

1625nm DFB SM coaxial laser diode Version: 3.1.1 17-12-12

Model: LSDLD162

Features:

- MQW-DFB
- Direct modulation rate up to 4Gbps
- High side-mode-suppression ratio (typical>35dB)
- High reliable, Built-in monitor PD
- Low threshold/operate current
- Hermetic package TO56 Can with receptacle or with fiber coupling



Applications:

- Optical communication
- Optical Sensing
- Test and Measurement Equipment

Absolute maximum ratings:

parameter	symbol	value	unit
Operating temperature	Top	-20~+85	°C
Storage temperature	Tstg	-40~+100	°C
Laser diode Reverse voltage	V _r	2	V
Soldering temperature/time		260/10	°C/S

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

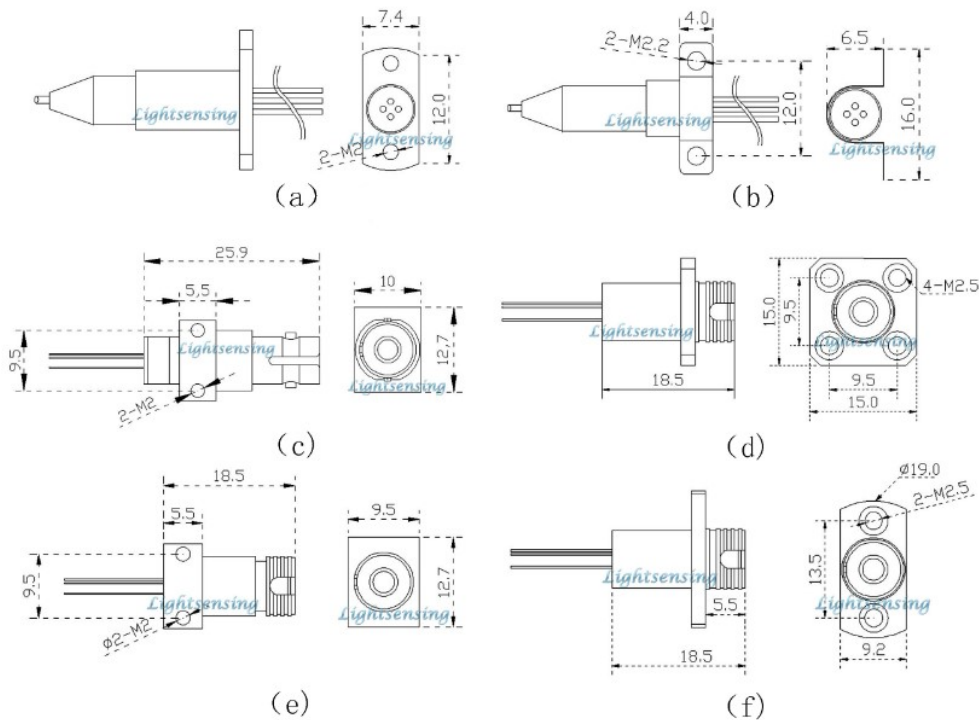
parameter	symbol	Min.	Typ.	Max.	unit
Center wavelength	λ	1620	1625	1630	nm
Threshold Current	I _{th}		12		mA
Operating Current	I _{op}		30	40	mA
Operating Voltage	V _{op}		1.1	1.6	V
Output power(from fiber)	P		3		mW
Spectral width	$\Delta\lambda$		0.1	1.0	nm
Wavelength/Temp. Coefficient	$\Delta\lambda/\Delta T$		0.1		nm/°C
Side mode suppression ratio	SMSR	35	40		dB
Rise/ Fall time	Tr/Tf(I _{th} +20mA)		120		ps
Direct modulation rate	R(I _{th} +20mA)		4		Gbps
Monitoring Output Current	I _m (I _{th} +20mA)	0.02	1		mA
Monitor Dark current	I _d (V _r =5V)			200	nA
Monitor Capacitance	C (V _r =5V)		10		pF
Optical Isolation(note1)	Iso	30			dB Single
		50			dB Double
package	Hermetic package TO56 Can with receptacle or with fiber coupling				

Note: keep the lead length shorter when you use laser diode.

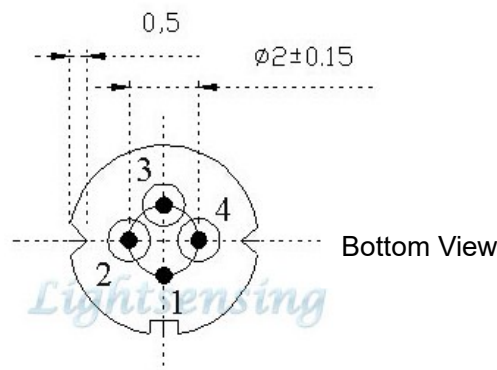
Note1: temperature range:-5~70°C.

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

The package Dimensions



PIN description



PIN OUT

F type	
1	LD(+)/Case
2	LD(-)
3	PD(-)
4	PD(+)

Order information

LSDLX-X-X-X-X-X

X=162 1625nm	mW	Pin out	Isolator	Rate	X=a	a package with SM Fiber or PM Fiber with FC/UPC or FC/APC
Other	X=3	X=F F Type	X=0 NO	X=2 2.5Gbps	X=b	b package with SM Fiber or PM Fiber with FC/UPC or FC/APC
	Other		X=1 Single	X=4 4Gbps	X=cJKST	c package with ST receptacle
			X=2 Double	Other	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.