

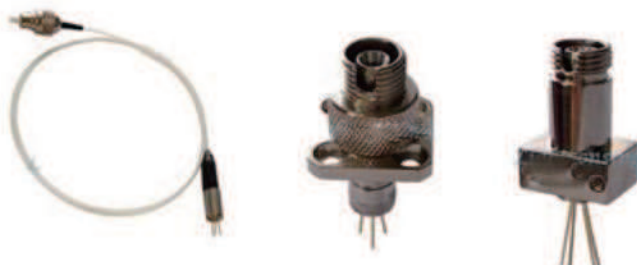
1550nm DFB SM coaxial laser diode

Version: 3.1 17-03-01

Model: LSDLD155

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 _r | 2 | V |
| Soldering temperature/time | | 260/10 | °C/S |

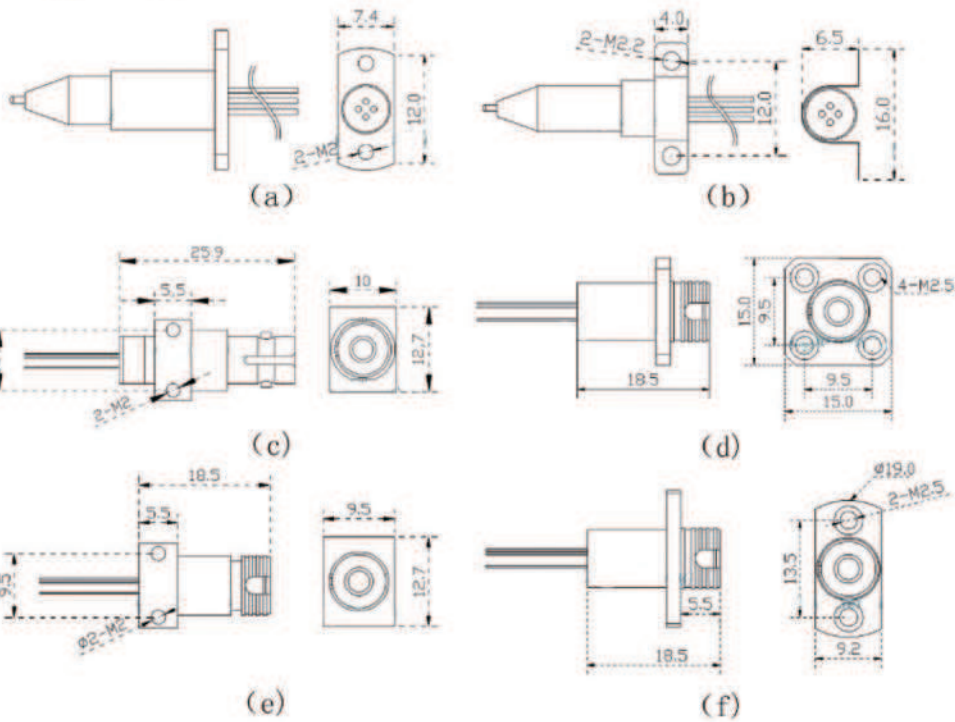
Electrical and optical characteristics:(T=25°C)

| parameter | symbol | Min. | Typ. | Max. | unit |
|------------------------------|---|------|------|------|-----------|
| Center wavelength | λ | 1530 | 1550 | 1570 | nm |
| Threshold Current | I _{th} | | 10 | 15 | mA |
| Operating Current | I _{op} | | 35 | 40 | mA |
| Operating Voltage | V _{op} | | 1.2 | 1.5 | V |
| Output power(from fiber) | P | 0.5 | 2 | 4 | mW |
| Spectral width | $\Delta\lambda$ | | 0.3 | 1 | nm |
| Side mode suppression ratio | SMSR | 35 | 40 | | dB |
| Wavelength/Temp. Coefficient | $\Delta\lambda/\Delta T$ | | 0.1 | | nm/°C |
| Rise/ Fall time | Tr/Tf(I _{th} +20mA) | | 0.3 | 0.7 | ns |
| Monitoring Output Current | I _m (I _{th} +20mA) | 0.1 | 0.7 | | mA |
| Monitor Dark current | I _d (V _r =5V) | | | 100 | nA |
| Monitor Capacitance | C (V _r =5V) | | 10 | | pF |
| Optical Isolation(note1) | I _{so} | 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.

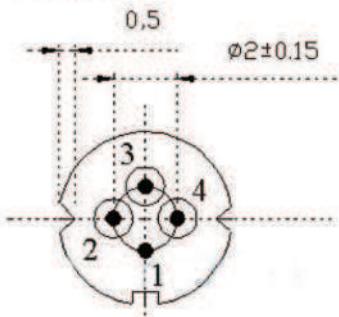
The package Dimensions



PIN description

PIN OUT

Bottom View



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

Order information

LSDL155-X-X-X-X-X

| mW | Pin out | Isolator | Rate | X=a | X=b |
|-------|------------|------------|--------------|---|---|
| X=0.5 | X=S S Type | X=0 NO | X=1 1.25Gbps | a package with SM Fiber with FC/UPC or FC/APC | 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.