

# 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

( $T_{LD} = 25^{\circ}\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Center Wavelength	$\lambda_c$	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, $I_f = 100$ mA	-	1.7	2.2	V
Beam Divergence (FWHM)	$\theta_{\perp}$	CW, $I_f = 100$ mA	-	35	-	deg.
	$\theta_{//}$	CW, $I_f = 100$ 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

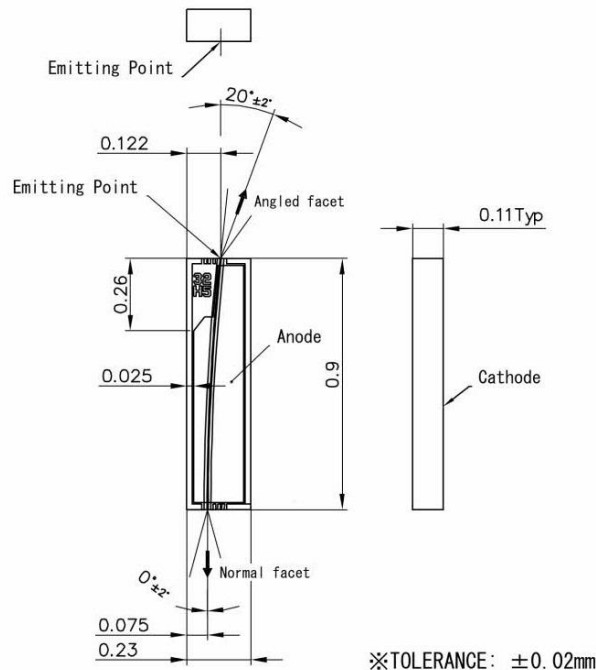
Distributed by



Ohmstrasse 4, 85716 Unterschleissheim, Germany

www.imm-photonics.de sales@imm-photonics.de Tel.: +49 89 / 3214120

## 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.

Distributed by  IMM photonics  
 Ohmstrasse 4, 85716 Unterschleissheim, Germany  
 www.imm-photonics.de sales@imm-photonics.de Tel.: +49 89 / 3214120

QD Laser, Inc.

Contact : [info@qdlaser.com](mailto:info@qdlaser.com) <http://www.qdlaser.com>

Copyright 2012 All Rights Reserved by QD Laser, Inc.

Keihin Bldg. 1F 1-1 Minamiwatarida-cho, Kawasaki-ku, Kawasaki, Kanagawa Zip 210-0855 Japan

All company or product names mentioned herein are trademarks or registered trademarks of their respective owners. Information provided in this data sheet is accurate at time of publication and is subject to change without advance notice.