

450nm 30mW FP SM coaxial laser diode Version: 3.1 17-03-01

Model: LSFLD450-30

Features:

- MQW F-P LD
- Single mode
- 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	-40~+70	°C
Storage temperature	Tstg	-40~+85	°C
Laser diode Reverse voltage	V _r	2	V
Soldering temperature/time		260/10	°C/S

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

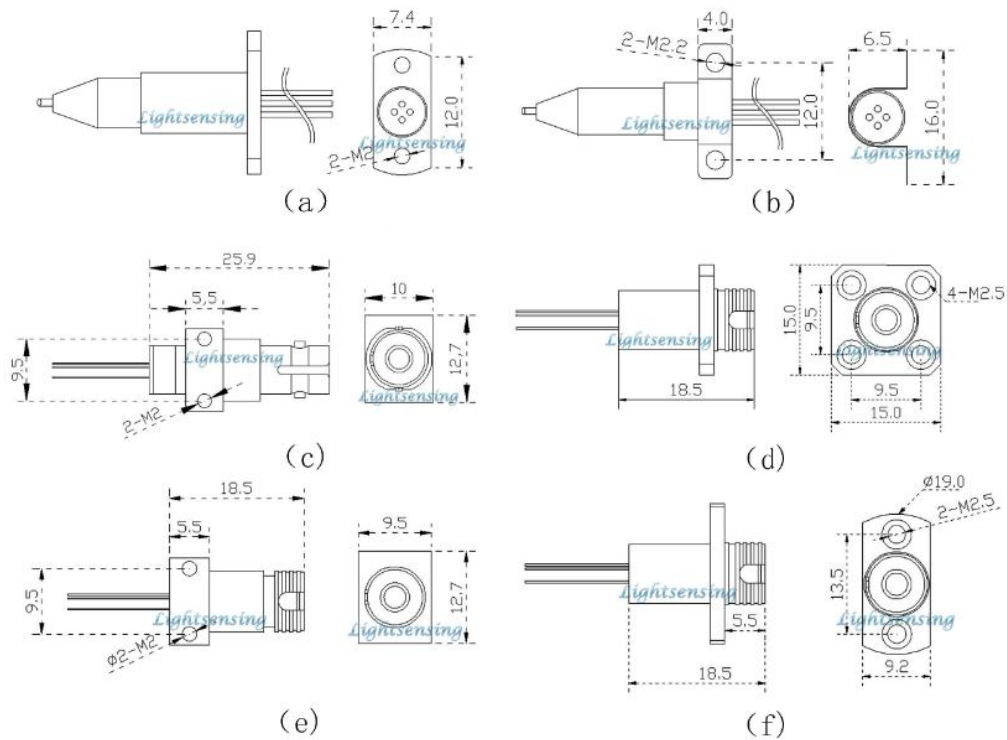
parameter	symbol	Min.	Typ.	Max.	unit
Center wavelength	λ	440	450	460	nm
Threshold Current	I _{th}		35	60	mA
Operating Current	I _{op}		105	150	mA
Spectral width	$\Delta\lambda$		3		nm
Operating Voltage	V _{op}		5.9	7	V
Light output power(from 9um SM fiber)*1	P _o (CW)		30		mW
-3dB bandwidth	BW		100		MHZ
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%

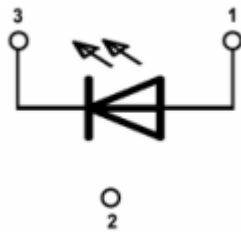
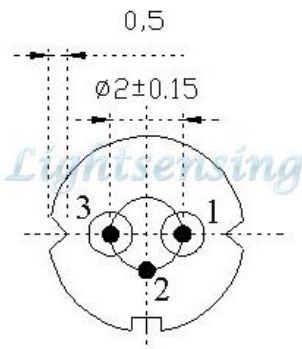
NOTE: The above product specifications are subject to change without notice.

The package Dimensions



PIN description

Bottom View



pin	function
1	LD anode
2	case
3	LD Cathode

Order information

LSFLD450-X-X

mW	X=a	a package with 4um SM, 9um SM or MM Fiber coupling with FC/UPC or FC/APC connector
X=30	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 protection is required in storage, transportation 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.