

1550nm 3GHZ Analog DFB SM coaxial laser diode Version: 3.1.1 17-09-01

Model: LSDLD155-A3G

Features:

- MQW-DFB
- Direct analog modulation bandwidth up to 3GHZ
- 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:

- CATV, Analog RF links
- Optical Sensing and Optical communication
- 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 _r	2	V
Soldering temperature/time		260/10	°C/S

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

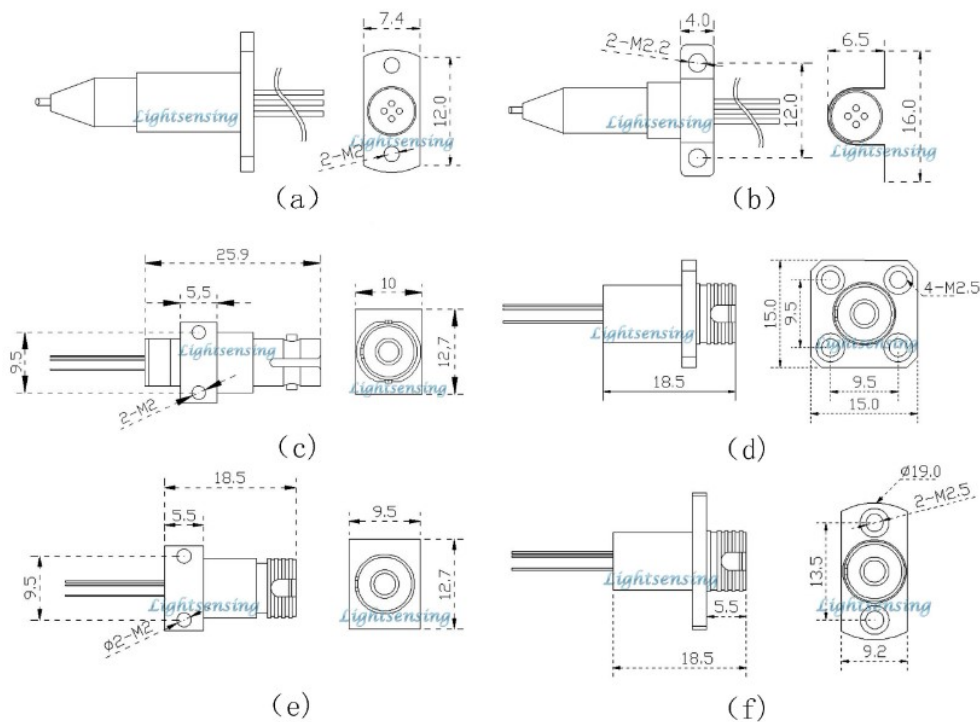
parameter	symbol	Min.	Typ.	Max.	unit
Center wavelength	λ	1540	1550	1560	nm
Threshold Current	I _{th}		10		mA
Operating Current	I _{op}		30	40	mA
Operating Voltage	V _{op}		1.1	1.6	V
Output power(from fiber)	P		3		mW
Spectral width	$\Delta\lambda$		0.1	1.0	nm
Wavelength/Temp. Coefficient	$\Delta\lambda/\Delta T$		0.1		nm/°C
Side mode suppression ratio	SMSR	35	40		dB
Rise/ Fall time	Tr/Tf(I _{th} +20mA)		100		ps
Band width(-3dB)	BW		3		GHZ
Monitoring Output Current	I _m (I _{th} +20mA)	0.02	1		mA
3rd Order Distortion	I _m (I _{th} +20mA)		-60		dB
Monitor Dark current	I _d (V _r =5V)			100	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.

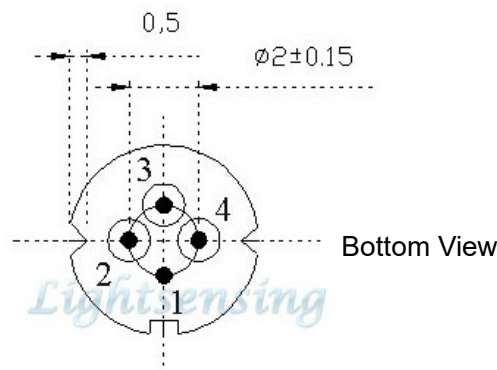
Note1: temperature range:-5~70°C.

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-A3G-X-X-X-X

X=155 1550nm
Other

mW
X=3
Other

Pin out
X=F F Type

Isolator
X=0 NO
X=1 Single
X=2 Double

X=a

X=b

X=cJKST

X=dJKFC

X=e JKFC

X=f JKFC

X=Other

a package with SM Fiber or PM Fiber with FC/UPC or FC/APC
b package with SM Fiber or PM Fiber with FC/UPC or FC/APC
c package with ST receptacle
d package with FC receptacle
e package with FC receptacle
f package with FC receptacle
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.