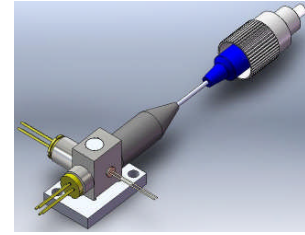




## FIBER PIGTAILED TRIPLEXER TRI-L2P1

The triplexer, TRI-L2P1-85.13.IN incorporates lasers with wavelengths of 850nm, and 1310nm, as well as a InGaAs PIN PD into a small main-body footprint of 12.50 X 19.05 X 13.70 mm, and coupled with a 62.5/125 $\mu$ m multi-mode fiber pigtail for easy board mounting.



### Features:

- Pout ~ 0.5 mW
- Fiber pigtailed
- Multi- $\lambda$  combinations

### Advantages:

- Board mountable
- Economical
- Ease of System Integration

### Applications:

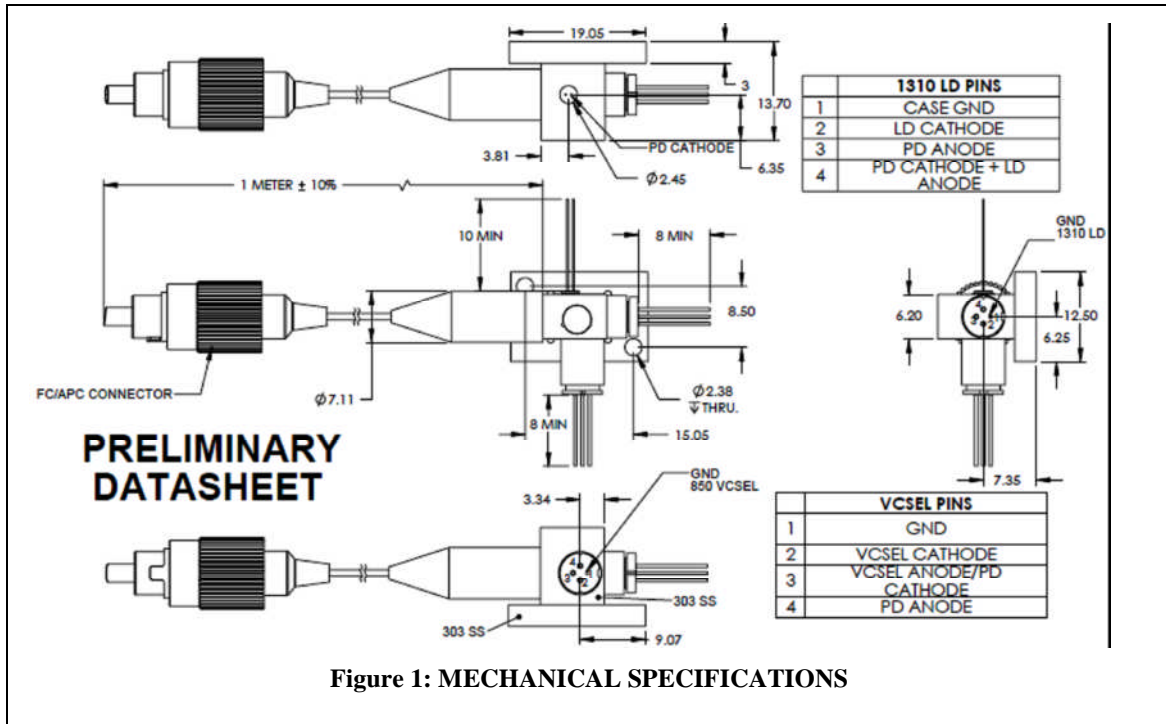
- Testing

### Operational Specifications @ 22C

| Parameter                 | Symbol          | Min. | Typ. | Max. | Unit             | Test Condition                             |
|---------------------------|-----------------|------|------|------|------------------|--|
| <b>850nm VCSEL LD</b>     |                 |      |      |      |                  |  |
| Optical Power Output      | $P_O$           |      | 0.5  |      | mW               | Into 62.5 $\mu$ m                          |
| Threshold Current         | $I_{TH}$        |      | 2    | 3.5  | mA               |  |
| Operating Current         | $I_{OP}$        |      | 15   |      | mA               |  |
| Forwarding Voltage        | $V_F$           | 1.6  | 1.8  | 2.1  | V                | $I_{OP} = 15\text{mA}$                     |
| Peak Wavelength           | $\lambda$       | 830  | 850  | 860  | nm               | $I_{OP} = 15\text{mA}$                     |
| Spectral Width            | $\Delta\lambda$ |      |      | 0.85 | nm               | $I_{OP} = 15\text{mA}$                     |
| Temperature Coefficient   |                 |      | 0.06 |      | nm/ $^{\circ}$ C |  |
| Rise and Fall Time        | $t_r/t_f$       |      | 0.10 | 0.15 | ns               |  |
| Monitor PD Output Current | $I_m$           |      | 30   |      | uA               | $P_o = 0.5 \text{ mW}$                     |
| Monitor Capacitance       | $C$             |      | 6    | 10   | pF               | $V_R = 3\text{V} @ 1\text{MHz}$            |
| <b>1310nm LD</b>          |                 |      |      |      |                  |  |
| Optical Power Output      | $P_O$           |      | 0.5  |      | mW               | Into 62.5 $\mu$ m                          |
| Threshold Current         | $I_{TH}$        |      | 10   |      | mA               |  |
| Operating Current         | $I_{OP}$        |      | 30   |      | mA               |  |
| Forwarding Voltage        | $V_F$           |      | 1.2  | 1.6  | V                | $I_{OP} = I_{th} + 20\text{mA}$            |
| Peak Wavelength           | $\lambda$       | 1290 | 1310 | 1330 | nm               | $I_{OP} = I_{th} + 20\text{mA}$            |
| Spectral Width            | $\Delta\lambda$ |      | 2    | 4    | nm               | $I_{OP} = I_{th} + 20\text{mA}$            |
| Rise and Fall Time        | $t_r/t_f$       |      | 200  | 240  | ps               |  |
| Monitor PD Output Current | $I_m$           | 0.1  | 0.5  |      | mA               |  |
| Monitor PD Dark Current   | $I_d$           |      |      | 100  | nA               |  |
| Monitor Capacitance       | $C$             |      | 10   | 20   | pF               | $F = 1\text{MHz}$                          |
| <b>InGaAs PD</b>          |                 |      |      |      |                  |  |
| Active Area               | $D$             |      | 300  |      | $\mu$ m          |  |
| Sensitive Wavelength      |                 | 1000 |      | 1600 | nm               |  |
| Responsivity              | $R$             | 0.3  |      |      | A/W              | $V_R = 5\text{V}, \lambda = 1300\text{nm}$ |
| Cutoff Frequency          | $F_c$           |      | 300  |      | MHz              | $V_R = 5\text{V}, \lambda = 1300\text{nm}$ |
| Dark Current              | $I_d$           |      | 0.2  | 3    | nA               |  |
| Monitor Capacitance       | $C$             |      | 7    | 10   | pF               |  |



## FIBER PIGTAILED TRIPLEXER TRI-L2P1



### Part Number System

#### TRI-L2P1-85.13.IN- XX

- **TRI** indicates Triplexer
- **L2P1** indicates two lasers, and 1 PIN PD
- **85.13.IN** indicates the 850nm, 1310nm Lasers, and InGaAs PD
- **XX** is a customer specific reference and includes power required