

## 1310nm DFB SM coaxial laser diode

Version: 3.1 17-03-01

**Model: LSDLD131**
**Features:**

- MQW-DFB, High reliable
- Single mode
- Good high temperature characteristic
- High side-mode-suppression ratio (typical>35dB)
- Built-in monitor PD
- Low threshold/operate current
- Metal can type hermetic


**Applications:**

- Optical Sensing
- Optical communication
- Industrial automatic control
- Science analysis and experiment
- Test and Measurement Equipment

**Absolute maximum ratings:**

parameter	symbol	value	unit
Operating temperature	Top	-40~+85	°C
Storage temperature	Tstg	-40~+100	°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	$\lambda$	1300	1310	1320	nm
Threshold Current	I <sub>th</sub>		10	15	mA
Operating Current	I <sub>op</sub>		35	40	mA
Operating Voltage	V <sub>op</sub>		1.2	1.5	V
Output power(from fiber)	P	0.5	2	4	mW
Spectral width	$\Delta\lambda$		0.3	1	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 <sub>th</sub> +20mA)		0.3	0.7	ns
Monitoring Output Current	I <sub>m</sub> (I <sub>th</sub> +20mA)	0.1	0.7		mA
Monitor Dark current	I <sub>d</sub> (V <sub>r</sub> =5V)			100	nA
Monitor Capacitance	C (V <sub>r</sub> =5V)		10		pF
Optical Isolation(note1)	Iso	30			dB Single
		50			dB Double
package	TO56 Can with SM fiber coupling or receptacle				

Note1: temperature range:-20~70°C

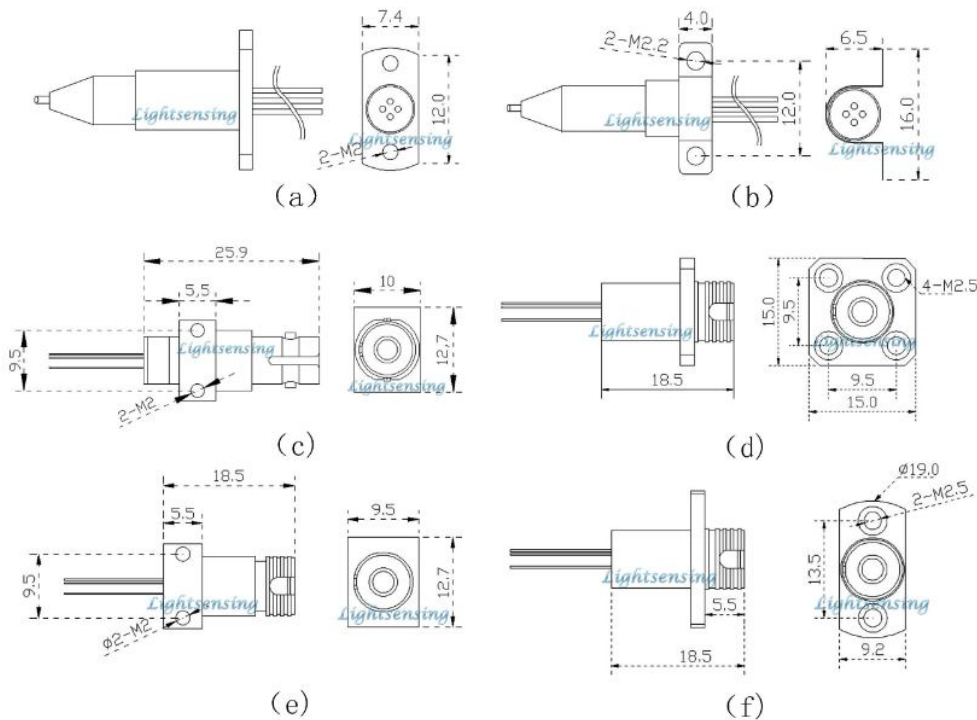
**NOTICE:** The above product specifications are subject to change without notice.

地址: 北京市海淀区苏州街12号西屋国际E座1201 邮编: 100080

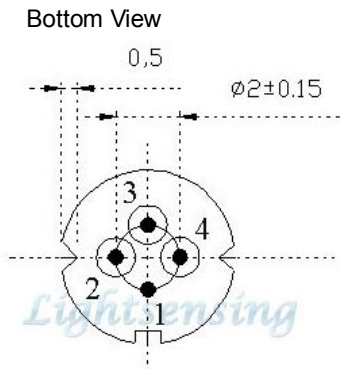
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### The package Dimensions



### PIN description



### PIN OUT

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

### Order information

LSDL131-X-X-X-X-X

mW	Pin out	Isolator	Rate	X=a	a package with SM Fiber with FC/UPC or FC/APC
X=0.5	X=S S Type	X=0 NO	X=1 1.25Gbps	X=b	b package with SM Fiber with FC/UPC or FC/APC
X=2	X=F F Type	X=1 Single	X=2 2.5Gbps	X=cJKST	c package with ST receptacle
X=4		X=2 Double	Other	X=dJKFC	d package with FC receptacle
Other				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 suitable ESD protection is required in storage, tran
- 2: 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.