

## 685nm 10mW FP SM coaxial laser diode Version: 3.1 17-03-01

Model: LSFLD685-10

### Features:

- MQW F-P LD
- Single mode
- Built-in monitor PD
- Metal can type hermetic
- Low threshold/operate current
- High reliable



### Applications:

- Optical Sensing
- Industrial automatic control
- Science analysis and experiment
- Test and Measurement Equipment
- Laser range finder

### Absolute maximum ratings:

parameter	symbol	value	unit
Operating temperature	Top	-10~+60	°C
Storage temperature	Tstg	-40~+85	°C
Laser diode Reverse voltage	V <sub>r</sub>	2	V
Soldering temperature/time		260/10	°C/S

### Electrical and optical characteristics:(T=25°C)

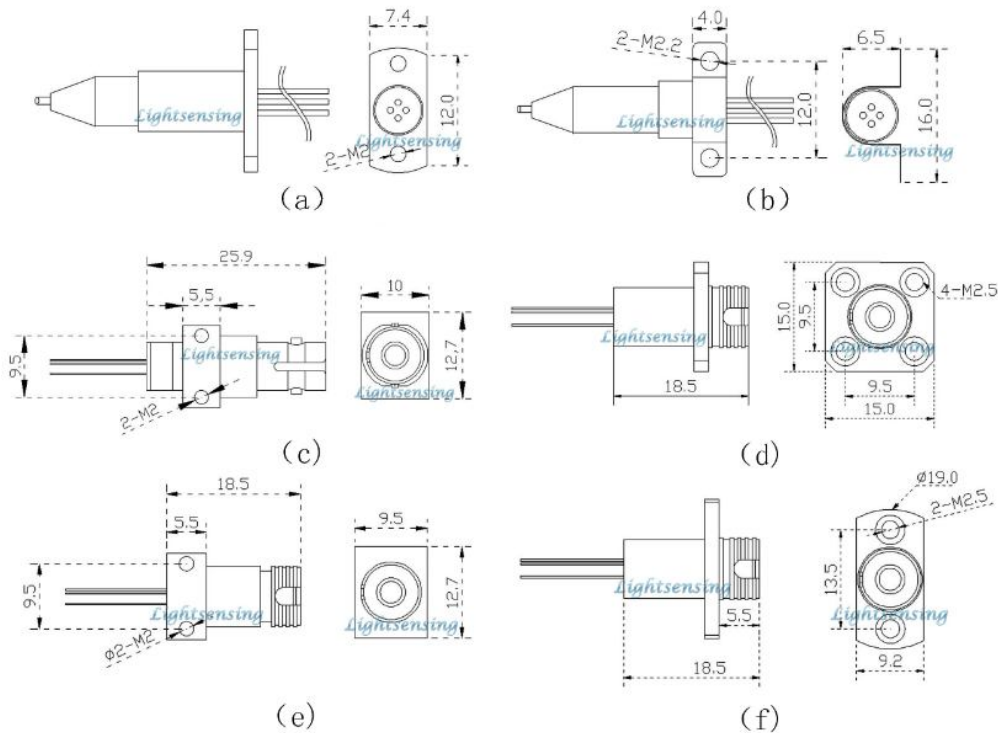
parameter	symbol	Min.	Typ,	Max.	unit
Center wavelength	$\lambda$	670	685	700	nm
Threshold Current	I <sub>th</sub>		30	60	mA
Operating Current	I <sub>op</sub>		60	140	mA
Spectral width	$\Delta\lambda$		3		nm
Operating Voltage	V <sub>op</sub>		2.2	3	V
Light output power(from 9um SM fiber)*1	P <sub>o</sub> (CW)		10		mW
Monitor Output Current	I <sub>m</sub>	0.05	0.5	2.5	mA
package	Hermetic TO56 Can with fiber coupling or receptacle				

\*1 Note: for 62.5um MM fiber, the output power can double.

For 4um SM fiber (NA =0.13) the output power can reduce about 50%

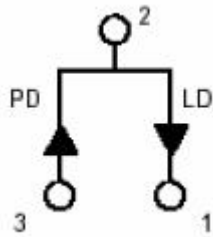
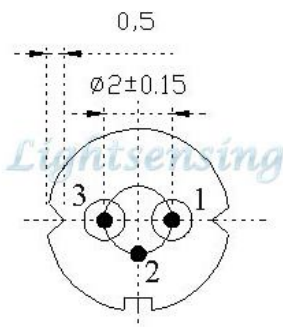
NOTICE: The above product specifications are subject to change without notice.

## The package Dimensions



## PIN description

Bottom View



pin	function
1	LD Cathode
2	LD anode, PD cathode, case
3	PD anode

## Order information

LSFLD685-X-X

mW	X=a	a package with 4um SM, 9um SM or MM Fiber coupling with FC/UPC or FC/APC connector
X=10	X=b	b package with 4um SM, 9um SM or MM Fiber coupling with FC/UPC or FC/APC connector
X=other	X=cJKST	c package with ST receptacle
	X=dJKFC	d package with FC receptacle
	X=e JKFC	e package with FC receptacle
	X=f JKFC	f package with FC receptacle
	X=Other	By customer's request

## The cautions

- 1: The above product specifications are subject to change without notice.
- 2: The suitable ESD protecting measures are recommend in storage,transporting and using.
- 3: The fiber bending radius no less than 20mm for avoiding fiber damaged ,Be sure the fiber coupling facet is clean before connecting it to opto-circuit.