QDLASER

QLD106G-6410

Preliminary

1064nm 20psec DFB Laser Butterfly Package with SMPM connector

C00167-01 June 2015

1. DESCRIPTION

The QLD106G-6410 is a 1064-nm distributed feedback (DFB) laser suitable for short pulsed seed sources including picosecond pulse operation. The laser is assembled into a 7-pin butterfly package with SMPM connector.

2. FEATURES

- Single longitudinal mode operation at 1064 nm
- Short pulsed operation of <20psec
- 7pin butterfly package with SMPM connector

3. APPLICATION

- Seeder for fiber lasers
- Sensing

4. ABSOLUTE MAXIMUM RATING

PARAMETER	SYMBOL	RATING	UNIT
Optical Output power (CW)	P_f	20	mW
LD Forward Current (CW)	I_f	90	mA
LD Reverse Voltage	V_{RLD}	2	V
TEC Drive Current	I_{TEC}	2	A
TEC Drive Voltage	V_{TEC}	4.3	V
Operation Temperature	T_c	0 to 60	°C
Storage Temperature	T_{stg}	-40 to 85	°C
Lead Soldering Temperature (5 s)	T_{sld}	230	°C

5. OPTICAL AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Peak Wavelength	λ_p	Pulsed operation	1061	1064	1067	nm
Spectral Linewidth	$\Delta\lambda$	@20dB, Pulsed	-	1	-	nm
Pulse Width	PW	-	-	20	-	psec
Averaged Output Power	P_{f_ave}	Pulsed/100MHz	-	0.1	-	mW
Sidemode Suppression Ratio	SMSR	Pulsed	-	30	-	dB
Polarization Extinction Ratio	PER	CW	15	20	-	dB
Thermistor Resistance	R_{th}	T_{LD} = 25°C, B=3930K	9.5	10	10.5	kΩ
RF Input Impedance	Z_0	-	-	50	-	Ω
Optical Isolation	-	@1064nm	25	40	-	dB

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Cybel

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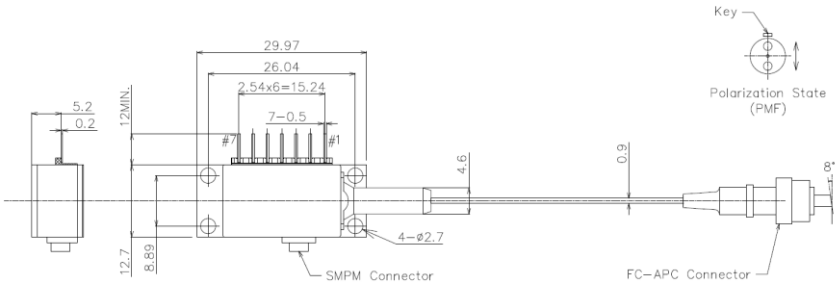
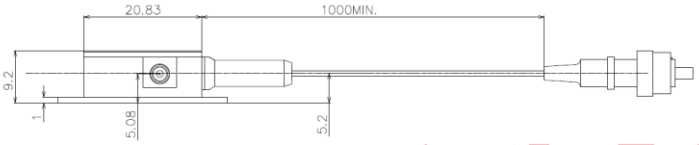
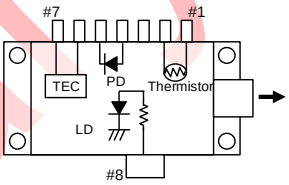
6. OUTLINE DRAWING AND PIN CONFIGURATION



No.	Descrption
1	Thermistor
2	Thermistor
3	NC
4	PD Anode
5	PD Cathode
6	TEC(+)
7	TEC(-)
8	LD Anode





All dimensions in millimeters.

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 2011/65/EU.

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