

■ **Features**

- a. VCSEL
- b. Low Threshold and Low Operating Current
- c. High Bandwidth
- d. High Reliability



■ **Applications**

- a. Optical Communication System
- b. Fiber Optical Sensor
- c. Instrumentation

■ **Absolute Maximum Ratings**

Parameter	Symbol	Min.	Max.	Unit
Forward Current	I_f	-	12	mA
Reverse Voltage	V_r	-	5	V
Operating Temperature	T_{op}	0	85	°C
Storage Temperature	T_{stg}	-40	85	°C
Soldering Temperature, Time	-	-	260°C, 10S	°C,S

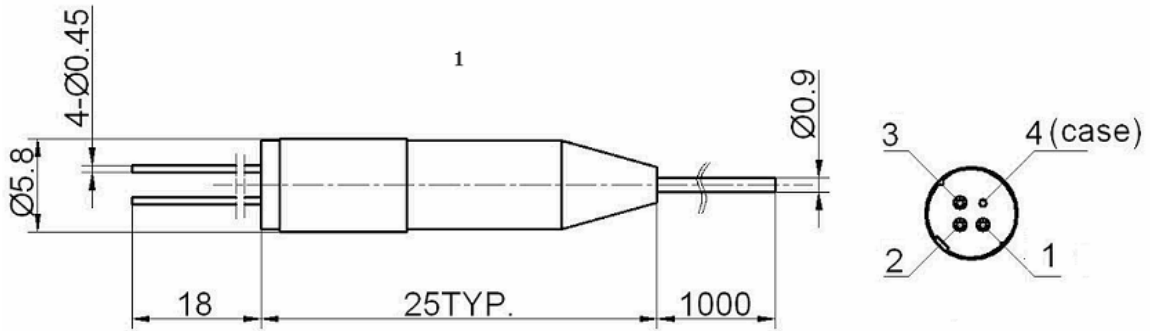
■ **Optical and Electrical Characteristics (T=25°C)**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Center Wavelength	λ_c	830	845	860	nm	6mA
Output Power	P_o	0.1	-	-	mW	6mA,CW
Threshold Current	I_{th}	-	2	3.5	mA	-
Ith Temperature Variation	ΔI_{th}	-2	-	2	mA	0~85°C
Forward Voltage	V_f	-	1.8	2.2	V	6mA
Differential Resistance	R_s	-	45	65	Ω	6mA
Rise Time	t_r	-	0.1	0.15	ns	20~80%
Fall Time	t_f	-	0.13	0.15	ns	20~80%

850nm VCSEL Module ALD-070XX/ALD-071XX

■ Pin Assignment and Dimension (mm)

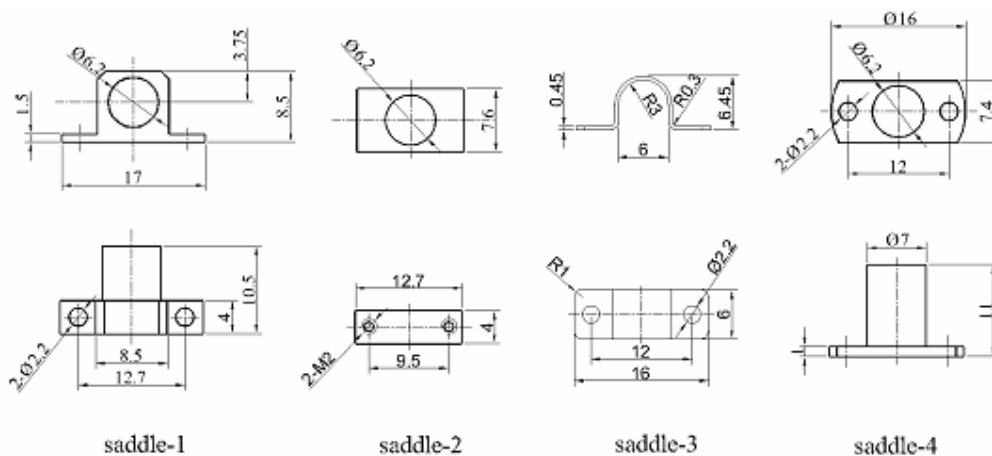
Pigtail Type



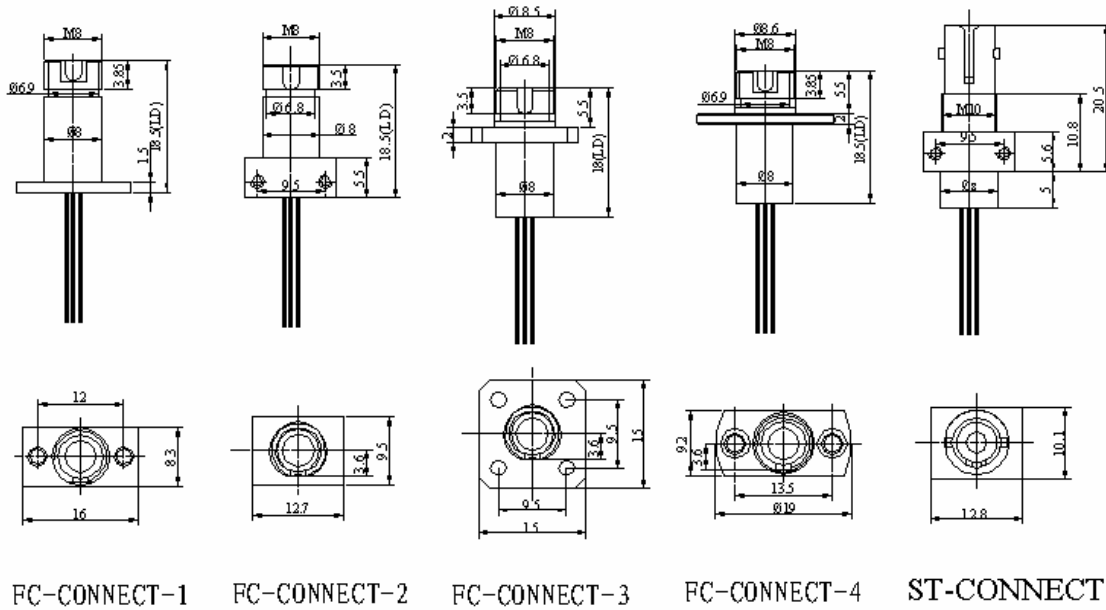
Pin Out:

Pin Assignment 4		Pin Assignment 5		Pin Assignment 6	
Number	Function	Number	Function	Number	Function
1	VCSEL Anode	1	VCSEL Cathode	1	VCSEL Cathode
2	VCSEL Cathode/ PD Anode	2	VCSEL Anode/ PD Cathode	2	VCSEL Anode
3	PD Cathode	3	PD Anode	3	NC
4	Case	4	Case	4	Case

Pigtail with SC, FC, ST Connector



Receptacle Type



■ **Ordering Information**

Part No.	Product	Connector	Pin Assignment
ALD-07001	850nm VCSEL Receptacle	FC	4
ALD-07002	850nm VCSEL Receptacle	FC	5
ALD-07003	850nm VCSEL Receptacle	FC	6
ALD-07004	850nm VCSEL Receptacle	ST	4
ALD-07005	850nm VCSEL Receptacle	ST	5
ALD-07006	850nm VCSEL Receptacle	ST	6

Part No.	Product	Fiber Type	Connector	Pin Assignment	Saddle Type
ALD-07101	850nm VCSEL Pigtail	50/125 μ m	FC/PC	4	Saddle-1 Saddle-2 Saddle-3 Saddle-4
ALD-07102	850nm VCSEL Pigtail	62.5/125 μ m	FC/PC	4	
ALD-07103	850nm VCSEL Pigtail	50/125 μ m	ST/PC	4	
ALD-07104	850nm VCSEL Pigtail	62.5/125 μ m	ST/PC	4	
ALD-07105	850nm VCSEL Pigtail	50/125 μ m	FC/PC	6	
ALD-07106	850nm VCSEL Pigtail	62.5/125 μ m	FC/PC	6	
ALD-07107	850nm VCSEL Pigtail	50/125 μ m	ST/PC	6	
ALD-07108	850nm VCSEL Pigtail	62.5/125 μ m	ST/PC	6	
ALD-07109	850nm VCSEL Pigtail	50/125 μ m	FC/PC	5	
ALD-07110	850nm VCSEL Pigtail	62.5/125 μ m	FC/PC	5	
ALD-07111	850nm VCSEL Pigtail	50/125 μ m	ST/PC	5	
ALD-07112	850nm VCSEL Pigtail	62.5/125 μ m	ST/PC	5	