

80/70mW High Power Laser Diode with a Detachable Fiber

Description

SLU301VR is a high power laser diode based on the SLD301V with a detachable fiber.

Direct coupling to a fiber having an FC connector is possible without any optical adjustment.

Features

- Detachable fiber
- Built-in photo diode

Application

- Solid state laser pumping
- Medical uses

Structure

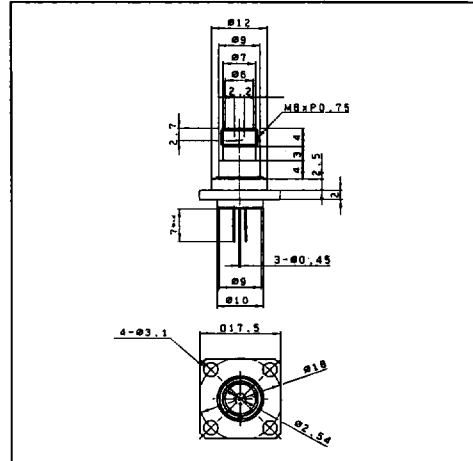
GaAlAs double hetero-type laser diode

Absolute Maximum Ratings (Tc = 25°C)

• Radiant power output	Po	80	mW	70	mW
• Recommended radiant power output	Po	72	mW	63	mW
• Reverse voltage	V _R LD	2	V	2	V
	PD	15	V	15	V
• Operating temperature	T _{opr}	-10 to +50	°C	-10 to +50	°C
• Storage temperature	T _{stg}	-40 to +85	°C	-40 to +85	°C

Package Outline

Unit : mm

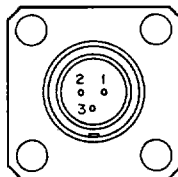


(Typ.)	(Option)
GI fiber	GI fiber
Core dia. 200 μm	Core dia. 100 μm
NA = 0.2	NA = 0.2
L = 2m	L = 2m

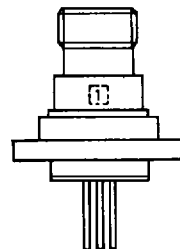
Pin Configuration

No.	Function
1	LD cathode
2	LD anode
3	COMMON

Bottom View



Mark



Electrical • Optical Characteristics (T_c = 25°C)

Item	Symbol	Condition*1	Min.	Typ.	Max.	Unit
Threshold current	I _{th}			150		mA
Operating current	I _{op}	a, b		300		mA
Operating voltage	V _{op}	a, b		1.9		V
Wavelength*2	λ _p	a, b	770		840	nm
Radiation angle*3 (F.W.H.M)	X	a		10		degree
		b		10		
	Y	a		15		
		b		15		
Monitor current	I _{mon}	a, b V _R = 10V		0.15		mA

Note)

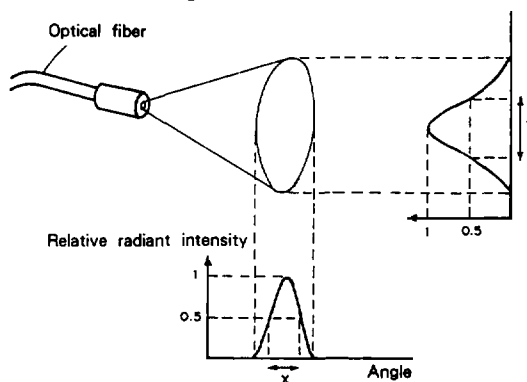
- *1 a : P_o = 72mW (Using standard fiber)
- b : P_o = 63mW (Using optional fiber)

***2 Classification of wavelength**

Type	Wavelength (nm)
SLU301VR-1	785 ± 15
SLU301VR-2	810 ± 10
SLU301VR-3	830 ± 10

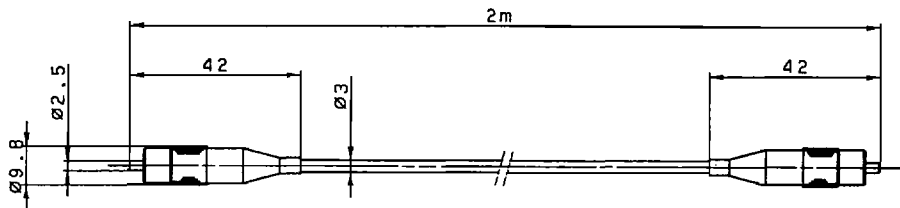
Type	Wavelength (nm)
SLU301VR-21	798 ± 3
24	807 ± 3
25	810 ± 3

***3 Radiation angle**



- X : F.W.H.M of radiation beam in the narrow direction.
- Y : F.W.H.M of radiation beam in the wide direction.

Fiber Package Outline



Unit : mm

Typical Characteristics ($T_c = 25^\circ\text{C}$)

