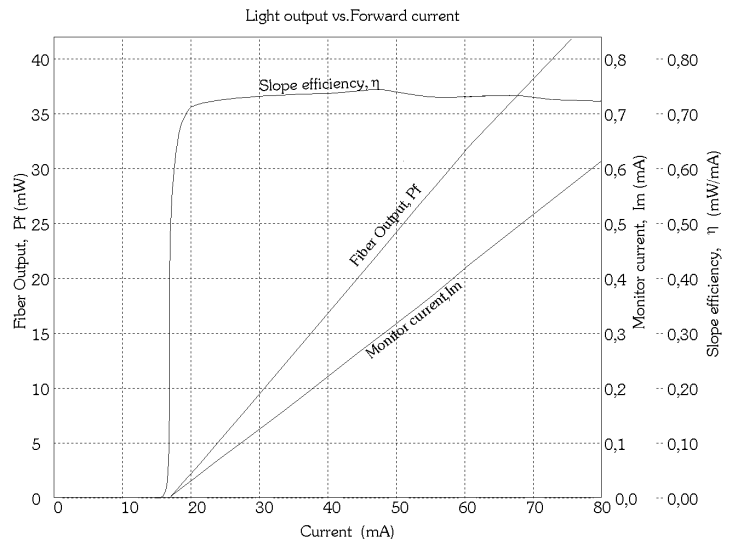
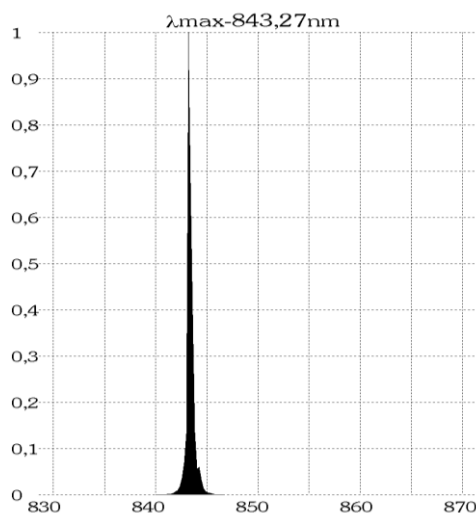
Ordering information

LDI H-FP-850-40P-X-X-X

Case type: **BH, T2**

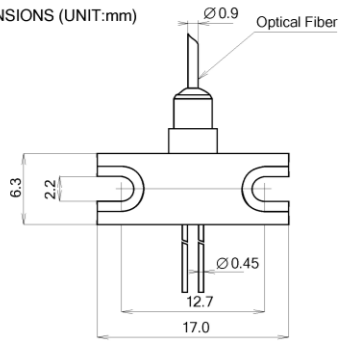
Connector type: **FC/UPC, FC/APC, N** – without connector

Fiber type: **SM, MM(50)**

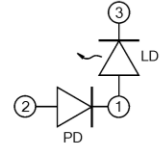
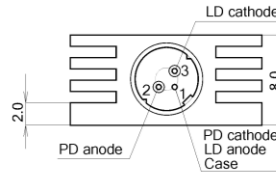


ATTENTION: ELECTROSTATIC SENSITIVE DEVICES

PACKAGE DIMENSIONS (UNIT:mm)

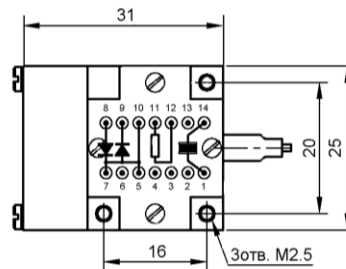
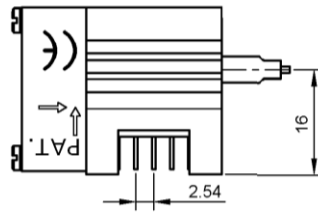
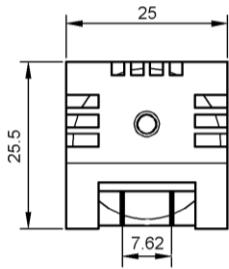


PIN Assignment (Bottom View)



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