常熟华邦光电科技工业有限公司 Changshu A-LASER Tech. Corp.
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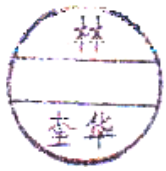
APPROVAL SHEET

(承认书)

ITEM: AD-BLUE405-20

版本 (Verison) : AD-BLUE405-20 V1.0
日期 (Date) : 2009-07-20

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

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BLUE LASER DIODE

AD-BLUE405-20

AD-BLUE405-20 V1.0

405nm/20mW 75℃ Reliable Operation Design

◆ Features

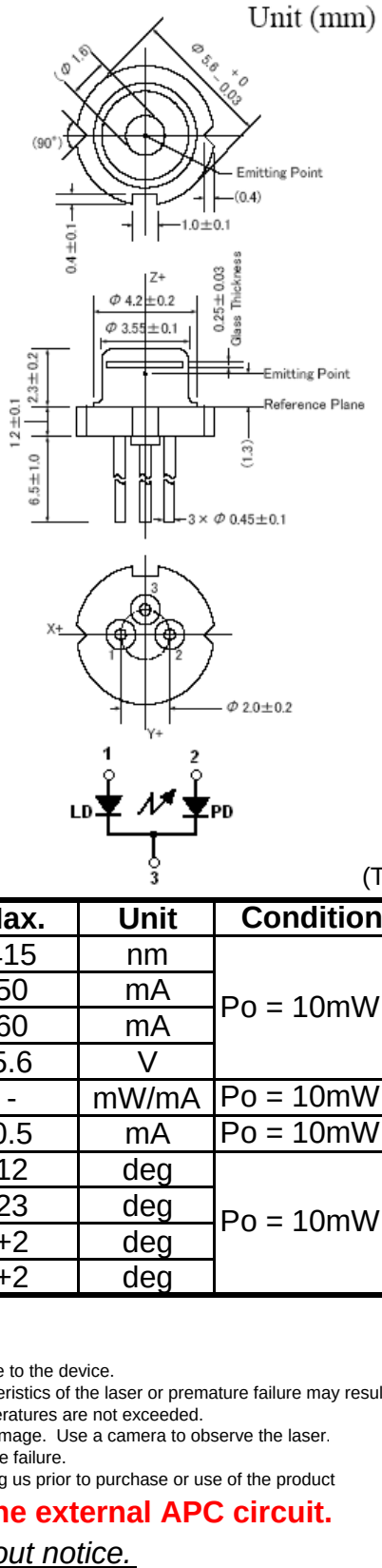
- Short wavelength : 405nm (Typ.)
- Low threshold current : Ith=26mA (Typ.)
- With PD

◆ Applications

- Blue laser light
- Industrial use

Dimension

Unit (mm)



◆ Absolute maximum ratings

(TC=25℃)

Parameter	Symbol	Condition	Rating	Unit
Light output power	P_0	-	20	mW
Reverse voltage (LD)	V_{RL}	-	2	V
Case Temperature	T_C	-	0~+75	℃
Storage temperature	T_S	-	-40~+85	℃

◆ Electrical and optical characteristics

(TC=25℃)

Parameter	Symbol	Min	Typ.	Max.	Unit	Condition (CW)
Peak wavelength*	λ	395	405	415	nm	Po = 10mW, CW
Threshold current	I_{th}	-	26	50	mA	
Operating current	I_{op}	-	35	60	mA	
Operating voltage	V_{op}	-	4.8	5.6	V	
Differential efficiency	η	0.7	1.1	-	mW/mA	Po = 10mW
Monitor current**	I_m	0.1	0.2	0.5	mA	Po = 10mW
Parallel divergence angle	$\theta_{//}$	6	8.5	12	deg	Po = 10mW
Perpendicular divergence angle	$\theta_{\perp}$	16	19	23	deg	
Parallel FFP deviation angle	$\triangle\theta_{//}$	-2	0	+2	deg	
Perpendicular FFP deviation angle	$\triangle\theta_{\perp}$	-2	0	+2	deg	

***Measuring Specifications.**

**Monitor Current is short time power reference purpose Only. (No guaranteed for accuracy.

●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 AD-BLUE405-20 by the external APC circuit.

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