QD LASER

QLF063D-60C0-GM

660 nm PULSED 300 mW FP LASER TO-CAN, Cathode common type C00212-02 April 2018

1. DESCRIPTION

The QLF063D-60C0-GM is a 660 nm quantum well laser device designed for visible laser application. The laser diode is mounted into a TO-56 header and hermetic sealed with a flat glass cap.

2. FEATURES

- 660 nm FP-LD
- Φ5.6mm TO-CAN package
- Monitor PD less
- Cathode common type
- Pulsed operation

3. APPLICATIONS

- Industrial laser markers
- Measuring instruments

4. ABSOLUTE MAXIMUM RATING

(CW operation, T_c = 25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Optical output power	P_o(CW)	130	mW
	P_o(Pulse) *	400	mW
LD reverse voltage	V_{RLD}	2	V
Operation temperature	T_c	-10 to 70	°C
Storage temperature	T_{stg}	-40 to 85	°C

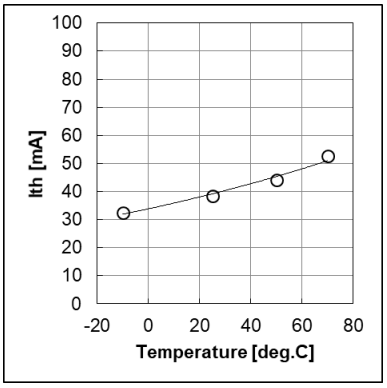
* Pluse condition: Pulse width 30 ns, duty 1%

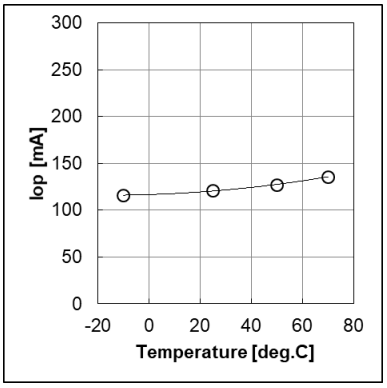
5. OPTICAL AND ELECTRICAL CHARACTERISTICS

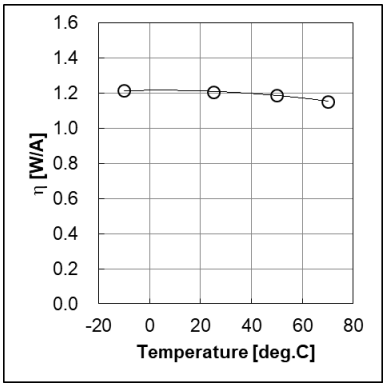
(T_c = 25°C, unless otherwise specified)

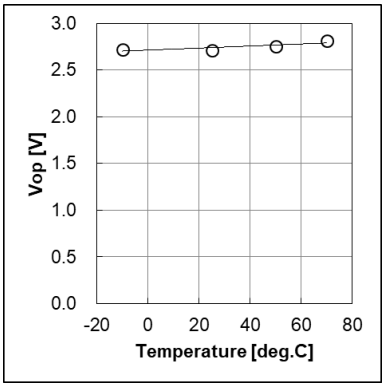
PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Threshold current	I_{th}	CW	-	50	90	mA
Operation current	I_{op}	CW, P_o=100mW	-	140	190	mA
Output power-Pulse	P_{oP}	Pulse**, 350mA	300	360	-	mW
Operation voltage	V_{op}	CW, P_o=100mW	-	2.5	3.0	V
Slope efficiency	η	CW, P_o= 5 – 100 mW	0.8	1.1	-	W/A
Peak wavelength	λ_p	CW, P_o=100mW	652	660	665	nm
Beam divergence, horizontal	θ_h	CW, P_o=100mW, FWHM	7	10	13	deg.
Beam divergence, vertical	θ_v	CW, P_o=100mW,FWHM	12	16	19	deg.
Beam angle, horizontal	$\Delta\theta_h$	CW, P_o=100mW	-3	-	3	deg.
Beam angle, vertical	$\Delta\theta_v$	CW, P_o=100mW	-3	-	3	deg.

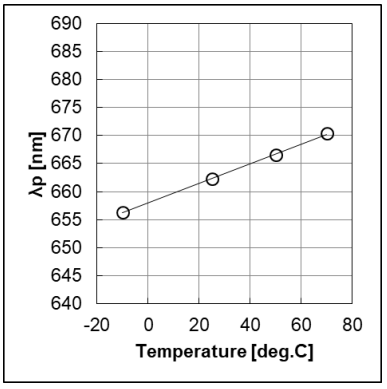
** Pluse condition for testing: Pulse width 500 ns, duty 50%

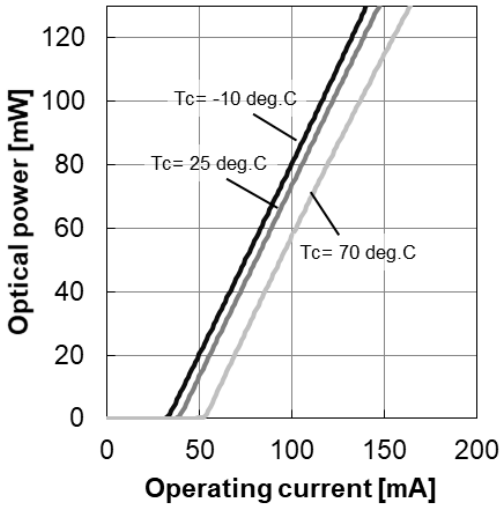


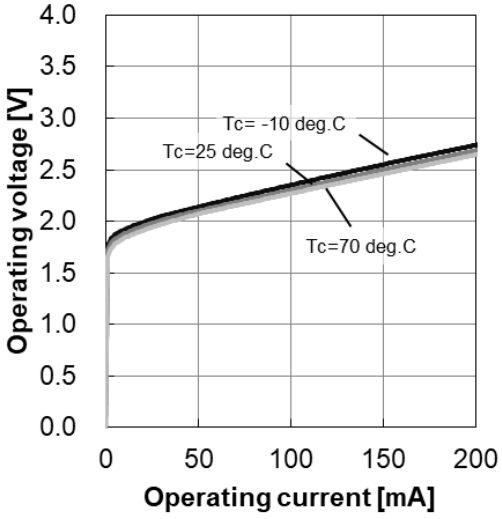


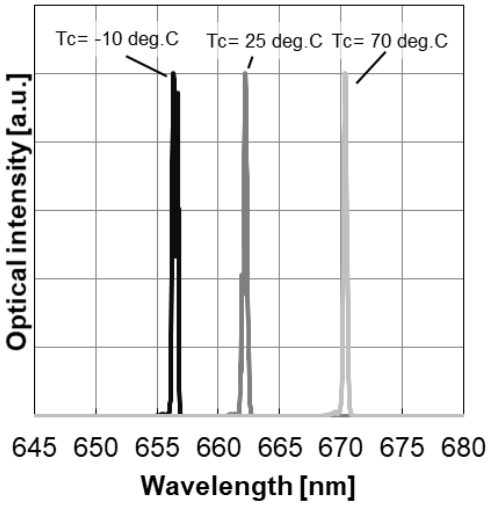


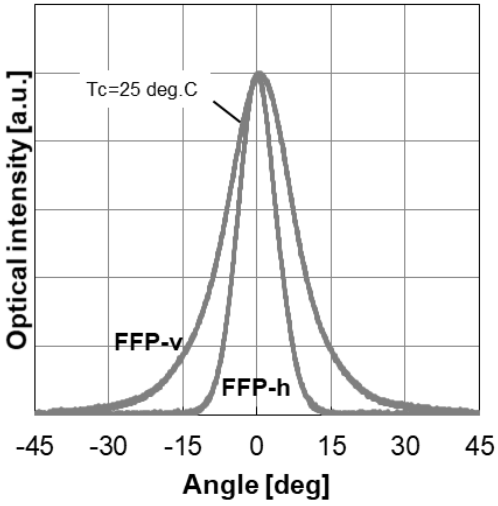












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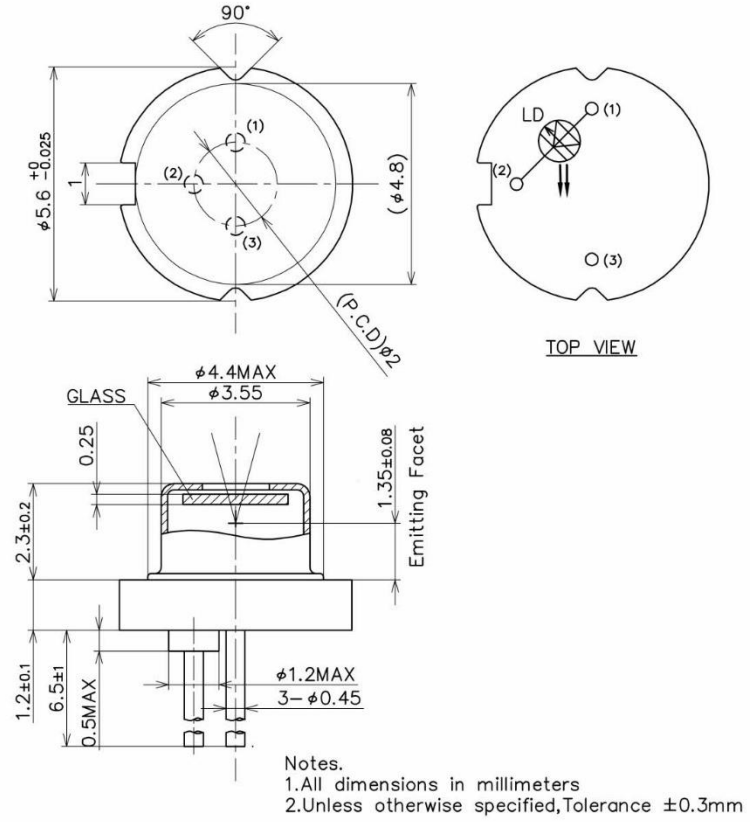
6. Outline Drawing



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 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 2011/65/EU.

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