

## LDI-405-FP-30

Preliminary

405 nm, FP, 30 mW CW

### DESCRIPTION

The module is equipped with an SM fiber and provides a Gaussian beam with the field diameter 3.6  $\mu\text{m}$  and optical power up to 30 mW in CW. Small size and weight allow for installing it on a PCB without additional mounting.

Application: biomedical systems.

### ABSOLUTE MAXIMUM RATINGS

Parameter	Value	Unit
LD forward current, $I_{ff}$	100	mA
LD reverse voltage, $V_{rl}$	2	V
PD reverse voltage, $V_{rp}$	5.5	V
Operating temperature, $T_c$	-10 ÷ +40	°C
Storage temperature, $T_{stg}$	-20 ÷ +60	°C

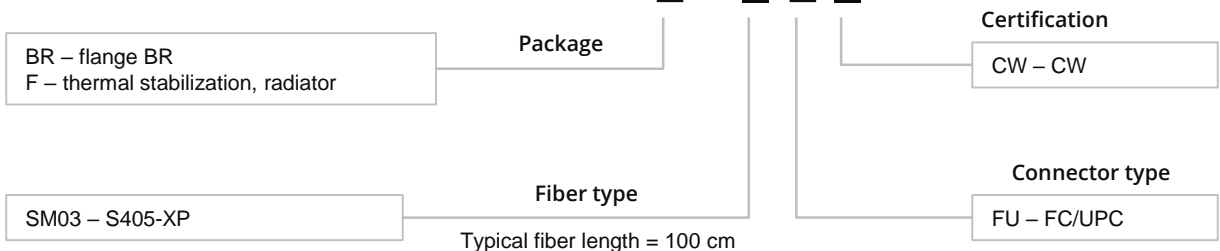
### ELECTRICAL-OPTICAL CHARACTERISTICS (SINGLE MODE, T = 25 °C)

Parameter	Min	Typ	Max	Unit	Test conditions	
Wavelength	$\lambda$	400	405	410	nm	CW, P = 30 mW
Threshold current	$I_{th}$		25	35	mA	CW
Operating current	$I_{op}$		32	45	mA	CW, P = 5 mW
			61	80		CW, P = 30 mW
Spectral width	$\Delta\lambda$		2	3	nm	CW, P = 30 mW, FWHM
Operating voltage	$V_{op}$		5.5	6	V	CW, P = 30 mW
Slope efficiency	$S_e$	0.75	0.85		mW/mA	CW, P = 30 mW
Monitoring output current (PD)	$I_m$		1.7	2.5	mA	CW, P = 30 mW, $V_{rd} = 5\text{ V}$

The provided values hold true for SM regime at ambient temperature 25 °C providing heat removal from the module case.

### ORDERING INFORMATION

## LDI-405-FP-30-X-8-X-X-X

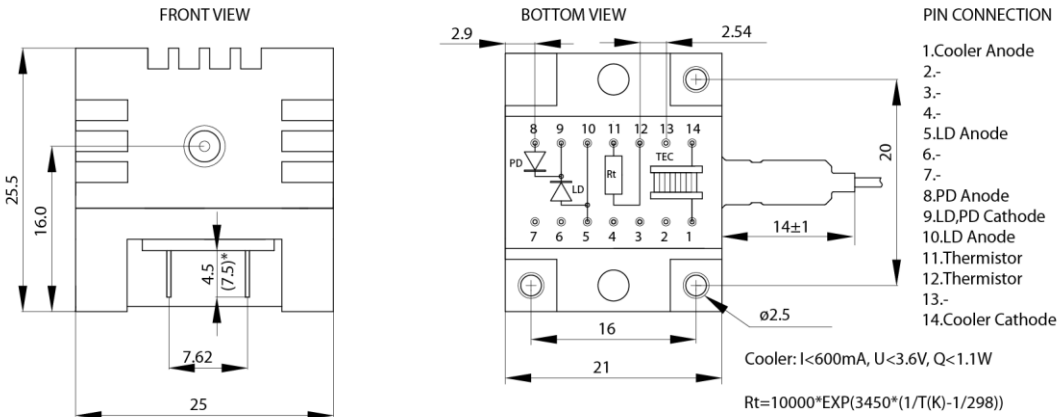
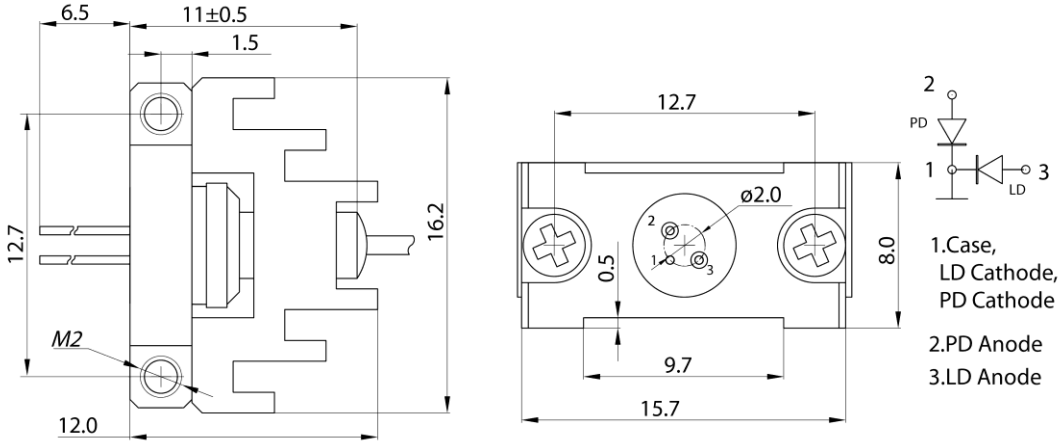


Our products are certified by Belarusian Chamber of Commerce. All the components used in production are ISO 9001:2008 certified and comply with RoHS directive. Characteristics, data, materials and structures specified in this datasheet are subject to change without notice. Please refer to the latest specification before use of the products.

This document was updated on 31.08.2017

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**BR**



\*Possible pins length 4.5 mm or 7.5 mm.

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