APPROVAL SHEET

(承认书)

ITEM: UDL-98X03TL-D

版本 (Verison) : PA043E98-DL-U
日期 (Date) : 2018-03-22

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

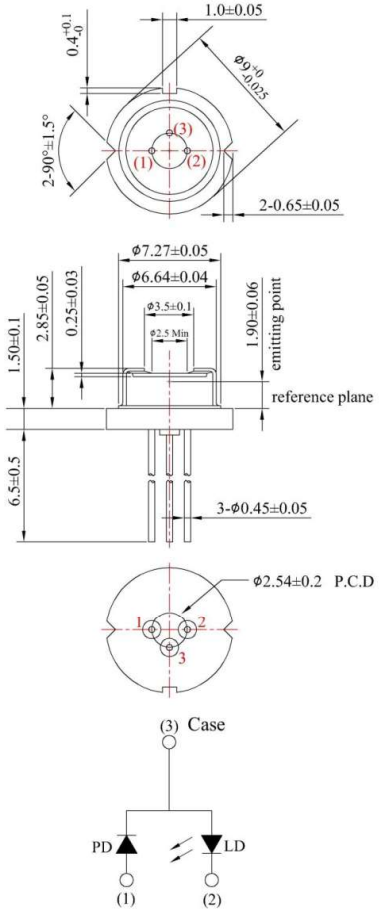
Infrared Laser Diode

UDL-98X03TL-D

PA043E98-DL-U

980nm/300mW 40℃ High Power Operation

Dimension



unit : mm

◆ Features

- Peak wavelength at 25℃ : 980nm (typical)
- Standart optical power output : 300mW (CW)
- TO-9 (Φ9.0mm) Packaged, with Pb-free windown cap.
- Building-in Photo Diode for monitoring laser diode

◆ Applications

- Industrial optical module
- Light source for counterfeit banknotes detection
- Infrared illumination
- Medical laser treatment

◆ Absolute maximum ratings

(TC=25℃)

Parameter	Symbol	Condition	Rating	Unit
Light output power	P_0	CW	300	mW
Reverse voltage (LD)	V_{RL}	-	2	V
Case Temperature	T_C	-	-10~+40	℃
Storage temperature	T_S	-	-40~+85	℃

◆ Electrical and optical characteristics

(TC=25℃)

Parameter	Symbol	Min	Typ.	Max.	Unit	Condition (CW)
Peak wavelength	λ	970	980	990	nm	Po = 300mW
Threshold current	I_{th}	-	120	170	mA	
Operating current	I_{op}	-	850	1000	mA	
Operating voltage	V_{op}	-	1.6	2.3	V	
Differential efficiency	η	0.6	0.7	-	mW/mA	
Monitor current	I_m	0.1	2.2	3	mA	Po = 300mW, V_{RD}=0V
Parallel divergence angle	$\theta_{//}$	-	12.0	-	deg	Po = 300mW
Perpendicular divergence angle	$\theta_{\perp}$	-	38	-	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-98X03TL-D by the external APC circuit.

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