



# SLDI-1310-1P SLDI-1550-1P

## 1310nm, 1550nm SUPERLUMINESCENT DIODE MODULES

These modules are 1310(+/-20)nm and 1550(+/-20)nm high stability superluminescent diode modules with single-mode fiber pigtailed. These modules are light sources for optical measuring instrument and fiber optic gyroscope.

### Absolute maximum ratings

Forward current, $I_f$	150mA
Reverse voltage, $V_r$	2V
Forward voltage, $V_f$	2.5V
Operating case temperature, $T_c$ : SLDI -1310-1P-T, SLDI -1550-1P-T SLDI -1310-1P-T2, SLDI -1550-1P-T2	-20 ÷ +40°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 SLDI-1310-1P SLDI-1550-1P	$\lambda$	1290 1530	1310 1550	1330 1570	nm	CW, P=1mW
Operating current	$I_{op}$			110	mA	CW, P=1mW
Forward voltage	$V_f$			2	V	CW, P=1mW
Optical power	$P_o$		1		mW	CW, $I_{op}$
Spectral width	$\Delta\lambda$	40			nm	CW, P=1mW, FWHM
Spectrum modulation	R		0.15	0.35	dB	CW, P=1mW

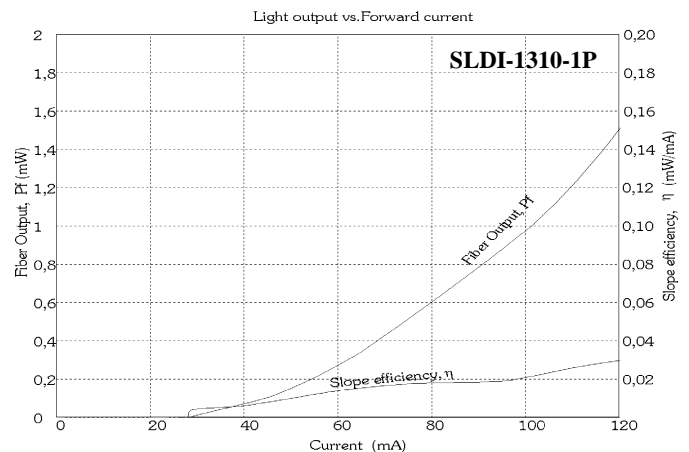
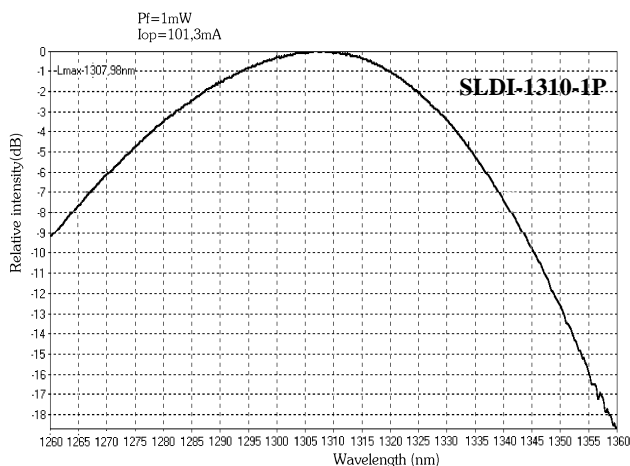
### Ordering information

**SLDI-X-1P-X-SM-X**

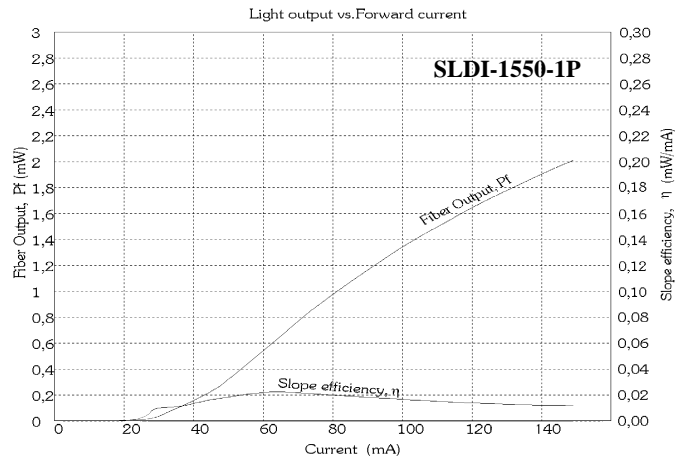
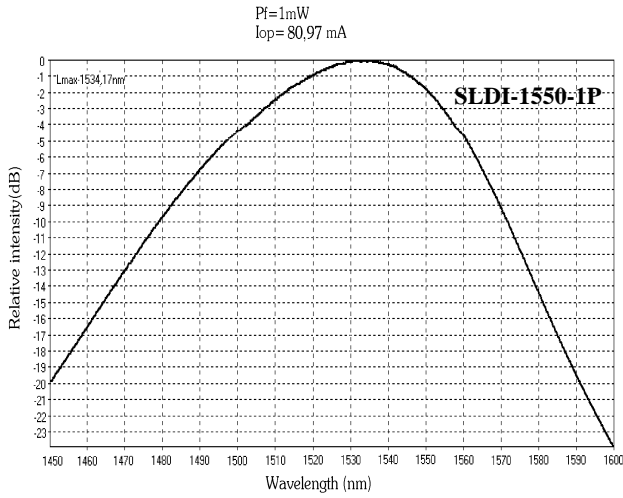
Connector type: **FC/UPC, FC/APC, N** – without connector

Case type: **T, T2**

Wavelength, nm: **1310, 1550**



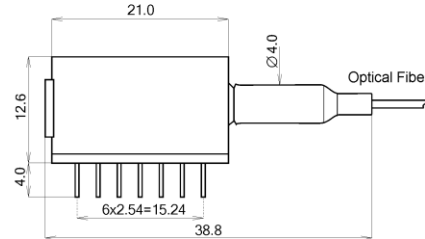
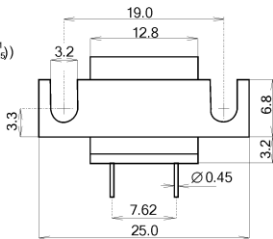
**ATTENTION: ELECTROSTATIC SENSITIVE DEVICES**



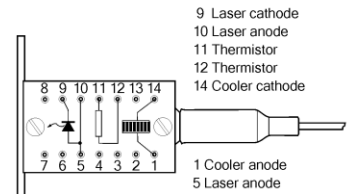
PACKAGE DIMENSIONS (UNIT:mm)

Thermistor technical data  
 $R_t = R_{25} \text{EXP}(b \cdot (T^{-1} - T_{25}^{-1}))$   
 $R_{25} = 10k\Omega$   
 $b = 3450$   
 $T = T + 273$   
 $T_{25} = 298$   
 Power rating 51mW

Cooler technical data  
 $I_{max} = 600\text{mA}$   
 $Q_{max} = 1100\text{mW}$   
 $V_{max} = 3.5\text{V}$

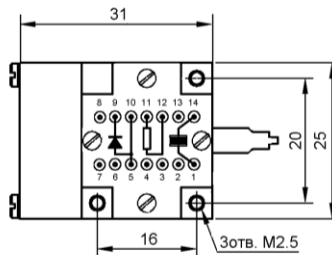
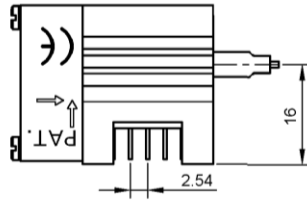
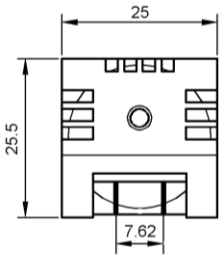


PIN Assignment (Bottom View)



**T**

PACKAGE DIMENSIONS (UNIT:mm)



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:  $R_t = 10000 \text{EXP}(3450(\frac{1}{T+273} - \frac{1}{298}))$  Cooler:  $I_{max} = 600\text{mA}$   $V_{max} = 3.5\text{V}$  Fan: DC12V=0.5W

**T2**