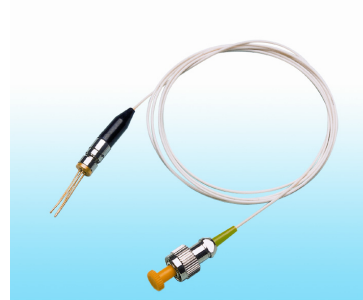


■ **Features**

- a. InGaAsP/InP MQW DFB LD
- b. Low Threshold Current
- c. High Reliability
- d. High Output Power

■ **Applications**

- a. Data Communication
- b. Video Transmission
- c. CATV System



■ **Absolute Maximum Ratings**

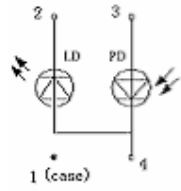
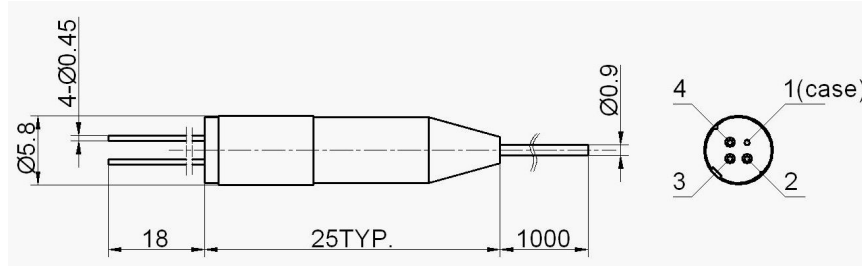
| Parameter | Symbol | Min. | Max. | Unit |
|-----------------------------|-------------|------|-------------------|------|
| LD Forward Current | $I_{f(LD)}$ | - | $I_{th}+40mA(DC)$ | mA |
| LD Reverse Voltage | $V_{r(LD)}$ | - | 2 | V |
| PD Forward Current | $I_{f(PD)}$ | - | 2 | mA |
| PD Reverse Voltage | $V_{r(PD)}$ | - | 20 | V |
| Operating Temperature | T_{op} | -40 | 85 | |
| Storage Temperature | T_{stg} | -40 | 100 | |
| Soldering Temperature, Time | - | - | 260 , 10 S | ,S |

■ **Optical and Electrical Characteristics (T=25)**

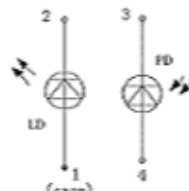
| Parameter | Symbol | Min. | Typ. | Max. | Unit | Test Condition |
|-----------------------------|-------------|------|------|------|------|-------------------------|
| Center Wavelength | λ_c | 1290 | 1310 | 1330 | nm | - |
| Output Power | P_o | 0.2 | - | - | mW | CW, $I_f = I_{th}+20mA$ |
| Threshold Current | I_{th} | - | 10 | 30 | mA | - |
| Operating Voltage | V_{op} | - | 1.1 | 1.8 | V | $I_f = I_{th}+20mA$ |
| Rise/Fall Time | t_r/t_f | - | 0.2 | 0.4 | ns | 10~90% |
| Spectral Width (-20dB) | λ | - | - | 1 | nm | - |
| Side Mode Suppression Ratio | SMSR | 30 | 40 | - | dB | - |
| Monitor Current | I_m | - | 0.2 | - | mA | $I_f = I_{th}+20mA$ |

■ **Pin Assignment and Dimension (mm)**

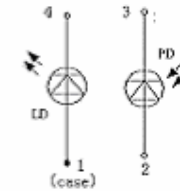
Pigtail Type



Pin Assignment1

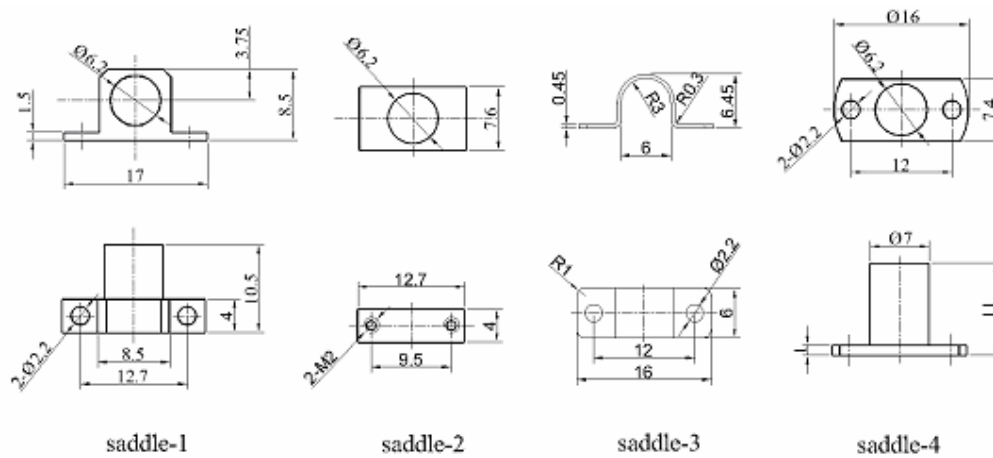


Pin Assignment2

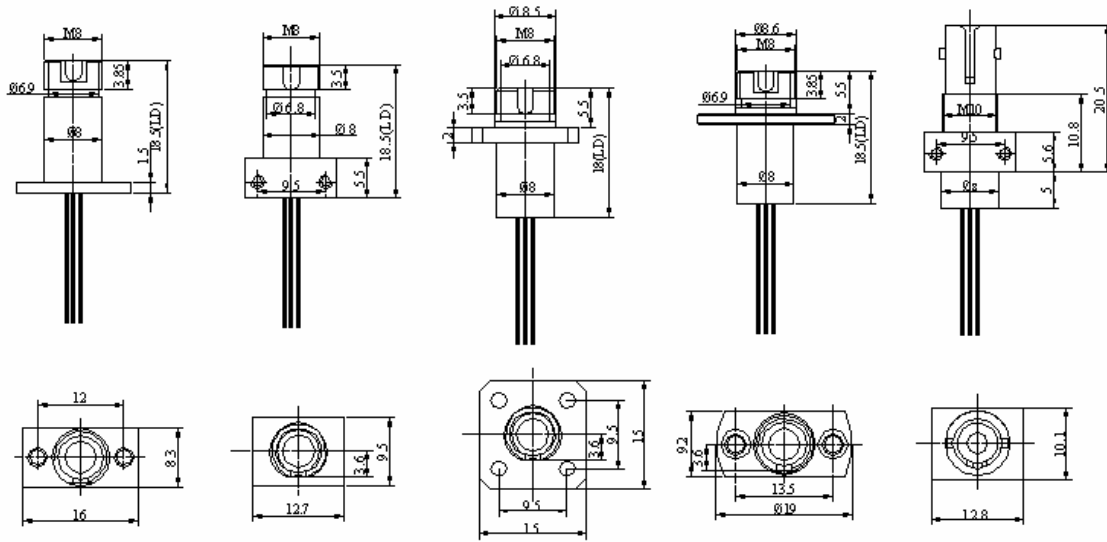


Pin Assignment3

Pigtail with SC, FC, ST Connector



Receptacle Type



FC-CONNECT-1

FC-CONNECT-2

FC-CONNECT-3

FC-CONNECT-4

ST-CONNECT

■ Ordering Information

| Part No. | Output Power | Optical Isolation | Bandwidth | Connector | Pin Assignment | Saddle Type |
|-----------|--------------|-------------------|-----------|-----------|----------------|--|
| ALD-04101 | 0.2 to 1.5mW | No | 622Mbps | FC/APC | 2 | Saddle-1 Saddle-2 Saddle-3 Saddle-4 |
| ALD-04102 | 0.2 to 1.5mW | No | 622Mbps | FC/PC | 2 | |
| ALD-04103 | 0.2 to 1.5mW | No | 622Mbps | FC/APC | 1 | |
| ALD-04104 | 0.2 to 1.5mW | No | 622Mbps | FC/PC | 1 | |
| ALD-04105 | ≥1.5mW | No | 622Mbps | FC/APC | 2 | |
| ALD-04106 | ≥1.5mW | No | 622Mbps | FC/PC | 2 | |
| ALD-04107 | ≥1.5mW | No | 622Mbps | FC/APC | 1 | |
| ALD-04108 | ≥1.5mW | No | 622Mbps | FC/PC | 1 | |
| ALD-04109 | ≥2mW | No | 622Mbps | FC/APC | 2 | |