QDLASER

QLF101A-AA

1060 nm Gain Chip C00075-03 June 2014

1. DESCRIPTION

The QLF101A-AA is a 1060-nm band gain chip suitable for a wide-band tunable light source.

2. FEATURES

- Wide tuning band
- Low facet reflectance with angled facet structure

3. APPLICATION

- Tunable external cavity lasers
- Wide band light source

4. ABSOLUTE MAXIMUM RATING

PARAMETER	SYMBOL	RATING	UNIT
Optical Output power	P_f	80	mW
LD Forward Current	I_F	250	mA
LD Reverse Voltage	V_{RLD}	2	V
Storage Temperature *	T_{stg}	-40 to 85	°C
Soldering Temperature (<1.5s)	T_{sld}	390	°C

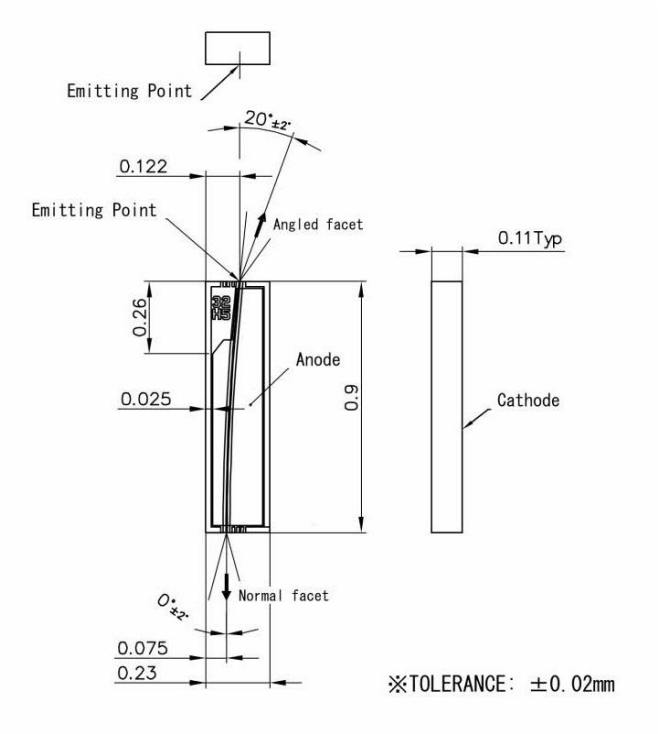
* No condensation

5. OPTICAL AND ELECTRICAL CHARACTERISTICS

(T_{LD} = 25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Center Wavelength	λ_c	CW, I_f =100 mA	1040	1060	1080	nm
Optical Bandwidth@3dB	$\Delta\nu$	CW, I_f =100 mA	30	43	-	nm
Gain Ripple (RMS)	-	CW, I_f =100 mA	-	TBD	-	dB
ASE Power	P_{ASE}	CW, I_f =100 mA	9	10	-	mW
Operation Current	I_{op}	CW	-	100	180	mA
Operation Voltage	V_{op}	CW, If =100 mA	-	1.7	2.2	V
Beam Divergence (FWHM)	$\theta_\perp$	CW, If =100 mA	-	35	-	deg.
	$\theta_{//}$	CW, If =100 mA	-	15	-	deg.
Facet Reflectance (Angled facet)	R_{angle}	at 1060 nm	-	-	0.01	%
Facet Reflectance (Normal facet)	R_{normal}	at 1060 nm	-	7.5	-	%
Operation Temperature	T_{chip}	-	20	-	30	°C

6. OUTLINE DRAWING



7. NOTICE

- Safety Information

This product is classified as Class 3B laser product, and complies with 21 CFR Part 1040.10.
Please do not take a look at laser lighting in operations since laser devices may cause troubles to human eyes.
Please do not eat, burn, break and make chemical process of the products since they contain GaAs material.

- Handling products

Semiconductor lasers are easily damaged by external stress such as excess temperature and ESD.
Please pay attention to handling products, and use within range of maximum ratings.
QD Laser takes no responsibility for any failure or unusual operation resulting from improper handling, or unusual physical or electrical stress.

- RoHS

This product conforms to RoHS compliance related EU Directive 2002/95/EC.