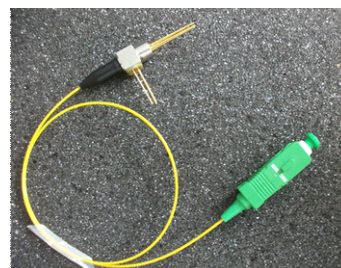


T1490DFB/R1310nm 1.25G LC BOSA

FB-B3443ASx-00

Features:

High stability DFB laser chip
InGaAs/InP PIN detector with TIA
Operate temperature from -40°C to +85°C
SC&FC&LC pigtail connector



Specification:

Absolute Maximum Ratings

| Parameter | Symbol | Condition | Min | Max | Unit |
|----------------------------|-----------|-----------|-----|-----|------|
| Operating Case Temperature | T_c | -- | -40 | 85 | °C |
| Storage Temperature | T_{stg} | -- | -40 | 85 | °C |
| Lead solder Temperature | -- | -- | | 260 | °C |
| Lead Soldering Time | -- | -- | | 10 | s |

Optical/Electrical Characteristics (T=25°C, unless otherwise stated)

1490nm DFB Laser Transmitter

| Parameter | Symbol | Min | Typ | Max | Unit | Test Conditions |
|------------------------------------|--------------------------|------|------|------|---------|----------------------------------|
| Optical Output Power | P_o | 1.0 | -- | 3.0 | mW | CW, $I_{op}=30mA$ |
| Threshold Current | I_{th} | -- | 10 | 15 | mA | $T=25\text{ }^\circ\text{C}$ |
| Forward Voltage | V_F | -- | 1.1 | 1.6 | V | |
| Operating Current | I_{op} | -- | 30 | 40 | mA | CW, $T=25\text{ }^\circ\text{C}$ |
| Center Wavelength | λ_c | 1470 | 1490 | 1510 | nm | CW, $T=25\text{ }^\circ\text{C}$ |
| Spectral Width (-20 dB) | $\Delta\lambda$ | -- | 0.1 | 1.0 | nm | |
| Wavelength temperature coefficient | $\Delta\lambda/\Delta T$ | | 0.08 | 0.12 | nm/°C | |
| Side-Mode Suppression Ratio | SMSR | 35 | 40 | | dB | $I_{op}=30mA$ |
| Relaxation Oscillation Frequency | f_R | -- | 4.5 | -- | GHZ | $I_{op}=30mA$ |
| Rise/Fall Times | t_R, t_F | -- | -- | 0.1 | ns | 20% to 80% |
| Monitor Current | I_{mon} | 100 | -- | 1000 | μA | $V_R=5\text{ V}$, |
| Monitor Dark Current | I_D | -- | -- | 200 | nA | $V_R=5\text{ V}$ |

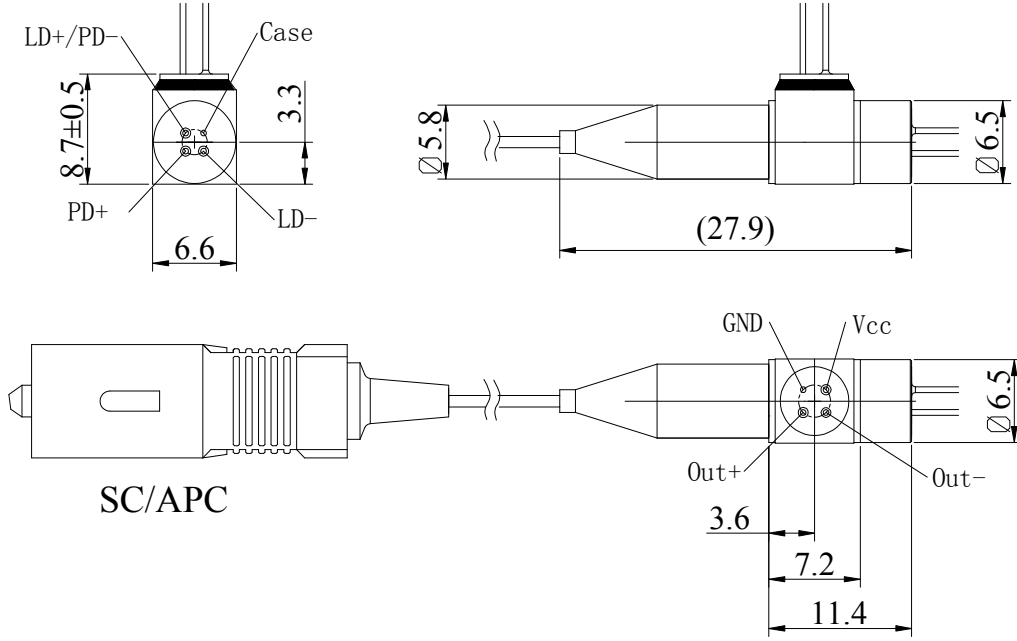
1310nm 1.25Gbps Receiver

| Parameter | Symbol | Min | Typ | Max | Unit | Test Conditions |
|---------------------------|--------|-----|-----|-----|-------|--------------------------------------------------------|
| Supply Voltage | VCC | 3.0 | 3.3 | 3.6 | V | |
| Supply Current | ICC | - | 30 | 40 | mA | No loads |
| Differential responsivity | R_d | 9.6 | -- | 32 | mV/uW | $R_{load}=100\ \Omega$, $\lambda=1310nm$, $P=-24dBm$ |
| Single ended responsivity | R_s | 4.8 | -- | 16 | mV/uW | $R_{load}=50\ \Omega$, $\lambda=1310nm$, $P=-24dBm$ |
| Small-Signal Bandwidth | Bw | 700 | - | - | MHZ | $\lambda = 1310\text{ nm}, P_f=10uW$ |
| Low-Frequency Cut off | LF | -- | -- | 115 | KHZ | |
| Rise /Fall Time(20%~80%) | Tr/f | | 300 | 400 | ps | $\lambda = 1310\text{ nm}, P=-24dBm$ |
| Saturation Power | Psat | 0 | | | dBm | $\lambda=1310nm$ |

江苏飞格光电有限公司
JIANGSU FIBER GRID CO., LTD

| | | | | | | |
|-------------------------------|-----------|------|------|------|-----|----------------------------------------------------------------------|
| Wavelength | λ | 1250 | 1310 | 1390 | nm | |
| Single ended output impedance | R_o | 35 | 50 | 65 | ohm | |
| Sensitivity | | -- | -- | -24 | dBm | $\lambda = 1310 \text{ nm}$, 1.25Gbps, PRBS7, ER=10dB, BER=1E-10 |

Dimensions And Package Outline
(SC/APC Pigtail Connector)



Order information

FB - B 3 4 4 3 A S x - 0 0

- Optical Connector: 1--SC/PC Pigtail
2-- SC/APC Pigtail
3--FC/PC Pigtail
4--FC/APC Pigtail
7--LC/PC Pigtail
8--LC/APC Pigtail