


# **APPROVAL SHEET**

(承认书)

**ITEM: UDL-98Y04TL-D**

版本 (Verison) : PA043C98-DL-U  
日期 (Date) : 2021-02-21

Prepared By (制订)	Confirmed By (确认)	Approved By (承认)
		
Date (日期)	Date (日期)	Date (日期)

# Infrared Laser Diode

UDL-98Y04TL-D

PA043C98-DL-U

980nm/200mW 40°C High Power Operation

Dimension

## ◆ Features

- Peak wavelength at 25°C : 980nm (typical)
- Standart optical power output : 200mW (CW)
- TO-9 (Φ9.0mm) Packaged, with Pb-free window cap.
- Building-in Photo Diode for monitoring laser diode

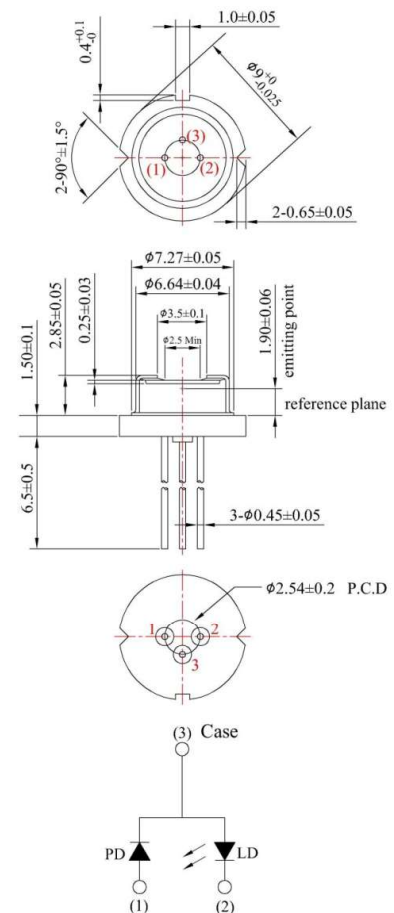
## ◆ Applications

- Laser inductor
- Laser detector
- Night vision
- Medical laser treatment

## ◆ Absolute maximum ratings

(TC=25°C)

Parameter	Symbol	Condition	Rating	Unit
Light output power	$P_0$	CW	200	mW
Reverse voltage (LD)	$V_{RL}$	-	2	V
Case Temperature	$T_C$	-	-10~+40	°C
Storage temperature	$T_S$	-	-40~+85	°C



unit : mm

## ◆ Electrical and optical characteristics

(TC=25°C)

Parameter	Symbol	Min	Typ.	Max.	Unit	Condition (CW)
Peak wavelength	$\lambda$	970	980	990	nm	$P_0 = 200\text{mW}$
Threshold current	$I_{th}$	-	86	100	mA	
Operating current	$I_{op}$	-	500	650	mA	
Operating voltage	$V_{op}$	1.2	1.6	2.1	V	
Differential efficiency	$\eta$	0.54	0.74	-	mW/mA	$P_0 = 200\text{mW}, V_{RD}=0\text{V}$
Monitor current	$I_m$	0.1	1.3	3	mA	
Parallel divergence angle	$\theta_{\parallel}$	-	10.0	-	deg	$P_0 = 200\text{mW}$
Perpendicular divergence angle	$\theta_{\perp}$	28	35	42	deg	

### ●Precautions

- \* Do not operate the device above maximum ratings. Doing so may cause unexpected and permanent damage to the device.
- \* Take precautions to avoid electrostatic discharge and / or momentary power spikes. A change in the characteristics of the laser or premature failure may result.
- \* Proper heat sinking of the device assures stability and lifetime. Always ensure the maximum operating temperatures are not exceeded.
- \* Observing visible on invisible laser beams with the human eye directly, or indirectly, can cause permanent damage. Use a camera to observe the laser.
- \* No laser device should be used in any application or situation where life or property is at risk in event of device failure.
- \* Specifications are subject to change without notice. Ensure that you have the laser specification by contacting us prior to purchase or use of the product.

**Notice : A-LASER proposes to operate UDL-98Y04TL-D by the external APC circuit.**

\*For reference only. Contents above are subject to change without notice.